Following code segmentThe name of the destructor is the same as that of a class proceding with a ~ sign

A pointer is
variable for storing address

Constructor is a special function, called whenever we
instantiate an object of a class

Symbolic constant PI can be defined as
#define Pi 3.14

Object code is machine code but it is not and
relocatable , executable

You can not overload operator
*

The default visibility for the data members of the class is
private

What will be the output of the given code
#include <iostream.h>
inline int max(int a. int b)
{
if (a>b)
return a;
x=23 y=45

Constructor is a special type of function
which has no return type

What will be the output of the given code

#include <iostream.h>

#include<conio.h>

void display(int = 1. float = 2.3. char = '@'):

first = 1. second = 2.3. third = @

first = 5. second = 2.3. third = @

first = 6. second = 7.8. third = @

< . <= . > . >are called operators

Realtional

In C/C++ variable's name can start with symbol

_ Underscore

if (a>b && a>c) then the condition will be true only if

Both a>b and a>c are true

+= . *= /= . etc are called

Assignment operators

what will be the output of the following code, if the first case is true

switch (var)

{

case 'a'

cout <<"apple"<<endl;

case 'b'

cout <<"banana"<<endl;

case 'm'

coun

t <<"mango"<<endl;

default

cout<<"any fruit"<<endl;

}

apple

banana

mango

" = " operator is used for

Assigning value

A variable of character data type occupies bytes in memory

1

If we pass more than one arguments to a function then they are seprated by

Comma ,

Which of the following is a reserve word for data types in C/C++

integer

What will be the result of arithmetic expression 6+48/4*3

42

In an n dimensional array, we use for loop(s) to populate the array

n

In three dimensional array, we use for loop(s) to populate the array

3

A record is a group of related

Related fields

A file is a group of related

Related records

contains functions for manipulations of character data

ctype.h

ifstream inFile; refers

object for reading from a file

A character is stored in the memory in

byte

A string which is assigned to a string variable is terminated by

Null character

When an identifier is decleared with keyboard const then,

its value cannot be changed

ifstream is used for

input file stream

A string which is assigned to a string varaible is terminated by

Null character

Which one of the following option is correct about array

only one type of elements can be stored in an array

Suppose that an integer type pointer contains a memory address 0x22f220. What will be the new memory address if we increment this pointer by one?

0x22f224

In one dimensional array, we use __ for loop(s) to populate the array

1

In the case of pointer to pointer or the first pointer contains the address of second pointer, which contains the address of the varaible, which contains the

double derference

The data in the memory is

volatile

Suppose we have a file with name "myfile.txt". What will be the correct syntax of file opening for input

myFile.open("myfile.txt",ios:in);

In Analysis, we try to have a

Precise problem statement

Returns true if c is a digit or a letter and false otherwise

int isalnum (int c)

Boss address is the memory address of element of an array

1st

Following is the delclaration of a array. int arr[2][2]

2-Dimensional

While handling files, one can have options

All of the given

Strings are accessed by variable of type

char

For the following statement, how much memory will allocated to myarray[0]?

char* my array[] = {"Arif", "Sadia"};

5 Bytes

To get the value stored at a memory addresss, we use the

dereferencing operator

Suppose we have int y[10];

To access the 4th element of the array we write

y[3];

*data means

the value of whatever the data points to

Returns true if c is a letter and false otherwise

int alnum(intc)

If a file is opened with ios::out mode; then

a new file is created

Following is declartion of a 2D array, how many rows are declared for this array

3

A character is stored in the memory in

byte

In three-dimensional array, we use loop(s) to populate the array

3

What is the output of the following code?

int data [10] = {10,20,30,40,50,60,70,80,90,100};

int *xptr = &data[4];

int *xptr = &data[6];

cout<<xptr + yptr++;

syntax error

Which of the following is true about streams?

A. it is a sequence of bytes

B. its is an ordered sequence

C. All bytes can go through the stream simultaneously

D. Bytes that enters first into the stream will go out at last

A and B

Which of the following is a correct way to assign the address of the first element of array to the pointer?
int data[10];

int*ptr = data[0];

In one-dimensional array, we use for loops to populate the array

1

Base address is the memory address of element of an array

1st

A is an array of characters that can store number of character specified

String

Suppose we have int y[10];

To access the 4th element of the array we write

y[3];

Which mode of file is used to open a file or stream for insertion

out

A string which is assigned to a string variable is terminated by

Null character

What will be the correct syntax for declaration of the following statement?

"ptr is a constant pointer to an integer"

int *const ptr ;

A record is a group of related

Related fields

How many bytes an integer type pointer int Ptr will jump in memory if the statement below is executed?
int Ptr += 2 ;

8

Given a two dimensional array of integers, what would be the correct way of assigning the value 6 to the element at third row and fourth column

array[2][3] = 6;

Following is the declaration of a array. int arr[2][2];

2-Dimensional

Following is the declaration of a 2D array; how many columns are declared for this array

int arr[3][2];

2

are conventional names of the command line parameters of the 'main()' function

argc' and 'argv'

Pointers are special type of in which a memory address is stored

variables

Which header file must be included to use the functions tolower() and toupper()

ctype.h

The increment of a pointer depends on its data type

Pointers store the

memory address

ofstream is used for

Output file stream

Which of the following is true about streams?

A. it is a sequence of bytes

B. its is an ordered sequence

C. All bytes can go through the stream simultaneously

D. Bytes that enters first into the stream will go out at last

A and B

Following is the declaration of a 2D array; how many rows are declared for this array

3

For the following statement, how much memory will allocated to myarray[1]?

char* my array[] = {"Arif", "Sadia"};

6 bytes

Returns true if c is a digit or a letter and false otherwise

int isalnum(int c)

'\0' takes space in the memory

1 Byte

ifstream is used for

input the stream

Which header file must be included to use the functions tolower() and toupper()

ctype.h

Which mode of file is used to open a file or stream for insertion

out

Returns true if c is a digit or a letter and false otherwise

int alnum(int c)

Following is the declaration of a array. int arr[2][2];

2-Dimensional

are conventional names of the command line parameters of the 'main()' function

'argc' and 'argv'

What will be the correct syntax for declaration of the following statement?

"ptr is a constant pointer to an integer"

int *const ptr ;

In an n dimensional array, we use for loop(s) to populate the array

n

Transpose of matrix means that when we interchange rows and columns

the first row becomes the first column

A record is a group of related

Related Fields

What is output of the following code?

int data [10] = {10,20,30,40,50,60,70,80,90,100};

int *xptr = &data[4];

int *xptr = &data[6];

cout<<xptr + yptr++;

syntax error

char dest[50] = "Using strncat function,";

char src[50] = "this part iss added and this is ignored";

strncat(dest, src, 19);

cout << dest;

Using strncat function, this part is added

Which of the following option is correct about array

Only one type of elements can be stored in an array

Which of the following option is correct about array

Only one type of elements can be stored in an array

ifstream inFile; refers

object of reading from a file

Which mode of file is used to open a file or stream for extraction

in

Which mode of file is used to open a file or stream for insertion

out

Constructor is itself a of C++ and

function, can be overloaded

In analysis, we try to have a

Precise problem statement

Returns true if c is a digit or a letter and false otherwise

int isalnum (int c)

In C++ variable can be delcare anywhere in the program this will increase

readability

C++ offers levels of data access control inside a class

three

The function calloc takes two arguments, first argument is the

required space in term of numbers, size of space

How many bits form a byte

8

In an n-dimensional array, we use for loop(s) to populate the array

n

In three-dimensional array we use for loops to populate the array

3

For converting a void type pointer ptr into integer type, the correct syntax is

(int*)ptr

To prevent dangling reference the functions returing reference should be used with

global variables only

The heap memory structure

constantly changes in size

Bugs can occur to

uninitialized data

A record is a group of

Realted fileds

A class can be declared as a of other class

friend

The compiler generates automatically

constructors

Constructors is itself a of C++ and

function, can be overloaded

In Analysis we try to have to

Precise problem statement

Returns true if c is a digit or a letter and false otherwise

int isalnum (int c)

In shifting operations if zero is inserted at the left most bit, the negative number will become a number

positive

The compiler generates automatcally

constructors

A class is

a member function

What is the other name for a variable

Identifier

In one dimensional array, we use for loop(s) to populate the array

1

The data in the memory is

volatile

Suppose we have a file with name "myfile.txt" What will be the correct syntax for file opening for input

myFile.open("myfile.txt",ios::in);

When we include the header file in the angle brackets the compiler searches for it in

specific directory

The data members of class are initialized

at runtime

When we include the header file in the angle brackets the compiler searches for it in

specific directory

is a special type of pointer we have to cast it before we use it

void

An instance of a class is called

object

We should not use such variables names that are starting with because in C++, there are lots of internal constants and symbolic names that start with it

double underscore

With the use of dynamic allocation of memory, the system resources can be

used efficiently

contains functions for manipulations of character data

ctype.h

Returns true if c is a digit and false otherwise

int isdigit(int c)

Returns true if c is a letter and false otherwise

int isalpha(int c)

Returns true if c is a lowercase letter and false otherwise.

int islower(int c)

Returns true if c is an uppercase letter; false otherwise

int isupper(int c)

If c is an uppercase letter, tolower returns c as a lowercase letter. Otherwise, tolower returns the argument unchanged

int tolower (int c)

If c is an lowercase letter, toupper returns c as a lowercase letter. Otherwise, toupper

returns the argument unchanged

int toupper (int c)

Returns true if c is a digit or a letter and false otherwise

int isalnum (int c)

The parameter passed to isdigit() function is

Character

Following is an array of rows and columns. int num[3][4];

3,4

What will be the output of the following code segment

char myName[] ="Student ID"

int n= sizeof(myName);

cout<<n;

11

If we have a pointer on left hand side then the right hand side should have a/an

Address

What will be the output of the following code?

int data [10] = {10,20,30,40,50,60,70,80,90,100};

int *xptr = &data[5];

cout<<xptr + yptr++;

70

function is used to fixed the number of characters in a string

strlen()

Dereferencing operator is used represented by

*

Char**argv can be read as

pointer to pointer to char

an array argument is demoted to a pointer, so

pointer to pointer to char , or char **

The statement cout <<yptr will show the the yptr points to

memory address

eof is used to check for the of file when a file is being read

End

The value of a pointer can be

Address of a variable

Basic address is the memory address element of an array

1st

We can read, write and manipulate the same file using

fstream

A hierarchy of classes which are used to deal with console and disk files are

stream classes

Each array declaration must provide the information about all these things except

The location of first element to be stored

Suppose we have int y[10]; To access the 4th element of the array we write

y[3];

From the following; which one is the range of Random number generator function rand()? 0 – 32767

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0? double arr[10] = {0.0};

In C/C++; by default arguments are passed by_____to a function. Value

char name [] = “Hello World” ; In the above statement, a memory of_____characters will be allocated

12

Keyword is used to return some value from a function. return

Which of the function call is call by value for the following function prototype? float add(int);

add(x);

The ASCHI code of null character is 000

Pointers are a special type of in which a memory address is stored

variables

Which of the following function call is “call by reference” for the following function prototype? int add (int *);

add(&x);

The name of the array is a constant pointer which contains the memory address of the of the array first element

array name always contains the memory address of the of the array first element

At the, we try to break up the problem into functional units design phase

Pointers store the

memory address

Whenever some number is added in an array name, it will jump as many as the added number.

none or bytes or rows

Following is the declaration of a array. int arr[2][2][2];

3-Dimensional

Pointer stores the

memory address

Character strings can be terminated by

\n

To read command-line arguments the main() function itself must be given

2

We must include the header file to convert the value one type into another type using built-in functions

string.h

Which statement is used to close a file

myFile.close();

particular Pointer points to a

variable

Pointers work by pointing to particular

variable

Learning how to program is important because it develops and problem-solving abilities

Analytical

In C++, which of the following option has the correct meaning of the expression "a <=b"

a is less than or equal to b

Which of the following expression is correct in CC++ language

X = X + 3

What will be the correct syntax for declaration of the following statement?

"ptr is a pointer to const int"

const int*ptr

What will be the correct syntax for declaration of the following statement?

"ptr is a constant pointer to an integer"

int *const ptr ;

There is a pointer variable named ptr of type int then address of which type of variable the ptr will store in it?

variable of type int

There is a pointer variable named ptr of type float. Which type of variable address can be stored by ptr

float

What will be the output of the following code

int x = 15;

int y = 10;

int z = 5;

cout<<x*x•4*y*z;

25

In CC++, which of the following data type is used to store real numbers

int

What will be the output of the following C++ code

{

char str[6]= "Hello"

char str3[5];

strcpy (str3,str1);

cout<<strlen(str3);

}

5

The use of * sign in first and second statements is called and of pointer

Referencing, dereferencing

CS201

GRAND QUIZ FILE (NEW)
ALMOST 800 + MCQS
BY SABA AND

RAQIA

1. ------ is used for input file or for reading from the file.
Tellg()

2. Following is the declaration a ------- array. Int arr[2][2][2] 3-demensional

3. ! (x < 3) means in c++ that

X is greater than 3

4. Which of the following option is correct to compare the declaration of the function?
---------- (parameter1, parameter2)

{

// code to be executed
}

Void functionNAME

5. Ofstream is ued for --------

Output file stream

6. By default, the starting index of an arrar in c++ is
____ 0

7. How we declare an array of integer data whose size is 20 with array name “count”.
Int count [20];

8. Which of the following is a reserve word for data types in c/c++? Int

9. C was developed with the help of ---------- language
BCPL and B

10. An object of ----- class can be created for saving the current position of any opened file before reading from the file. Streampos

11. C ++ is a ----- language.

High level
12. In while loop, the loop counter is initialized at -----
Before entering the loop

13. What is the output of thw following code if the 3rd case is true
Switch (var)

{Case ‘a’;Cout<<”apple”<<endl;

Mango

14. ---------- character is used to indicate the end of the string.
Null

15. Which of the following is used to perform bit-wise exclusive OR operation?
|

16. If x = 11, and x % = 3, then value of x will be-
--- 2

17. A variable of character data type occupies ---- bytes in memory.

1

18. Null character is represented by ---- in c ++?

\0

19. In computer system there are mainly ---- type of softwares.

2

20. There is pointer variable named ptr of type float. Which type of variable address can be store by ptr? Float

21. A character is stored in the memory in -----

Byte

22. X is an integer variable; what does x++ means, Add 1 in x value

23. When we call a function, its control--------

Transfers to its definition

24. '\0' takes ---- space in the memory.

1 byte

25. -------- will be used for enclosing function statements into a block?

{ }

26. How can we declare an array of characters whose size is 12 with array name "country"?

Char country[12];

27. Following is the declaration of a 2d array, how many columns are declared for this array.
Int arr[3][2];

2

28. If we assign 2.06721 to an integer variable x, what will be the output if we print x using cout<< statement?
2

29. We can access a global variable ----

From anywhere in the program

30. We use ---- to include all those functions which are located in different files.
Linker
31. A character is stored in the memory in ----
Byte

32. Which is not true regarding structure?

We can declare array of structure

33. Mr. ahmad sleeps thirty hours every day. This sentence is ----
Grammatically correct but illogical

34. ----- will explain the function of a program.
Comments

35. Char **argv can be read as ----

Pointer to pointer to char

36. What will be output of the following code?

String name [4] = {“ali”, “bilal”,“omer”,
Ayesha”}; Cout<< name [0];

Ali

37. The data type before a function name represents its, Return type

37. The expression ((a+b) = = 10) || ((x+y) = = 20) is true only if?

Either ((a+b) = =) OR ((x + y) = =20) is true

38. = operator is used for ----

Assigning values to varaibles

39. What is the use of ios::trunc mode?

To truncate an existing file to zero

40. X is an integer variable; what does x ++ means, Add 1 in x value

41. Structures use ---- allocation.

Heap

42. What will be the size of the following character array?
Char name[] = “adeel”;

6

43. A ---- is an array of characters that can store number of character specified.

String

44. ----- statement is used to terminate the processing of a particular case and exit from switch structure.

Break

45. If y = 20 and z = y ++, then the valye of z will be------

2146. If

Int a = 17;

int b = 3;

double c = a/b;

what will be value of variable c?

5

47. What will be the output of the following code? String grade [3] = {“a’, “b”, “c”};

Grade[2] = “f”;

Cout<< grade[2];

F

48. Declaration of two-dimensional array of integers having 3 rows and 5 columns is following?

Int arr [3][5];

49. A = a + 1; can be written as ----

A+ = 1;

50. A record is a group of related
Fields

51. What will be the result of arithmetic
expression 6+48/4*3?
42

52. ---------- construct is used to execute a set of
instructions when a condition is true and other set when it is
false? If\else

53. If an array has 50 elements, what is allowable range
of subscripts?
0 – 49

54. If int a = 50; then the value of a/= 3; will be?

16

55. Which of the following option is/are correct about array?
Only one type of elements can store in an array

56. Whenever some number is added in an array name, it
will jump as many --- as the added number?
Rows
57. --------- returns true if c is a digit or a letter and false otherwise. Int
isalnum(int c)

58. which of the following is the default mode of the opening using
of ofstream class?

Ios::trunc

59. In which language the compiler of c language is written? C

60. While loop executes at least?

One time

61. String are accessed by variable of type----

Char

62. Which of the following is the correct operator to compare the values of two variables?

= =

63. Not operator is a -----

Single input operator

64. Pointer points to a particular-----

Memory address

65. A function is a block of statements that can be defined once and used- ---in the program.

As many times as user wants

66. -------- function is used to find the number of characters in a string?

Strlen()

67. ! = operator is used to check whether the operand on the left-hand side is------to the operand on the right-hand-side.

Not equal

68. A while loop may execute ----- or more times.

0

69. How we declare an array of integer data whose size is 20 with array name “count”.

Int count[20];

70. A variable declared within a code block becomes ---- variable for that block.

Local

71. If a file is opened with ios::out mode, then -------

We can write in this file

72. A function’s prototype is written --- the function call.

Before

73. ---- Loop is mostly used to perform repetition of a tasks for a known number of times.

For

74. In shifting operations if zero is inserted at the lest most bit, the negative number will become a ---- number.

Positive

75. It is the job of ---- to transfer the executable code from hard disk to main memory.

Loader

76. RAID stands for------

Redundant array of inexpensive devices

77. Array indexes start from ----

0

78. In call by reference, ----- of a variable is passed to the called function.
Address

79. How many times the following do-while loop will execute?
Int k = 10;

Do

{

Cout << “statements” << endle; ?

6

80. The name of a location in memory is called ----

Variable

81. ----- function is used to find the number of character in a string.
Strlen()

82. Which statement is used to close a file?

Myfile.close();

83. ------- allow us to have a memory location and use it as int or char interchangeably.

None of the given

84. While handling files, one can have ---- options

All of the given

85. ------- function is used to determine the next position to write a character while writing into a file.

Tellp()

86. Which is the correct syntax to define a structure named 'student'? Struct student{

//varaibles

};

87. < and > both are ---- operators.

Logical

Identify the logical error in the following if condition

88. If ((i<5) & & (i>15)) ?

Condition is always false

89. Not operator is a ----

Single input operator

90. The use of *sign in first and second statements is called --- and ---- of pointer.

Int *ptr = &x;

Cout<<*ptr; ?

Referencing, dereferencing

91. C is widely known as development language of ---- operating system.
Linux
92. If x is declare as an integer, what will be result of the
given expression?

X = 2 + 3 * 5 % 2 + 3 / 2 ??

4

93. What will be the correct syntax of declaration of the
following statements?

“ptr is a pointer to const int” ??

Const int *ptr

94. After evaluating the expression

95. X = 10 +3 * 4 / 2 – 1, the value of x will be?

15

96. We can read, write and manipulate the same file using ----
Fstream.h

97. Return type of a function that does not return any value must be ----
Void

98. Pointers store the ----

Memory address

99. ----- operator uses the sign ^.

Exclusive OR

100. To get the value stored at a memory address, we use the ----

Dereferencing operator

101. Telling a computer what to do is called ----

Programming

102. Compiler translates high level language program into ---- language code.

Machine

103. Each array declaration must provide the information about all these things except----

The location of the first element to be stored

104. Eof is used to check for the --- of file when a file is being resd.

End

105. The result of 4%3 will be?

1

106. When the logical operator AND (&&) combine two expression exp1 and exp2 then the result will be true only?

When both exp1 and exp2 are true

107. 'multi[3][3]' element can also be accessed by ------

((multi + 3) + 3)

108. What is output of following code?

Int data [10] = {10,20,30,40,50,60,70,80,90,100};

Int *xptr =&data [4];

Int *xptr =&data [6];

Cout<<xptr + yptr ++; ??

120

109. Which of the following is not the subcategory of the system software? None of the above

110. We get 12 | 8 = ------ where “|” is (bit-wise OR) ?

12

111. ------ is a substitute of multiple if statement.

If..elseif statement

112. Find out the logical error in following lines of code.

If (x = 10)

Cout << “x is 10”; ?

Assignment operator should not be used for comparison 113.

Which is not true regarding structure?

c) we can’t declare pointers to structure

114. -------- are used to compiler the code.

Compiler

115. #include <iostream>

#include <cstring>

Using namespace std;

Int main ()

{

Char str1[10] = “hello”;

Char str2[10] = “world”; ?

10

116. A --- structure specifies that an action is to be repeated while some condition remains true.

Repetition

117. In which language the compiler of c language is written? C

118. Characters string are terminated by -----

\0

119. A function is a block of statements that can be defined once and used - -- in the program.

As many times as user wants

120. -------- is used for output during the process of writing to the file.

Seekp()

In case of two-dimnstional array, if you add some number in a two dimensional name, it will jump to the next----

Row

121. In while loop the condition is checked ---- the execution of loop.
Before

122. Array indexes start from ----

0

123. Pointers store the ----

Memory address

124. Which step is not not performed during a proper program design? Write details about the performance of program

125, We can say that a pointer is a variable that holds the --- address.
Memory
126. When accessing a structure memory, the identifier to the left of the dot operator is the name of ----

Structure variable

127. From the following; which one is the range of random number generator rand() ?

O – 32767

128. To read command-line arguments, the main () function itself must be given ---- arguments.

2

129. Which operator has the highest precedence?

(*, -, /, +) ?

* and / both hane the same highest precedence

130. Suppose we have int y[10];

To access the 4th element of the array we write----

Y[3];

131. What will be the value of the variable output in the given piece of code? Double output = 0;
Output = (2 +2) * 4 + / (4 – 2);

17

132. What is the output of the following statement?

int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);

error

133. Searching is easier when an array is already sorted True

134. If an array has 100 elements, what is allowable range of subscripts?

0 - 99

While developing a program; should we think about the user interface? //handouts main

Yes

A character is stored in the memory in _____

String

These functions seekg() and seekp() requires an argument of type _____to let them how many bytes to move forward or backward.

Int

dereferencing operator is represented by _____

*

_____ transfers the executable code from main memory to hard disk.

Loader

When the logical operator OR (||) combine two expressions exp1 and exp2 then the result will be false only, //bitwise “or” applies here….

When both exp1 and exp2 are false

suppose we have int y[10]; To access the 4th element of the array we write_____

none of given

we have opened a file stream myfile for reading (getting), myfile.tellg () gives us the current get position of the file pointer. It returns a whole number of type_____

int

ofstream is used for_____

Output file stream

A structure is a collection of _____under a single name. Variables

In C/C++ the string constant is enclosed ……. corrected r red one In curly braces
The size of int data type is

4 bytes

In Flow chart process is represented by

Rectangle

If the break statement is missed in switch statement then,// a break statement with no label always completes abruptly, the reason being a break with no label. If no switch, while, do, or for statement in the immediately enclosing method, constructor or initializer encloses the break statement, a compile-time error occurs?

This may cause a logical error

When we are using const keyword with a variable x then initializing it at the time of declaration is, ?

Optional

Which of the following is the correct way to assign an integer value 5 to element of a matrix say ‘m’ at second row and third column?

m[2][3] = 5 ;

How many total elements must be in two-dimensional array of 3 rows and 2 columns?

6

Which of the following is the correct statement for the following declaration?
*ptr is a pointer to const int

What will be the correct syntax to assign an array named arr of 5 elements to a pointer

ptr?

*ptr = arr[5] ;

C is a/an _____ language

object oriented

The variables having a name, type and size are just like empty boxes. True

What's wrong with this for loop?

for (int k = 2, k <=12, k++)

the commas should be semicolons

Most efficient method of dealing with structure variables is to define the structure globally

True

There are mainly ---------- types of software.// Two

When a pointer is incremented, it actually jumps the number of memory addresses ?
According to data type

setw is a parameterized manipulator.

True

if (a>b && a>c) then the condition will be true only if

Both a>b and a>c are true

In while loop the loop counter must be initialized,

Before entering the loop

_____ of a variable means the locations within a program from where it can be accessed.

Reference

Switch support_____ data.

Integer

Character

Float

Both integer and character

A function is a block of statements that can be defined once and used _____ in the program.

As many times as user wants

_____statement is used to terminate the processing of a particular case and exit from switch structure.

break

The most suitable data type for number 325.25 is _____. float

X is an integer variable; what does X++ means,

Add 1 in X value

The operators ++ and –- are used to increment or decrement the value of a variable by _____

1

Which of the following loops checks the test condition at the end of the loop?

Do-While

The operator to free the allocated memory using new operator is _____.

delete

suppose we have int y[10]; To access the 4th element of the array we write_____

y[3];

From the following; which one is the range of Random number generator function rand()?

0 – 32767

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

double arr[10] = {0.0};

The string in the array is terminated by a_____

null

In C/C++; by default arguments are passed by_____to a function. Value

char name [] = “Hello World” ; In the above statement, a memory of_____characters will be allocated

12

_____Keyword is used to return some value from a function.

return

Which of the function call is call by value for the following function prototype? float add(int);

add(x);

The increment of a pointer depends on its_____.

data type

The ASCHI code of null character is_____

000

Pointers are a special type of _____in which a memory address is stored

variables

Transpose of a matrix means that when we interchange rows and columns_____

the first row becomes the first column

Pointers store the _____

value of a variable

Which of the following function call is “call by reference” for the following function prototype? int add (int *);

add(&x);

The name of the array is a constant pointer which contains the memory address of the _____of the array.

first element

array name always contains the memory address of the _____of the array

first element

At the_____, we try to break up the problem into functional units design phase

Syntax of a union is identical to _____ .

structure

A union is a user-defined data type that contains only _____from its list of members at a

time.

one object

Which of the given file handling modes are similar in their functionality ?
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

In C/C++, the header file used for string manipulation is _____. string.h

A 2D array multi[5][10] can be accessed using the array name as **multi , this technique is

called _____.

Double dereferencing

C language was evolved from _____ language(s).

B and BCPL

The _____ statement forces the immediate next iteration of the loop. Continue

_____ are very good tools for code reuse.

Functions

When an argument is passed by reference, _____

the function accesses the argument's original value in the calling program.

_____ executes all the lines before error and stops at the line which contains the error.

Intrepreter

Analysis is the ---------- step in designing a program.

First

Which of the following is the correct function call, having array named student of 10

elements as a parameter?

addRecord(student);

When an array element is passed to a function, it is passed by _____.

Reference

What is the correct syntax to declare an array of size 10 of int data type? int name[10] ;

If we want to copy an array, both arrays need to be of same_____. Data type and size

Which of the following is the correct syntax to print multiple values or variables in a single command using cout?

cout << "H" << x << "\n";

Which one of the statements given below is equivalent to x %= 5? x = x % 5

The condition in loop should be a(n) _____.

Boolean Expression

Which structure is represented by following flow chart ? if structure

Stream which sends data to the program is called _____. Input stream

Syntax of a union is identical to _____ .

Structure

When accessing a structure member, the identifier to the left of the dot operator is the

name of _____.

a structure variable
The parameter passed to isdigit() function is
_____. a character variable

TWAIN stands for _____ .

Technology Without An Interesting Name

_____ translates high level language program into machine language code.

Compiler

From the option given below, what will be the correct output of the code?
for (int a = 1; a <= 3; a++)
cout<<a*3-1<<" ";

2 5 8

If the return type of a function is void then it means that it will
_____. return any type of data
return no data

The functions that have already been defined as a part of the language are called

_____.

built-in functions
Given that doubleArray is an array of 7 integers. Which of the below is the correct statement to access the 5th element of the array?

doubleArray[4]

The symbol which is used to represent a process in a flow chart is _____.

Rectangle

When an array is passed to a function, by default it will be passed by_____.

Reference

What is the range of Random number generator function rand()? 0 – 32767

The first character of a variable name must be an alphabet or _____.

Underscore

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference
Initialization of variable at the time of definition is ----------practice.
Good Programming

Which looping process checks the test condition at the end of the loop? do-while

You can use a _____ statement to transfer control elsewhere out of the nested structure.

Goto

Which of the following array is the most suitable for storing a matrix structure?

Single-dimensional array

The microsoft word document(.doc) is a kind of _____ . Random Access File

A union is a user-defined data type that contains only _____from its list of members at a time.

one object

In C/C++, _____ are the doors through which data can enter and come out of a program.

Streams

Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

C++ views each file as a sequential stream of _____. Bytes

In 2D array, the technique used to access the array elements is called _____

Double dereferencing

From the options given below, identify the correct option which is used for calling the function float square (int &);

square (num);

Identify the correct option which is used for calling the function float area (int).

area(num) ;

Which kind of error occurs in the code below to access the variable num in the main

function?

```
int num =10;

int main(){

int x ;

x = num ;
}
```

No error

A program statement that invokes a function is called _____. function call

What will be the output of the following code segment?

```
main(){

int a = 10 ;

int b =0;

int *x = &a;

b = (*x)+3 ;

cout << a << —, ‖ << b ;

}
```

10,13

When the logical operator AND (&&) combines two expressions exp1 and exp2 then the result will be true only _____

When both exp1 and exp2 are true

For which array, the size of the array should be one more than the number of elements in an array?

char

What is the range of Random number generator function rand()? 0 – 32767

To assigned a value to a character type variable, _____ are used around the value.

single qoutes ' '

In C/C++, the #include is called_____.

Preprocessor Directive

The number 544.53 must be stored in _____ data type.

Float

Use of the _____ statement violates the rules of structured programming.

Goto

In Flow Chart, flow of control is represented by _____. Arrow

What will be the correct syntax for initialization of pointer ptr of type int with variable x?

int *ptr = &x ;
Syntax of a union is identical to _____ .

structure

A union is a user-defined data type that contains only _____from its list of members at a time.

one object

Which of the given file handling modes are similar in their functionality ?
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

Stream which sends data to the program is called _____. Input stream

Syntax of a union is identical to _____ .

Structure

When accessing a structure member, the identifier to the left of the dot operator is the name of _____.

a structure variable
The parameter passed to isdigit() function is _____. a character variable

TWAIN stands for _____ .

Technology Without An Interesting Name

_____ translates high level language program into machine language code.

Compiler

From the option given below, what will be the correct output of the code?
for (int a = 1; a <= 3; a++)
cout<<a*3-1<<" ";

2 5 8

If the return type of a function is void then it means that it will _____. return no data

The functions that have already been defined as a part of the language are called

_____.

built-in functions
Given that doubleArray is an array of 7 integers. Which of the below is the correct

statement to access the 5th element of the array?

doubleArray[4]

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Rectangle

When an array is passed to a function, by default it will be passed by_____.

Reference

The first character of a variable name must be an alphabet or _____.

Underscore

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference

Initialization of variable at the time of definition is ----------practice.
Good Programming
Which looping process checks the test condition at the end of the loop? do-while

You can use a _____ statement to transfer control elsewhere out of the nested structure.

Goto

An object of _____ class can be created for saving the current position of any opened file

before reading from the file

Stream

The value returned by the eof() function is of _____
type. Character

If a file is not properly closed in a program then what is the status of the program ?

The program will terminate normally

The parameter passed to isdigit() function is
_____. a character variable
In C/C++, the header file used for string manipulation is
_____. string.h

Arrays are best data structures _____.

for relatively permanent collections of data

Each array declaration must provide the information about all these things except

_____.

Number of elements of the array

The First step for developing a program is _____.

Linking

Analysis

_____ transfers the executable code from hard disk to main memory. Loader

_____ operator is used to pass the address of a variable to the called function.

&

In call by reference, _____ of a variable is passed to the called function.

Address

_____ of a function is also known as signature of a function. Declaration

Preprocessor program performs its function before _____ phase takes place.

Compiling

Which of the following is the correct function call, having array named student of 10 elements as a parameter?

addRecord(student[10]);

The remainder (%) operator is a _____operator.

Arithmetic

Which of the following array is the most suitable for storing a matrix structure?

Two-dimensional array

*.doc is _____ by type.

► Random Access File

Which of the following is NOT a preprocessor directive?

► #define

The return type of operator function must always be void.

► False

Question No: 4 (Marks: 1) - Please choose one

What does (*this) represents?

► A value of the data member

The statement cin.get (); is used to,

► Read a character from keyboard

When we do dynamic memory allocation in the constructor of a class, then it is necessary to provide a destructor.

► True

Overloaded new operator function takes parameter of type size_t and returns

► void pointer

The second parameter of operator functions for << and >> are objects of the class for which we are overloading these operators.

► True

C++ is a case-sensitive language

► True

To include code from the library in the program, such as iostream, a directive would be called up using this command.

► #include <iostream.h>

A template function must have only generic data types.

► True

Template class can not have static variables.

► False

What will be the correct syntax to assign an array named arr of 5 elements to a pointer

ptr?

► *ptr = arr[5] ;

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

► Both 1and 3

If most significant bit of un-signed number is 1 then it represents a positive number.

► True

If there is a symbol (& sign) used with the variable name followed by data type then it

refers to _____ and if & is being used with variable name then it refers to _____.

► Reference variable, address of variable

We can also do conditional compilation with preprocessor directives.

► True

The default value of a parameter can be provided inside the _____

► function definition

Classes defined inside other classes are called _____ classe ► nested

What purpose do classes serve?

► All of the given options

Every class contains _____.

► Constructor

new operator is used to allocate memory from the free store during ► None of the given options

When an object of a class is defined inside another class then, ► Destructor of inner object will be called first

It is possible to define a class within another class.

► True

New and Delete are also used with _____ and data types as well. ► Class, Objects

With New keyword, data types and class members are initialized with meaningful values instead of garbage.

► True

C language is developed by

► Dennis Ritchie

Which of the following choice is not an example of an int data type?

► -4.0

In flow chart, the symbol used for decision making is,

► Diamond

Switch statement deals with,

► Integer and character data

Default case in switch statement is,

► Optional

*.doc is _____ by type.

► Sequential File

Member function tellg() returns the current location of the _____ pointer.

► tellptr()

Dealing with structures and functions passing by reference is the most economical method

► True

In C/C++ all character strings are terminated with,

► Null character

Word processor is http://vustudents.ning.com

► Application software

Which of the following can not be a variable name?

10area

Which looping process is best, when the number of iterations is known?

► while

By default an array of characters is passed by value to a function

► False

Which of the following operator is used to access the address of a variable?

► & operator

The name of an array represents address of first location of array element.

► False

Compiler is a

► Application Software

If Num is an integer variable then Num++ means,

► Add 1 with Num

For one byte there are _____ combinations of values that can be stored in computer.

► 2^8

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

► ctype.h

Default case in switch statement is,

► Optional

When break statement is encountered in switch statement, it
► Exits from switch statement

What will be the result of arithmetic expression
6+27/3*3? ► 33

What is the correct syntax to declare an array of size 10 of int data type?
► int name[10] ;

How many dimensions does n-dimensional array has?

► n dimensions

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

► ptr[3]

Which of the following values C++ use to represent true and false?
► 1 and 0

Declaring structures does not mean that memory is allocated.
► True

For which array, the size of the array should be one more than the number of elements in an array?

► char

If a variable is passed by value to a function and the function makes some changes to that variable then it

► does not affect the original variable

In C/C++ the #include is called,

► Preprocessor Directive

Loops are ---------- Structure.

► Repetition

the sizeof operator is used to determine the size of _____. data type

Structures use _____ allocation.

Stack

Which header file must be included to use the functions tolower() and toupper()?

ctype.h

In Analysis, we try to have a_____

Precise problem statement

Pointers store the _____

memory address

_____ Returns true if c is a digit and false otherwise. int isdigit(int c)

eof is used to check for the _____ of file when a file is being read. End

The statement cout << yptr will show the _____the yptr points to. memory address

Which of the following is true about streams?

A& B

While handling files, one can have _____
options All of the given

If an array has 50 elements, what is allowable range of subscripts?
0 – 49

A structure is a collection of _____under a single name. variables

Ifstream is used for_____

Input file stream

The ASCHI code of null character is_____

000

dereferencing operator is represented by _____

*

Whenever some number is added in an array name, it will jump as many _____as the added number.

rows

To access the data members of structure, _____ is used. Dot operator

Which of the following is true about streams? A. It is a sequence of bytes B. It is an ordered sequence C. All bytes can

go through the stream simultaneously D. Bytes that enters first into the stream will go out at last

A and B

We use _____ to open a file or stream for extraction

in

char **argv can be read as_____.

pointer to pointer to char

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

double arr[10] = {0.0};

Pointers work by pointing to a particular_____

data type

_____function give the position of the next character to be read from that file.

tellg()

aFile. seekg (-10L, ios:cur)

backward direction

An object of _____ class can be created for saving the current position of any opened file before reading from the file.

Stream

Structures are syntactically defined with the word_____. struct

_____ allow us to have a memory location and use it as int or char interchangeably

union

Question # 9 of 10 (Start time: 12:25:41 PM) Total Marks: 1

A hierarchy of classes which are used to deal with console and disk files are called _____.

IO classes

_____function is used to determine the next position to write a character while writing into a file.

tellp()

For binary member operators, operands on the _____ drives (calls) the operation.

Left

We cannot increment _____.

references

We can _____ pointer.

all of the given

We can _____ references.

None of the given

What will be the correct syntax for the following function call?
add(x);
An instance of a class is called _____.

object

The _____ is called automatically when an object destroys destructor

The destructor is used to _____.

deallocate memory

_____ data isn't accessible by non-member functions or outside classes. private

Member functions of the class _____ main program.

are accessible from

Overloading means :

Using the same name to perform multiple tasks or different tasks depending on the situation.

The main advantage of function overloading is _____.

The program becomes more readable

You cannot overload the _____ operator.

? :

In C++, a variable can be declared anywhere in the program this will increase _____.

efficiency

Memory allocated from heap or free store _____.

cannot be returned back unless freed explicitly using free and delete operators

We cannot use _____ pointer for storing and reading data from it. 'NULL

The dynamic memory allocation uses _____ whereas static memory allocation uses _____.

heap , stack

What will be the output of the given code?

```
#include #define MAX( A, B ) ((A) > (B) ? (A) : (B))
void main() {
int i, x, y;
x = 23;
y = 45;
i = MAX( x++, y++ );
// Side-effect: // larger value incremented twice
cout << "x = " << x << " y = " << y << '\n';
}
```
x=24 y=47

NULL has been defined in _____ header file.

Stdlib.h

Symbolic constant PI can be defined as:

#define PI 3.14

The friend function of a class can have access _____. to the private data members

C++ was developed by _____.

Bejarne Stroustrup

Once the _____ are created, they exist for the life time of the program. static variables

Encapsulation means _____.

that the data of a class can be accessed from outside

An address is a _____, while a pointer is a _____.

constant, variable

The syntax of declaration of a function that returns the reference to an integer is _____.

int & myfunc();

Which one of the following is mandatory preprocessor directive for c++?
#include

The members of a class declared with the keyword struct are _____ by default.

Public

getche() is a _____ function and defined in _____ header file. built-in function , conio.h

_____ operators are the ones that require two operands on both sides of the operator.

Binary

_____ will return the number of bytes reserved for a variable or data type.

sizeof operator

_____ are not available in C language.

Library functions

The members of a class declared without any keyword are _____ by default.

private

For console input and output we use _____.

conio.h header file

The name of the destructor is the same as that of a class proceeding with a _____.

~ sign

A reference cannot be NULL it has to point a data type.

True

A pointer is _____.

a variable for storing address

Constructor is a special function, called whenever we _____. instantiate an object of a class

Symbolic constant PI can be defined as:

#define PI 3.14

Object code is machine code but it is not _____ and _____. relocatable, executable

The default visibility for the data members of the class is private

accessible outside the class

The _____ is called automatically when an object destroys. destructor

Constructor is special type of function :

which has no return type

_____ variables are those that are defined outside of main. Global

Within the statement obj1=obj2; obj1 will call the assignment operator function and obj2 will be passed as an argument to function.

True

When the compiler overload the assignment (=) operator by default then Compiler does member wise assignment.
It is possible to return an object from function using this pointer.
True

Overloaded assignment operator must be

Member function of class

Let suppose

int a, b, c, d, e;

a = b = c = d = e = 42;

This can be interpreted by the compiler as

a = (b = (c = (d = (e = 42))));

In statement a+b+c, at first

b+c is executed first

Suppose int i = 10; then what is the output of
cout<<oct<<i; 12

ostream is a _____ operator.

Standalone

_____ must be included to use stream manipulation in your code. Iomanip
_____ operators are the ones that require only one operator to work. Unary

The endl and flush are _____.

Manipulators

When operator function is implemented as member function then return type of function _____.

Can be any data type

When a variable is defined as static in a class then _____. Only one copy is created for all objects of this class

Automatic variables are created on _____.

Stack

cout << i << " ";

cout << d <<" ";

cout << f;

Above statements can be written within statement of one line as:
cout << i <<" "<< d <<" "<< f;
dec, hex, oct are all _____.

Non-parameterized manipulators

What will be the output of following statement?

cout<<setfill('0')<<setw(7)<< 128;

0000128

Which of the following syntax is best used to delete an array of 5 objects named 'string' allocated using new operator.

delete []string;

If we have a program that writes the output data(numbers) to the disc, and if we collect the output data and write it on the disc in one write operation instead of writing the numbers one by one.

In the above situation the area where we will gather the number is called Buffer

The first parameter of operator function for << operator _____. Must be passed by reference

The second parameter of operator function for >> operator must always be passed

By reference

The only operator that the compiler overloads for user define data type by default is------

Assignment (=) operator

Consider the following code, the printed value will be converted into:
int n=10;
cout <<oct<<n;

Base 8

_____ variables are defined in the main.

Local

ostream class is _____ and not under our control.

built-in

The memory allocation in C++ is carried out with the help of _____. new operator

If B is designated as friend of A, B can access A's non-public members. A can access non-public members of B

If the request of new operator is not fulfilled due to insufficient memory in the heap _____.

the operator returns 0
We should not use such variable names that are starting with _____ because in C++, there are lots of internal constants and symbolic names that start with it.

double underscore

The friend keyword provides access _____.

in one direction only

The malloc function takes _____ argument(s).

one

The constructor contains _____.

no return type

What will be the output of the following c++ code?

```
#include<iostream.h>
#define max 100
main()
{
#ifdef max
Cout<<"Hellow;
}
```

Error

Once we have defined a symbolic constant value using #define, that value _____ during program execution

cannot be changed

The memory allocation functions return a chunk of memory with a pointer of type _____.

ptr

A class can be declared as a _____ of other class.

member

To avoid dangling reference, don't return _____.

the reference of a local variable from the function

Constructor is itself a _____ of C++ and _____.

function, can be overloaded

The parameter passed to isdigit() function is _____ variable. Integer

char **argv can be read as _____.

pointer to pointer to char

To read command-line arguments, the main() function itself must be given _____ arguments.

2

How many bytes an integer type pointer intPtr will jump in memory if the statement below is executed?

intPtr += 2;

8

The increment of a pointer depends on its _____.

data type

The statement cout << yptr will show the _____ the yptr points to. memory address

_____ is used as a dereferencing operator.

*

Transpose of a matrix means that when we interchange rows and columns _____.

the first row becomes the first column

Individual characters in a string stored in an array can be accessed directly using array _____.

subscript

We can define a matrix as _____ array.

Multi dimensional

A _____ is an array of characters that can store number of character specified.

String

Given a two dimensional array of integers, what would be the correct way of assigning the value 6 to the element at third row and fourth column?

array[2][3] = 6;

_____ of a variable means the locations within a program from where it can be accessed.

Visibility

Which of the following function call is "call by reference" for the following function prototype? int add (int *);

add(&x);

Which of the following function call is "call by reference" for the following function prototype? float add (float *);

add(&x);

Which of the function call is call by value for the following function prototype? float add(float);

add(x);

Which of the function call is "call by value" for the following function prototype? float add(int);

add(x);

Return type of a function that does not return any value must be _____. void

_____ will be used for enclosing function statements into a block. { }

What is the output of the following code if the 2nd case is true

```
switch (var) {
case 'a': cout<<"apple"<<endl;
case 'b':cout<<"banana"<<endl;
case 'm':cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl;
}
```

Banana mango any fruit

When the break statement is encountered in a loop's body, it transfers the control _____ from the current loop.

Outside

What is the output of the following code if the 3rd case is true

```
switch (var) {

case 'a':cout<<"apple"<<endl;
case 'b':cout<<"banana"<<endl;
case 'm':cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl;
}
```

Mango any fruit

What is the output of the following code, if the first case is true

```
switch (var) {
case 'a':cout<<"apple"<<endl;
case 'b':cout<<"banana"<<endl;
case 'm':cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl;
}
```

Apple banana mango any fruit

What will be the output of following code segment?

```
for (int i = 2; i<10; i++) {
if ( i == 5) continue;
```

cout << i << "," ;

}

2,3,4,6,7,8,9

_____ statement is used to terminate the processing of a particular case and exit from switch structure.

break

What will be the result of the expression j = i++; if initially j = 0 and i = 5? 5

What will be the result of the expression k = ++m; if initially k = 0 and m = 5

What will be the result of the expression k = ++m; if initially k = 0 and m = 5?

6

How many times the following do-while loop will execute? int k = 10; do { cout << "Statements" << endl; k -= 2; } while(k>0);
6

Which of the following loops checks the test condition at the end of the loop?

Do-While

The operators ++ and -- are used to increment or decrement the value of a variable by _____.

1

How many times the following loop will execute?

int j = 3; while(j > 0) { cout << "Statements" << endl; j -= 2; } 2

A _____ structure specifies that an action is to be repeated while some condition remains true.

Control

!(x > 3) means in C++ that

x is less than or equal to 3

When the logical operator && combines two expressions then the result will be true only when the both expressions are _____.

true

< and > both are _____ operators.

Relational

What will be the value of variable “input” if the initial value of input is 67?

if(input >= 50)

input = input + 1;

if(input <= 75)

input = input + 2;
else

input = input - 1;

!(x < 3) means in C++ that

x is greater than or equal to 3

!= operator is used to check whether the operand on the left-hand-side is _____ to the operand on the right-hand-side.

Not equal

When the if statement consists more than one statement then enclosing these statement in curly braces is,

Must

The most suitable data type for number 325.25 is _____. Float

What will be the result of arithmetic expression 6+48/4*3?
42

Which of the following will be the most appropriate data type to store the value 63.547?

Float
In the given expression which operator will be evaluated first? 10 + (6 / 2) - 2 * 3?

/

What will be the value of the variable output in the given piece of code? double output = 0;
output = (2 + 2) * 4 + 2 / (4 - 2);

It is the job of _____ to transfer the executable code from hard disk to main memory.

Loader

In computer systems there are mainly _____ type of softwares. 2

_____ will explain the function of a program.

Comments

if (a>b && a>c) then the condition will be true only if

Both a>b and a>c are true

A variable of character data type occupies _____ byte(s) in memory. 1

We must include the header file _____ to convert the value of one type into another type using built-in functions.

string.h

A function is a block of statements that can be defined once and used _____ in the program.

As many times as user wants

Select the correct way to assign the address of first element of array to pointer?

int *ptr = &data;

Consider the following code segment. What will be the output of following code?

```
int addValue (int *a){
int b = (*a) + 2;
return b;
}
main() {
int x = 6;
cout<<addValue(&x)<<",";
cout<<x;
}
```

6,8,6

Here the code is given below. You have to identify the problem in the code. while(i < 10) && (i > 24))
the test condition is always false

The correct syntax of do-while loop is _____.

do {statements;} while (condition);

Matrix is defined as _____.

Multi-dimensional array

In programming, comments are used to explain the functioning of the _____.

Program

Operating System is a type of a/an _____.

system software

From the options given, you need to choose the option which is true for the given code.

```
for (int i = 1; i>0; i++) {
/*loop code*/
}
```

the test condition is always true

Which of the following values are used in C/C++ to represent true and false?

1 and 0

'While' loop may execute _____ or more times.

zero

Body of any function is enclosed within _____.

{ }

What will be the correct syntax for initialization of a pointer ptr with string "programming"?

char *ptr = "programming";

Which one of the given option is not a mode for reading/writing the data from a file?

Get

Which of the following operators is used to access the value of variable pointed by a pointer?

* operator

CS201

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RAQIA

1. ------ is used for input file or for reading from the file.
Tellg()

2. Following is the declaration a ------- array. Int arr[2][2][2] 3-demensional

3. ! (x < 3) means in c++ that

X is greater than 3

4. Which of the following option is correct to compare the declaration of the function?

---------- (parameter1, parameter2)

{

// code to be executed
}

Void functionNAME

5. Ofstream is ued for --------

Output file stream

6. By default, the starting index of an arrar in c++ is
____ 0

7. How we declare an array of integer data whose size is 20 with array name “count”.
Int count [20];

8. Which of the following is a reserve word for data types in c/c++? Int

9. C was developed with the help of ---------- language
BCPL and B

10. An object of ----- class can be created for saving the current position of any opened file before reading from the file. Streampos

11. C ++ is a ----- language.

High level
12. In while loop, the loop counter is initialized at -----
Before entering the loop

13. What is the output of thw following code if the 3rd case is true

Switch (var)

{Case ‘a’;Cout<<”apple”<<endl;

Mango

14. ---------- character is used to indicate the end of the string.

Null

15. Which of the following is used to perform bit-wise exclusive OR operation?

|

16. If x = 11, and x % = 3, then value of x will be-

--- 2

17. A variable of character data type occupies ---- bytes in memory.

1

18. Null character is represented by ---- in c ++?

\0

19. In computer system there are mainly ---- type of softwares.

2

20. There is pointer variable named ptr of type float. Which type of variable address can be store by ptr? Float

21. A character is stored in the memory in -----
Byte

22. X is an integer variable; what does x++
means, Add 1 in x value

23. When we call a function, its control--------
Transfers to its definition

24. '\0' takes ---- space in the memory.

1 byte
25. -------- will be used for enclosing function statements into a block?
{ }

26. How can we declare an array of characters whose size is 12 with array name "country"?
Char country[12];

27. Following is the declaration of a 2d array, how many columns are declared for this array.
Int arr[3][2];

2

28. If we assign 2.06721 to an integer variable x, what will be the output if we print x using cout<< statement?
2

29. We can access a global variable ----

From anywhere in the program

30. We use ---- to include all those functions which are located in different files.

Linker

31. A character is stored in the memory in ----

Byte

32. Which is not true regarding structure?

We can declare array of structure

33. Mr. ahmad sleeps thirty hours every day. This sentence is ----

Grammatically correct but illogical

34. ----- will explain the function of a program.

Comments

35. Char **argv can be read as ----

Pointer to pointer to char

36. What will be output of the following code?

String name [4] = {“ali”, “bilal”,“omer”, Ayesha”}; Cout<< name [0];

Ali

37. The data type before a function name represents its, Return type

37. The expression ((a+b) = = 10) || ((x+y) = = 20) is true only if?

Either ((a+b) = =) OR ((x + y) = =20) is true

38. = operator is used for ----

Assigning values to varaibles

39. What is the use of ios::trunc mode?

To truncate an existing file to zero

40. X is an integer variable; what does x ++
means, Add 1 in x value

41. Structures use ---- allocation.

Heap

42. What will be the size of the following character array?
Char name[] = “adeel”;
6

43. A ---- is an array of characters that can store number of character specified.
String

44. ----- statement is used to terminate the processing of a particular case and exit from switch structure.
Break

45. If y = 20 and z = y ++, then the valye of z will be------
2146. If
Int a = 17;

int b = 3;

double c = a/b;

what will be value of variable c?

5

47. What will be the output of the following code? String grade [3] = {“a’, “b”, “c”};
Grade[2] = “f”;

Cout<< grade[2];

F

48. Declaration of two-dimensional array of integers having 3 rows and 5 columns is following?
Int arr [3][5];

49. A = a + 1; can be written as ----

A+ = 1;

50. A record is a group of related Fields

51. What will be the result of arithmetic expression 6+48/4*3?
42

52. ---------- construct is used to execute a set of instructions when a condition is true and other set when it is false? If\else

53. If an array has 50 elements, what is allowable range of subscripts?

0 – 49

54. If int a = 50; then the value of a/= 3; will be?

16

55. Which of the following option is/are correct about array?
Only one type of elements can store in an array

56. Whenever some number is added in an array name, it will jump as many --- as the added number?

Rows

57. --------- returns true if c is a digit or a letter and false otherwise. Int isalnum(int c)

58. which of the following is the default mode of the opening using of ofstream class?

Ios::trunc

59. In which language the compiler of c language is written? C

60. While loop executes at least?

One time

61. String are accessed by variable of type----

Char

62. Which of the following is the correct operator to compare the values of two variables?

= =

63. Not operator is a -----

Single input operator

64. Pointer points to a particular-----

Memory address

65. A function is a block of statements that can be defined once and used- ---in the program.

As many times as user wants

66. -------- function is used to find the number of characters in a string?

Strlen()

67. ! = operator is used to check whether the operand on the left-hand side is------to the operand on the right-hand-side.

Not equal

68. A while loop may execute ----- or more times.

0

69. How we declare an array of integer data whose size is 20 with array name “count”.

Int count[20];

70. A variable declared within a code block becomes ---- variable for that block.

Local

71. If a file is opened with ios::out mode, then -------

We can write in this file

72. A function's prototype is written --- the function call.

Before

73. ---- Loop is mostly used to perform repetition of a tasks for a known number of times.

For

74. In shifting operations if zero is inserted at the lest most bit, the negative number will become a ---- number.

Positive

75. It is the job of ---- to transfer the executable code from hard disk to main memory.

Loader

76. RAID stands for------

Redundant array of inexpensive devices

77. Array indexes start from ----

0

78. In call by reference, ----- of a variable is passed to the called function.
Address

79. How many times the following do-while loop will execute?
Int k = 10;

Do

{

Cout << “statements” << endle; ?

6

80. The name of a location in memory is called ----

Variable

81. ----- function is used to find the number of character in a string.
Strlen()

82. Which statement is used to close a file?

Myfile.close();

83. ------- allow us to have a memory location and use it as int or char interchangeably.

None of the given

84. While handling files, one can have ---- options

All of the given

85. ------- function is used to determine the next position to write a character while writing into a file.

Tellp()

86. Which is the correct syntax to define a structure named 'student'? Struct student{

//varaibles

};

87. < and > both are ---- operators.

Logical

Identify the logical error in the following if condition

88. If ((i<5) & & (i>15)) ?

Condition is always false

89. Not operator is a ----

Single input operator

90. The use of *sign in first and second statements is called --- and ---- of pointer.

Int *ptr = &x;

Cout<<*ptr; ?

Referencing, dereferencing

91. C is widely known as development language of ---- operating system.

Linux

92. If x is declare as an integer, what will be result of the given expression?

X = 2 + 3 * 5 % 2 + 3 / 2 ??

4

93. What will be the correct syntax of declaration of the following statements?

“ptr is a pointer to const int” ??

Const int *ptr

94. After evaluating the expression

95. X = 10 +3 * 4 / 2 – 1, the value of x will be?

15

96. We can read, write and manipulate the same file using ----
Fstream.h

97. Return type of a function that does not return any value must be ----
Void

98. Pointers store the ----

Memory address

99. ----- operator uses the sign ^.

Exclusive OR

100. To get the value stored at a memory address, we use the ----
Dereferencing operator

101. Telling a computer what to do is called ----

Programming

102. Compiler translates high level language program into ---- language code.

Machine

103. Each array declaration must provide the information about all these things except----

The location of the first element to be stored

104. Eof is used to check for the --- of file when a file is being resd.
End

105. The result of 4%3 will be?

1

106. When the logical operator AND (&&) combine two expression exp1 and exp2 then the result will be true only?

When both exp1 and exp2 are true
107. 'multi[3][3]' element can also be accessed by ------
((multi + 3) + 3)

108. What is output of following code?

Int data [10] = {10,20,30,40,50,60,70,80,90,100};

Int *xptr =&data [4];

Int *xptr =&data [6];

Cout<<xptr + yptr ++; ??

120

109. Which of the following is not the subcategory of the system software? None of the above

110. We get 12 | 8 = ------ where “|” is (bit-wise OR) ?

12

111. ------ is a substitute of multiple if statement.

If..elseif statement

112. Find out the logical error in following lines of code.

If (x = 10)

Cout << “x is 10”; ?

Assignment operator should not be used for comparison 113.

Which is not true regarding structure?

c) we can’t declare pointers to structure

114. -------- are used to compiler the code.

Compiler

115. #include <iostream>

#include <cstring>

Using namespace std;

Int main ()

{

Char str1[10] = “hello”;

Char str2[10] = “world”; ?

10

116. A --- structure specifies that an action is to be repeated while some condition remains true.

Repetition

117. In which language the compiler of c language is written? C

118. Characters string are terminated by -----

\0

119. A function is a block of statements that can be defined once and used - -- in the program.

As many times as user wants

120. -------- is used for output during the process of writing to the file.
Seekp()

In case of two-dimnstional array, if you add some number in a two dimensional name, it will jump to the next----

Row

121. In while loop the condition is checked ---- the execution of loop.
Before

122. Array indexes start from ----

0

123. Pointers store the ----

Memory address

124. Which step is not not performed during a proper program design? Write details about the performance of program

125, We can say that a pointer is a variable that holds the --- address.
Memory
126. When accessing a structure memory, the identifier to the left of the dot operator is the name of ----

Structure variable

127. From the following; which one is the range of random number generator rand() ?

O – 32767

128. To read command-line arguments, the main () function itself must be given ---- arguments.

2

129. Which operator has the highest precedence?

(*, -, /, +) ?

* and / both hane the same highest precedence

130. Suppose we have int y[10];

To access the 4th element of the array we write----

Y[3];

131. What will be the value of the variable output in the given piece of code? Double output = 0;
Output = (2 +2) * 4 + / (4 – 2);

17

132. What is the output of the following statement?

int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);

error

133. Searching is easier when an array is already sorted True

134. If an array has 100 elements, what is allowable range of subscripts?

0 - 99

While developing a program; should we think about the user interface? //handouts main

Yes

A character is stored in the memory in _____

String

These functions seekg() and seekp() requires an argument of type _____to let them how many bytes to move forward or backward.

Int

dereferencing operator is represented by _____

*

_____ transfers the executable code from main memory to hard disk.

Loader

When the logical operator OR (||) combine two expressions exp1 and exp2 then the result will be false only, //bitwise “or” applies here….

When both exp1 and exp2 are false

suppose we have int y[10]; To access the 4th element of the array we write_____

none of given

we have opened a file stream myfile for reading (getting), myfile.tellg () gives us the current get position of the file pointer. It returns a whole number of type_____

int

ofstream is used for_____

Output file stream

A structure is a collection of _____under a single name. Variables

In C/C++ the string constant is enclosed ……. corrected r red one In curly braces

The size of int data type is

4 bytes

In Flow chart process is represented by

Rectangle

If the break statement is missed in switch statement then,// a break statement with no label always completes abruptly, the reason being a break with no label. If no switch, while, do, or for statement in the immediately enclosing method, constructor or initializer encloses the break statement, a compile-time error occurs?

This may cause a logical error

When we are using const keyword with a variable x then initializing it at the time of declaration is, ?

Optional

Which of the following is the correct way to assign an integer value 5 to element of a matrix say ‘m’ at second row and third column?

m[2][3] = 5 ;

How many total elements must be in two-dimensional array of 3 rows and 2 columns?

6

Which of the following is the correct statement for the following declaration?
*ptr is a pointer to const int

What will be the correct syntax to assign an array named arr of 5 elements to a pointer

ptr?

*ptr = arr[5] ;

C is a/an _____ language

object oriented

The variables having a name, type and size are just like empty boxes. True

What's wrong with this for loop?

for (int k = 2, k <=12, k++)

the commas should be semicolons

Most efficient method of dealing with structure variables is to define the structure globally

True

There are mainly ---------- types of software.// Two

When a pointer is incremented, it actually jumps the number of memory addresses ?
According to data type

setw is a parameterized manipulator.

True

if (a>b && a>c) then the condition will be true only if

Both a>b and a>c are true

In while loop the loop counter must be initialized,

Before entering the loop

_____ of a variable means the locations within a program from where it can be accessed.

Reference

Switch support_____ data.

Integer

Character

Float

Both integer and character

A function is a block of statements that can be defined once and used _____ in the program.

As many times as user wants

_____statement is used to terminate the processing of a particular case and exit from switch structure.

break

The most suitable data type for number 325.25 is _____. float

X is an integer variable; what does X++ means,

Add 1 in X value

The operators ++ and –- are used to increment or decrement the value of a variable by _____

1

Which of the following loops checks the test condition at the end of the loop?

Do-While

The operator to free the allocated memory using new operator is _____.

delete

suppose we have int y[10]; To access the 4th element of the array we write_____

y[3];

From the following; which one is the range of Random number generator function rand()?

0 – 32767

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

double arr[10] = {0.0};

The string in the array is terminated by a_____

null

In C/C++; by default arguments are passed by_____to a function. Value

char name [] = “Hello World” ; In the above statement, a memory of_____characters will be allocated

12

_____Keyword is used to return some value from a function.

return

Which of the function call is call by value for the following function prototype? float add(int);

add(x);

The increment of a pointer depends on its_____.

data type

The ASCHI code of null character is_____

000

Pointers are a special type of _____in which a memory address is stored

variables

Transpose of a matrix means that when we interchange rows and columns_____

the first row becomes the first column

Pointers store the _____

value of a variable

Which of the following function call is “call by reference” for the following function prototype? int add (int *);

add(&x);

The name of the array is a constant pointer which contains the memory address of the _____of the array.

first element

array name always contains the memory address of the _____of the array

first element

At the_____, we try to break up the problem into functional units design phase

Syntax of a union is identical to _____ .

structure

A union is a user-defined data type that contains only _____from its list of members at a

time.

one object

Which of the given file handling modes are similar in their functionality ?
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

In C/C++, the header file used for string manipulation is _____. string.h

A 2D array multi[5][10] can be accessed using the array name as **multi , this technique is

called _____.

Double dereferencing

C language was evolved from _____ language(s).

B and BCPL

The _____ statement forces the immediate next iteration of the loop. Continue

_____ are very good tools for code reuse.

Functions

When an argument is passed by reference, _____

the function accesses the argument's original value in the calling program.

_____ executes all the lines before error and stops at the line which contains the error.

Intrepreter

Analysis is the ---------- step in designing a program.
First

Which of the following is the correct function call, having array named student of 10

elements as a parameter?

addRecord(student);

When an array element is passed to a function, it is passed by _____.

Reference

What is the correct syntax to declare an array of size 10 of int data type? int name[10] ;

If we want to copy an array, both arrays need to be of same_____. Data type and size
Which of the following is the correct syntax to print multiple values or variables in a single command using cout?

cout << "H" << x << "\n";

Which one of the statements given below is equivalent to x %= 5? x = x % 5

The condition in loop should be a(n) _____.

Boolean Expression

Which structure is represented by following flow chart
? if structure

Stream which sends data to the program is called
_____. Input stream

Syntax of a union is identical to _____ .

Structure

When accessing a structure member, the identifier to the left of the dot operator is the

name of _____.

a structure variable
The parameter passed to isdigit() function is
_____. a character variable

TWAIN stands for _____ .

Technology Without An Interesting Name

_____ translates high level language program into machine language code.

Compiler

From the option given below, what will be the correct output of the code?
for (int a = 1; a <= 3; a++)
cout<<a*3-1<<" ";

2 5 8

If the return type of a function is void then it means that it will _____. return any type of data
return no data

The functions that have already been defined as a part of the language are called

_____.

built-in functions
Given that doubleArray is an array of 7 integers. Which of the below is the correct statement to access the 5th element of the array?

doubleArray[4]

The symbol which is used to represent a process in a flow chart is _____.

Rectangle

When an array is passed to a function, by default it will be passed by_____.

Reference

What is the range of Random number generator function rand()? 0 – 32767

The first character of a variable name must be an alphabet or _____.

Underscore

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference
Initialization of variable at the time of definition is ----------practice.
Good Programming

Which looping process checks the test condition at the end of the loop? do-while

You can use a _____ statement to transfer control elsewhere out of the nested structure.

Goto

Which of the following array is the most suitable for storing a matrix structure?

Single-dimensional array

The microsoft word document(.doc) is a kind of _____ . Random Access File

A union is a user-defined data type that contains only _____from its list of members at a time.

one object

In C/C++, _____ are the doors through which data can enter and come out of a program.

Streams
Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

C++ views each file as a sequential stream of _____. Bytes

In 2D array, the technique used to access the array elements is called _____

Double dereferencing

From the options given below, identify the correct option which is used for calling the function float square (int &);

square (num);

Identify the correct option which is used for calling the function float area (int).

area(num) ;

Which kind of error occurs in the code below to access the variable num in the main

function?

```
int num =10;

int main(){

int x ;

x = num ;
}
```

No error

A program statement that invokes a function is called _____. function call

What will be the output of the following code segment?

```
main(){
int a = 10 ;
int b =0;
int *x = &a;
b = (*x)+3 ;
cout << a << —, ‖ << b ;
}
```

10,13

When the logical operator AND (&&) combines two expressions exp1 and exp2 then the result will be true only _____

When both exp1 and exp2 are true

For which array, the size of the array should be one more than the number of elements in an array?

char

What is the range of Random number generator function rand()? 0 – 32767

To assigned a value to a character type variable, _____ are used around the value.

single qoutes ' '

In C/C++, the #include is called_____.

Preprocessor Directive

The number 544.53 must be stored in _____ data type.

Float

Use of the _____ statement violates the rules of structured programming.

Goto

In Flow Chart, flow of control is represented by _____. Arrow

What will be the correct syntax for initialization of pointer ptr of type int with variable x?

int *ptr = &x ;

Syntax of a union is identical to _____ .

structure

A union is a user-defined data type that contains only _____from its list of members at a time.

one object

Which of the given file handling modes are similar in their functionality ?
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

Stream which sends data to the program is called _____. Input stream

Syntax of a union is identical to _____ .

Structure

When accessing a structure member, the identifier to the left of the dot operator is the name of _____.

a structure variable

The parameter passed to isdigit() function is _____. a character variable

TWAIN stands for _____ .

Technology Without An Interesting Name

_____ translates high level language program into machine language code.

Compiler

From the option given below, what will be the correct output of the code?

```
for (int a = 1; a <= 3; a++)
 cout<<a*3-1<<" ";
```

2 5 8

If the return type of a function is void then it means that it will _____. return no data

The functions that have already been defined as a part of the language are called

_____.

built-in functions

Given that doubleArray is an array of 7 integers. Which of the below is the correct

statement to access the 5th element of the array?

doubleArray[4]

The symbol which is used to represent a process in a flow chart is _____.

Rectangle

When an array is passed to a function, by default it will be passed by_____.

Reference

The first character of a variable name must be an alphabet or _____.

Underscore

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference

Initialization of variable at the time of definition is ----------practice.

Good Programming

Which looping process checks the test condition at the end of the loop? do-while

You can use a _____ statement to transfer control elsewhere out of the nested structure.

Goto

An object of _____ class can be created for saving the current position of any opened file

before reading from the file

Stream

The value returned by the eof() function is of _____ type. Character

If a file is not properly closed in a program then what is the status of the program ?

The program will terminate normally

The parameter passed to isdigit() function is _____. a character variable
In C/C++, the header file used for string manipulation is _____. string.h

Arrays are best data structures _____.

for relatively permanent collections of data

Each array declaration must provide the information about all these things except

_____.

Number of elements of the array

The First step for developing a program is _____.

Linking

Analysis

_____ transfers the executable code from hard disk to main memory. Loader

_____ operator is used to pass the address of a variable to the called function.

&

In call by reference, _____ of a variable is passed to the called function.

Address

_____ of a function is also known as signature of a function. Declaration

Preprocessor program performs its function before _____ phase takes place.

Compiling

Which of the following is the correct function call, having array named student of 10 elements as a parameter?

addRecord(student[10]);

The remainder (%) operator is a _____operator.

Arithmetic

Which of the following array is the most suitable for storing a matrix structure?

Two-dimensional array

*.doc is _____ by type.

► Random Access File

Which of the following is NOT a preprocessor directive?

► #define

The return type of operator function must always be void.

► False

Question No: 4 (Marks: 1) - Please choose one

What does (*this) represents?

► A value of the data member

The statement cin.get (); is used to,

► Read a character from keyboard

When we do dynamic memory allocation in the constructor of a class, then it is necessary to provide a destructor.

► True

Overloaded new operator function takes parameter of type size_t and returns

► void pointer

The second parameter of operator functions for << and >> are objects of the class for which we are overloading these operators.

► True

C++ is a case-sensitive language

► True

To include code from the library in the program, such as iostream, a directive would be called up using this command.

► #include <iostream.h>

A template function must have only generic data types.

► True

Template class can not have static variables.

► False

What will be the correct syntax to assign an array named arr of 5 elements to a pointer

ptr?

► *ptr = arr[5] ;

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

► Both 1and 3

If most significant bit of un-signed number is 1 then it represents a positive number.

► True

If there is a symbol (& sign) used with the variable name followed by data type then it

refers to _____ and if & is being used with variable name then it refers to _____.

► Reference variable, address of variable

We can also do conditional compilation with preprocessor directives.

► True

The default value of a parameter can be provided inside the _____

► function definition

Classes defined inside other classes are called _____

classe ► nested

What purpose do classes serve?

► All of the given options

Every class contains _____.

► Constructor

new operator is used to allocate memory from the free store during

► None of the given options

When an object of a class is defined inside another class then, ► Destructor of inner object will be called first

It is possible to define a class within another class.

► True

New and Delete are also used with _____ and data types as well. ► Class, Objects

With New keyword, data types and class members are initialized with meaningful values instead of garbage.

► True

C language is developed by

► Dennis Ritchie

Which of the following choice is not an example of an int data type?
► -4.0

In flow chart, the symbol used for decision making is,
► Diamond
Switch statement deals with,

► Integer and character data

Default case in switch statement is,

► Optional

*.doc is _____ by type.

► Sequential File

Member function tellg() returns the current location of the _____ pointer.

► tellptr()

Dealing with structures and functions passing by reference is the most economical method

► True

In C/C++ all character strings are terminated with,

► Null character

Word processor is http://vustudents.ning.com

► Application software

Which of the following can not be a variable name?

10area

Which looping process is best, when the number of iterations is known?

► while

By default an array of characters is passed by value to a function

► False

Which of the following operator is used to access the address of a variable?

► & operator

The name of an array represents address of first location of array element.

► False

Compiler is a

► Application Software

If Num is an integer variable then Num++ means,

► Add 1 with Num

For one byte there are _____ combinations of values that can be stored in computer.

► 2^8

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

► ctype.h

Default case in switch statement is,

► Optional

When break statement is encountered in switch statement, it

► Exits from switch statement

What will be the result of arithmetic expression

6+27/3*3? ► 33

What is the correct syntax to declare an array of size 10 of int data type?

► int name[10] ;

How many dimensions does n-dimensional array has?

► n dimensions

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

► ptr[3]

Which of the following values C++ use to represent true and false?

► 1 and 0

Declaring structures does not mean that memory is allocated.

► True

For which array, the size of the array should be one more than the number of elements in an array?

► char

If a variable is passed by value to a function and the function makes some changes to that variable then it

► does not affect the original variable

In C/C++ the #include is called,

► Preprocessor Directive

Loops are ---------- Structure.

► Repetition

the sizeof operator is used to determine the size of _____. data type

Structures use _____ allocation.

Stack

Which header file must be included to use the functions tolower() and toupper()?

ctype.h

In Analysis, we try to have a_____

Precise problem statement

Pointers store the _____

memory address

_____ Returns true if c is a digit and false otherwise. int isdigit(int c)

eof is used to check for the _____ of file when a file is being read. End

The statement cout << yptr will show the _____the yptr points to. memory address

Which of the following is true about streams?

A& B

While handling files, one can have _____

options All of the given

If an array has 50 elements, what is allowable range of subscripts?
0 – 49

A structure is a collection of _____under a single name. variables

Ifstream is used for_____

Input file stream

The ASCHI code of null character is_____

000

dereferencing operator is represented by _____

*

Whenever some number is added in an array name, it will jump as many _____as the added number.

rows

To access the data members of structure, _____ is used. Dot operator

Which of the following is true about streams? A. It is a sequence of bytes B. It is an ordered sequence C. All bytes can

go through the stream simultaneously D. Bytes that enters first into the stream will go out at last

A and B

We use _____ to open a file or stream for extraction

in

char **argv can be read as_____.

pointer to pointer to char

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

double arr[10] = {0.0};
Pointers work by pointing to a particular_____

data type

_____function give the position of the next character to be read from that file.

tellg()

aFile. seekg (-10L, ios:cur)

backward direction

An object of _____ class can be created for saving the current position of any opened file before reading from the file.

Stream

Structures are syntactically defined with the word_____. struct

_____ allow us to have a memory location and use it as int or char interchangeably

union

Question # 9 of 10 (Start time: 12:25:41 PM) Total Marks: 1

A hierarchy of classes which are used to deal with console and disk files are called _____.

IO classes

_____function is used to determine the next position to write a character while writing into a file.

tellp()

For binary member operators, operands on the _____ drives (calls) the operation.

Left

We cannot increment _____.

references

We can _____ pointer.

all of the given

We can _____ references.

None of the given

What will be the correct syntax for the following function call?
add(x);

An instance of a class is called _____.

object

The _____ is called automatically when an object destroys destructor

The destructor is used to _____.

deallocate memory

_____ data isn't accessible by non-member functions or outside classes. private

Member functions of the class _____ main program.

are accessible from

Overloading means :

Using the same name to perform multiple tasks or different tasks depending on the situation.

The main advantage of function overloading is _____.

The program becomes more readable

You cannot overload the _____ operator.

? :

In C++, a variable can be declared anywhere in the program this will increase _____.

efficiency

Memory allocated from heap or free store _____.

cannot be returned back unless freed explicitly using free and delete operators

We cannot use _____ pointer for storing and reading data from it. 'NULL

The dynamic memory allocation uses _____ whereas static memory allocation uses _____.

heap , stack

What will be the output of the given code?

#include #define MAX(A, B) ((A) > (B) ? (A) : (B))

void main() {

int i, x, y;

x = 23;

y = 45;

i = MAX(x++, y++);

// Side-effect: // larger value incremented twice

cout << "x = " << x << " y = " << y << '\n';

}
x=24 y=47

NULL has been defined in _____ header file.

Stdlib.h

Symbolic constant PI can be defined as:

#define PI 3.14

The friend function of a class can have access _____. to the private data members

C++ was developed by _____.

Bejarne Stroustrup

Once the _____ are created, they exist for the life time of the program. static variables

Encapsulation means _____.

that the data of a class can be accessed from outside

An address is a _____, while a pointer is a _____.

constant, variable

The syntax of declaration of a function that returns the reference to an integer is _____.

int & myfunc();

Which one of the following is mandatory preprocessor directive for c++?
#include

The members of a class declared with the keyword struct are _____ by default.

Public

getche() is a _____ function and defined in _____ header file. built-in function , conio.h

_____ operators are the ones that require two operands on both sides of the operator.

Binary

_____ will return the number of bytes reserved for a variable or data type.

sizeof operator

_____ are not available in C language.

Library functions

The members of a class declared without any keyword are _____ by default.

private

For console input and output we use _____.

conio.h header file

The name of the destructor is the same as that of a class proceeding with a _____.

~ sign

A reference cannot be NULL it has to point a data type.

True

A pointer is _____.

a variable for storing address

Constructor is a special function, called whenever we _____. instantiate an object of a class

Symbolic constant PI can be defined as:

#define PI 3.14

Object code is machine code but it is not _____ and _____. relocatable, executable

The default visibility for the data members of the class is private

accessible outside the class

The _____ is called automatically when an object destroys. destructor

Constructor is special type of function :

which has no return type

_____ variables are those that are defined outside of main. Global

Within the statement obj1=obj2; obj1 will call the assignment operator function and obj2 will be passed as an argument to function.

True

When the compiler overload the assignment (=) operator by default then Compiler does member wise assignment.
It is possible to return an object from function using this pointer.
True

Overloaded assignment operator must be

Member function of class

Let suppose

int a, b, c, d, e;

a = b = c = d = e = 42;

This can be interpreted by the compiler as

a = (b = (c = (d = (e = 42))));

In statement a+b+c, at first

b+c is executed first

Suppose int i = 10; then what is the output of
cout<<oct<<i; 12

ostream is a _____ operator.

Standalone

_____ must be included to use stream manipulation in your code. Iomanip
_____ operators are the ones that require only one operator to work. Unary

The endl and flush are _____.

Manipulators

When operator function is implemented as member function then return type of function _____.

Can be any data type

When a variable is defined as static in a class then _____. Only one copy is created for all objects of this class

Automatic variables are created on _____.

Stack

cout << i << " ";

cout << d <<" ";

cout << f;

Above statements can be written within statement of one line as:
cout << i <<" "<< d <<" "<< f;
dec, hex, oct are all _____.

Non-parameterized manipulators

What will be the output of following statement?

cout<<setfill('0')<<setw(7)<< 128;

0000128

Which of the following syntax is best used to delete an array of 5 objects named 'string' allocated using new operator.

delete []string;

If we have a program that writes the output data(numbers) to the disc, and if we collect the output data and write it on the disc in one write operation instead of writing the numbers one by one.

In the above situation the area where we will gather the number is called Buffer

The first parameter of operator function for << operator _____. Must be passed by reference

The second parameter of operator function for >> operator must always be passed

By reference

The only operator that the compiler overloads for user define data type by default is------

Assignment (=) operator

Consider the following code, the printed value will be converted into:

```
int n=10;
cout <<oct<<n;
```

Base 8

_____ variables are defined in the main.

Local

ostream class is _____ and not under our control.

built-in

The memory allocation in C++ is carried out with the help of _____. new operator

If B is designated as friend of A, B can access A's non-public members. A can access non-public members of B

If the request of new operator is not fulfilled due to insufficient memory in the heap _____.

the operator returns 0

We should not use such variable names that are starting with _____ because in C++, there are lots of internal constants and symbolic names that start with it.

double underscore

The friend keyword provides access _____.

in one direction only

The malloc function takes _____ argument(s).

one

The constructor contains _____.

no return type

What will be the output of the following c++ code?

#include<iostream.h>

```
#define max 100
main()
{
#ifdef max
Cout<<"Hellow;
}
```

Error

Once we have defined a symbolic constant value using #define, that value _____ during program execution

cannot be changed

The memory allocation functions return a chunk of memory with a pointer of type _____.

ptr

A class can be declared as a _____ of other class.

member

To avoid dangling reference, don't return _____.

the reference of a local variable from the function

Constructor is itself a _____ of C++ and _____.

function, can be overloaded

The parameter passed to isdigit() function is _____ variable. Integer

char **argv can be read as _____.

pointer to pointer to char

To read command-line arguments, the main() function itself must be given _____ arguments.

2

How many bytes an integer type pointer intPtr will jump in memory if the statement below is executed?

intPtr += 2;

8

The increment of a pointer depends on its _____.

data type

The statement cout << yptr will show the _____ the yptr points to. memory address

_____ is used as a dereferencing operator.

*

Transpose of a matrix means that when we interchange rows and columns _____.

the first row becomes the first column

Individual characters in a string stored in an array can be accessed directly using array _____.

subscript

We can define a matrix as _____ array.

Multi dimensional

A _____ is an array of characters that can store number of character specified.

String

Given a two dimensional array of integers, what would be the correct way of assigning the value 6 to the element at third row and fourth column?

array[2][3] = 6;

_____ of a variable means the locations within a program from where it can be accessed.

Visibility

Which of the following function call is "call by reference" for the following function prototype? int add (int *);

add(&x);

Which of the following function call is "call by reference" for the following function prototype? float add (float *);

add(&x);

Which of the function call is call by value for the following function prototype? float add(float);

add(x);

Which of the function call is "call by value" for the following function prototype? float add(int);

add(x);

Return type of a function that does not return any value must be _____. void

_____ will be used for enclosing function statements into a block. { }

What is the output of the following code if the 2nd case is true

```
switch (var) {
case 'a': cout<<"apple"<<endl;
case 'b':cout<<"banana"<<endl;
case 'm':cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl;
}
```

Banana mango any fruit

When the break statement is encountered in a loop's body, it transfers the control _____ from the current loop.

Outside

What is the output of the following code if the 3rd case is true

```
switch (var) {
case 'a':cout<<"apple"<<endl;
case 'b':cout<<"banana"<<endl;
case 'm':cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl;
}
```

Mango any fruit

What is the output of the following code, if the first case is true
switch (var) {
case 'a':cout<<"apple"<<endl;

case 'b':cout<<"banana"<<endl;

case 'm':cout<<"mango"<<endl;

default: cout<<"any fruit"<<endl;

}

Apple banana mango any fruit

What will be the output of following code
segment? for (int i = 2; i<10; i++) {
if (i == 5) continue;

cout << i << "," ;

}

2,3,4,6,7,8,9
_____ statement is used to terminate the processing of a particular case and exit from switch structure.

break

What will be the result of the expression j = i++; if initially j = 0 and i = 5? 5

What will be the result of the expression k = ++m; if initially k = 0 and m = 5

What will be the result of the expression k = ++m; if initially k = 0 and m = 5?

6

How many times the following do-while loop will execute? int k = 10; do { cout << "Statements" << endl; k -= 2; } while(k>0);
6

Which of the following loops checks the test condition at the end of the loop?

Do-While

The operators ++ and -- are used to increment or decrement the value of a variable by _____.

1
How many times the following loop will execute?

int j = 3; while(j > 0) { cout << "Statements" << endl; j -= 2; } 2

A _____ structure specifies that an action is to be repeated while some condition remains true.

Control

!(x > 3) means in C++ that

x is less than or equal to 3

When the logical operator && combines two expressions then the result will be true only when the both expressions are _____.

true

< and > both are _____ operators.

Relational

What will be the value of variable “input” if the initial value of input is 67?

```
if(input >= 50)
input = input + 1;
if(input <= 75)
input = input + 2;
else
input = input - 1;
```

70

!(x < 3) means in C++ that

x is greater than or equal to 3

!= operator is used to check whether the operand on the left-hand-side is _____ to the operand on the right-hand-side.

Not equal

When the if statement consists more than one statement then enclosing these statement in curly braces is,

Must

The most suitable data type for number 325.25 is _____. Float

What will be the result of arithmetic expression 6+48/4*3?
42

Which of the following will be the most appropriate data type to store the value 63.547?

Float

In the given expression which operator will be evaluated first? 10 + (6 / 2) - 2 * 3?

/

What will be the value of the variable output in the given piece of code? double output = 0;
output = (2 + 2) * 4 + 2 / (4 - 2);

17

It is the job of _____ to transfer the executable code from hard disk to main memory.

Loader

In computer systems there are mainly _____ type of softwares. 2

_____ will explain the function of a program.

Comments

if (a>b && a>c) then the condition will be true only if

Both a>b and a>c are true

A variable of character data type occupies _____ byte(s) in memory. 1

We must include the header file _____ to convert the value of one type into another type using built-in functions.

string.h

A function is a block of statements that can be defined once and used _____ in the program.

As many times as user wants

Select the correct way to assign the address of first element of array to pointer?

int *ptr = &data;

Consider the following code segment. What will be the output of following code?

```
int addValue (int *a){
int b = (*a) + 2;
return b;
}
main() {
int x = 6;
cout<<addValue(&x)<<",";
cout<<x;
}
```

6,8,6

Here the code is given below. You have to identify the problem in the code. while(i < 10) && (i > 24))

the test condition is always false

The correct syntax of do-while loop is _____.

do {statements;} while (condition);

Matrix is defined as _____.

Multi-dimensional array

In programming, comments are used to explain the functioning of the _____.

Program

Operating System is a type of a/an _____.

system software

From the options given, you need to choose the option which is true for the given code.

```
for (int i = 1; i>0; i++) {
/*loop code*/
}
```

the test condition is always true

Which of the following values are used in C/C++ to represent true and false?

1 and 0

'While' loop may execute _____ or more times.

zero

Body of any function is enclosed within _____.

{ }

What will be the correct syntax for initialization of a pointer ptr with string "programming"?

char *ptr = "programming";

Which one of the given option is not a mode for reading/writing the data from a file?

Get

Which of the following operators is used to access the value of variable pointed by a pointer?

* operator

CS201 1500+ MID TERM MCQS

SEARCHING FILE FOR GRAND QUIZ

CREATED BY ORANGE MONKEY TEAM

1ST FILE 95% CORRECT

The ASCII code of null character is ----------

000

Which step is not performed during a proper program design?

Write details about the performed of program

How many elements are stored stored in the following? In matrix [4][5]

20

Which of the following is not a valid variable name in c++?

@student name

If an array has 50 elements what is allowable range of subscripts

0-49

Compiler is a
System

software

If Num is an integer variable then Num++ means,

Add 1 with Num

For one byte there are combinations of values that can be stored in computer

2^8

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

ctype.h

Default case in switch

statement is,

Optional

When break statement is encountered in switch

statement, it

Exits from switch statement

What will be the result of arithmetic expression

6+27/3*3?

33

What is the correct syntax to declare an

array of size 10 of int data type?

int name[10] ;

How many dimensions does n-dimensional array has?

n dimensions

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?
ptr[3]

Which of the following values C++

use to represent true and false?

1 and 0

Declaring structures does not mean that memory is

allocated.

True

For which array, the size of the array should be one more than the number of elements in an array?

Char
If a variable is passed by value to a function and the function makes some changes to that variable then it

Does not affect the original

variable

In C/C++ the #include is called,

Preprocessor Directive

Loops are----------Structure.

Repetition

In C/C++ the string constant is

enclosed

In double quotes

Switch statement deals

with,

Integer and character

data

A record is a group of related .

Fields

C++ views each file as a sequential

stream of . Bytes

To access the element of two dimensional array

we use,

Double referencin

If it is required to copy an array to another array

then,

Both arrays must be of the same size and data

type

The precedence of * is higher than dot operator

False

Pointers works by pointing to a data

type, which can be of the form,

All of the given options

Which of the following data type(s)

can operate on modulus operator

‘%’?

Int

What will be the output of following

code? int x = 10 ;

cout<< “x =” << x

;

x=10

Which looping process checks the test

condition at the end of the loop?

do while

What will be the correct syntax of the following

statement?

nt *constptr ;

A function must always return

value.

False

C is a/an

langugu

ae

function oriented

Assignment operator is used for .

assigning value to variables

When the logical operator AND (&&) combine two expressions exp1 and exp2 then the result will be true only,

When both exp1 and exp2 are true

Which of the following function(s)

is/are included in ctype.h header

file?

All of the above

To access the data members of structure is

used.

dot operator (.)

The address operator (&) can be used

with,

Variable

Both compiler and interpreter are used to translate program into machine language code.

True

Missing semicolon ';' at the end of C++

statement is

Syntax error

Switch statement is an alternative of

Multiple if
t

Array is passed by value to a function by default.

False
statemen

Which of the following is the correct function call having array named student of 10 elements as a parameter.

Add Record (student [ ])

What will be the result of expression x%= 2, if x

= 7?

x = 1

What will be the output of following code

segment? main(){

int x = 5 ;

{
i

n

t

x

=

4

;

cout<x
}

Cout<x;

}

4, 5

Which of the following operator is used to access the value of variable pointed to by a pointer?

For loop

The object may be used both for file input and file output

fstream

What's wrong with this for

loop? for (int k = 2, k <=12,

k++)

The commas should be

semicolons

Union intorDouble{

Intival;

Double charvar;

};

main()

{

intorDouble

VAZ; int size ;

size = sizeof(VAZ); }

What will be the value of variable "size", if int occupies 4 bytes and double occupies 8 bytes?
C language is

developed by

Dennis Ritchie

Which of the following choice is not an

example of an intdatatype? -4.0

In flow chart, the symbol used for decision

making is,

Diamond

Switch statement deals

with,

Integer and character

data

***doc is by**
type.
Sequential File

Member function tellg() returns
the current location of the pointer.

get()

Dealing with structures and functions passing
by reference is the most economical method

True

In C/C++ all character strings are terminated

with,

Zero

Word processor
is

Application

software

Which of the following cannot be a variable

name?

10area

Which looping process is best, when the

number of iterations is known?

For

By default an array of characters

is passed by value to a function.

False

Which of the following operator is used to

access the address of a variable?

& operator

The name of an array represents address

of first location of array element.

True

Data Size of the file is always the
actual size of the file.
None of the above

When an identifier is declared with keyword

const then,

Its value can not be changed
In C/C++ if we define an array of size eight
(8) i.e. intArr [8]; then the last element of
this array will be stored at,

Arr[7]

If it is required to copy an array to another array

then,

Both arrays must be of the same size and data

type

In C/C++ all character strings are terminated with,

Null character

When a pointer is incremented, it actually jumps the number of memory addresses

According to data type

Do-while loop executes at least

One Time

+= , *= , /= , etc are called

Compound assignment operator

Computer can understand only machine language code.

True

The compilers and interpreters also belong to the System Software category.

True

Editors are used to compile the code.

False

The variables having a name, type and

size are just like empty boxes.

True

What will be the result of the statement rand ( )

% 50

Less than 50.

if (a>b && a>c) then the condition will be true

only if

Both a>b and a>c are true

In while loop the loop counter must be

initialized, Before entering the loop

of a variable means the locations within a program from where it can be

accessed.

Referenc
e

Switch support Character

.

data

A function is a block of statements that can be defined once and used inthe program.

As many times as user wants

statement is used to terminate the processing of a particular case and exit from switch structure.

break

The most suitable data type for number 325.25 is .

float

X is an integer variable; what does X++

means, Add 1 in X value

The operators ++ and –- are used to increment or decrement the value of a variable by

1

Which of the following loops checks the test

condition at the end of the loop? Do-While

What is the output of the following statement?
int i = 2.5; do { cout i * 2; } while (i > 3 && i <

10); Error

What does !(7) evaluate to in decimal where ! is a NOT operator? 7

The condition in while loop may contain logical expression but not relational expression.

False
Searching is easier when an array is already sorted True

If an array has 100 elements, what is allowable range of subscripts?
0 – 99

What will be the value of 'a' and 'b' after executing the following statements?
a = 3;
b=a+4,

3

What will be the correct syntax to initialize all elements of two dimensional array to value 0?

intarr[2][3] = {{0},{0}} ;

Which of the following functionreturns the

size of a string variable? strlen()

What will be the range of numbers generated

by function rand () % 9? 0 to 8

Computer can understand only machine language code. True
What does 5 ^ 6 , evaluate to in decimal where '^' is Exclusive OR operator?

False

If the file is not properly closed in the program, the program .

Crashes

Which of the following header file include string conversion functions?
stdlib.h

The function of cin is
To read data from keyboard

In C/C++ language the header file which is used to perform useful task and manipulation of character data is
ctype.h

How many parameter(s) function getline() takes?
3

Word processor is
Application software

For which values of the integer _value will the following code becomes an infinite loop?

```
int number=1;
while (true) {
cout<< number;
if (number == 3) break;
number +=integer_value; }
```

only 0

Each pass through a loop is called a/an
Iteration

A continue statement causes execution to skip to

the next iteration of the loop

What is the correct syntax to declare an array of size 10 of int data type?

Int name[10] ;

Consider the following code segment. What will the following code segment display?

```
int main(){
int age[10] =
{0}; cout<<
age ;
}
```

Value of first element of array

What will be the correct syntax to initialize all elements of two dimensional array to value 0?

intarr[2][3] = {0,0} ;

How many bytes will the pointer intPtr of type int move in the following statement?

intPtr += 3 ;

12 bytes

If there are 2(n+1) elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

(n+1) elements

Which of the following operator is used to access the value of variable pointed to by a pointer?

Operator

The statement interrupts the flow of

Break

control.

Analysis is the ----------step in designing a program

First

Paying attention to detail in designing a program is

Necessary

Application Software's are

used to

Solve end user problems

Computer can do,

Exactly what we tell it

We can control our program while it is running by

using

Debugger

are part of system software

Linker and loaders

The remainder (%) operator is,

An arithmetic operator

int x = 2 * 3 + 4 * 5; What value will x

contain in the sample code above?

26

What is the correct value to return to the operating system upon the successful completion of a program?

0

What is the only function all C++ programs must contain?

main()

What punctuation is used to signal the beginning and end of code blocks? { }

What punctuation ends most lines of C++ code?

(Semi-colon)

Which of the following is a correct comment?

/* Comment */

Which of the following is not a correct variable type?

Real

Which of the following is the correct operator to compare two variables? ==

Identify the correct statement

All lines beginning with two slash signs are considered comments.

There is a unique function in C++ program by where all C++ programs start their

Main ()

Every statement in C++ program should end with

A Semicolon (;}

A variable is/are

Those numbers that is frequently required in programs

The value of 2*15/3*7+3*2 is

76

The size of a double variable is

8 bytes

Which of the following are NOT relational operators? ==

Which of the following cannot be used as identifiers?

Spaces

Result of " number = number / 10; " will be equel to The " number = number % 10;”

FALSE

intx,y =10; cout<< x <<endl; The value of

the x will be in the above code

Unknown Value

In flow chart process is

represented by

Rectangle

Which of the following is the boolean operator for

logical-and?

&&

Evaluate! (1 &&!(0 ||

1)).

TRUE

Which one of the following operators is a unary operator?

Logical NOT (!)

Which of the following shows the

correct syntax for an

if statement?

if (expression)

In if structure the block of statements is executed only,

When the condition is true

Loader transfers the executable code from main memory to hard disk.

FALSE

What is the final value of x when the code int x; for(x=0; x < 10; x++) {} is run?

10

When does the code block following while(x< 100) execute?

When x is greater than one hundred

Which is not a loop structure?

Repeat Until

for (int n=10; n >0; n++) { cout<< n << ", "; } How many Time Loop will run Infinite Time

When break statement is encountered in switch statement, it

Exits from switch statement

A for loop usually consist of expressions

2

.

How many times is a do

while loop guaranteed

to loop?

1

41- x = x + 4 ; Is Equal

to

x += 4;

The first

expressio

n in a for

loop is

The

first

value

of our

counte

r vari

able

What

is the

break

state

ment

used

for?

To quit the current iteration

What is the continue statement used for?

To stop the current iteration and begin the next iteration from the beginning

What is the output of the following code? for (int a = 1; a < = 1; a++) cout<< a+

+

;

1

2

Every case statement is follows by?

:

What is required to avoid falling

through from one case to the next?

Break;

What keyword covers unhandled possibilities in switch

case?

Default

What is the result of the following code? x=0; switch(x) { case 1: cout<< "One"; case

Hello World

Which of the following is

true?

1

Every function in C++ are followed by

Parenthesis

Which is not a proper

prototype?

doublefunct(char x)

What is the return type of the function with prototype: " intfunc(char x, float v, double

t);”

int

Which of the following is a valid function call

(assuming the function exists)?

funct();

Which of the following is a complete function?

intfunct(int x) {return x=x+1;}

Function prototypes are useful

All of the above

A function that calls itself is known as

Recursive function

A preprocessor directive is identified by

 # l
symbo

When a call to function statement is encountered,

The control is transfer to its Prototype

The directives for the preprocessors begin with

Two Slashes (//)

The file iostream includes

The declarations of the basic standard input-output library

Which of the following is false?

None of above

Which of the following statement is

true about preprocessor directives?

They end with a semicolon

If the statements intj,k; j = 123; k= 234; int* q, * r; r = &j; q=&k; cout<< *q<< ' '<< *r; are executed, what will be displayed?

132, 234

If the statements intj,k; j = 123; k= 234; int* q, * r; cout<< *q<< ' '<< *r; are executed,

What will be displayed?

Garbage values

Which of the following correctly declares an

array?

intanarray[10];

Which of the following correctly accesses the seventh element stored in foo, an array with 100 elements?

foo[6];

Which of the following gives the memory address of the first element in array foo, an array with 100 elements?

Foo;

Consider the following statement: int age [ ] = { 0,

2, 1, 3, 4, 5, 6, 7, 8, 9 }; Array Length is

10

c [3] = 33; by this Code we are assigning the

value to

4th element

for (i = 0; i < 10 ; i ++) { b[i] = a[i]; } by given loop we are

Copying the two arrays

int z, i ; int a [100] ; z=5; for (i =0 ; i < 100 ; i ++) { a [i] = i ; } for (i = 0 ; i < 100 ; i ++) { if (z == a [i]) { found = 1 ; break ; } } Loop will be executed *for*

6 Times

Given that #define sum(a,b) a+b what is the value of:

sum(3+1,2);

6

int m=0,v=0; for(m=5;m < 8;m++){ v=v+(m++)+(++m); } cout<< v <<endl; output of the V will be ?

11

Because of variable scope

Variables created in a function cannot be used another function

When we are using const keyword with a variable x then initializing it at the time of declaration is

Must

void allocateme(int* p){ p = new int; *p = 2; } int main(){ int i = 1; allocateme(&i); std::cout<< i; return 0; } What is displayed?

Outputs '1'

intnumarray[4][4] = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}; What value does numarray [0][3] in the sample code above contain?

4

**If the statements
intj,k;
j = 123;
k= 234;
int* q, * r;
cout<< *q << ' ' << * r ;
are executed, what will be displayed?**

garbage values

Which one of the following will declare a pointer to an integer at address 0x22ff74 in memory?

int *x; *x =

0x22ff74; An array

is also called

Constant pointer

Which of the following is the proper declaration of a pointer?

int *x;

Which of the following gives the memory

address of integer variable a (inta;)?

&a;

Which of the following is the

proper Operator to

allocate memory?

New

Which of the following is the

proper keyword to

deallocate memory?

Delete

When we are calling function i.e.

swap (&x, &y); then it is a call by

Reference

Which symbol is used to declare a pointer?

*****

Which symbol is used to reference a

pointer?

&

In the given code inty[10]; int *x ; x= y; y is

giving

Address of the first element of the array

Adding to a pointer that points to an array will

Cause the pointer to point to the next element in the array.

Which one of the following

operators is a

unary operator?

Complement operator (~)

The statement i++; is

equivalent to

i = i + 1;

A variable which is defined inside a function is called
Functional variable

Which of the following is a two-dimensional

array?

intanarray[20][20];

inttwoDArray[2][2]

={0,1,2,3,4,5,6}; the 1st row and

3rd element is;

2

An array of pointers is the same as .

Pointers to pointers

Pointers may be like any
other data type.
Arrayed (stored in an array)

In C/C++ language when an array is
passed to a function then by default its
passing Mechanism is,

Call by Reference

intisdigit(int c) Returns true if c is a

Digit

intisupper(int c) Returns true if c is a

Uppercase letter

doubleatof(const char *nPtr) Converts the string

nPtr to

double

The basic steps of file handling are:

Open the file, Read and write, Close the file

ofstreamoutFile; char outputFileName[] = "myFileOut.txt"; char ouputText[100] = "Welcome to VU"; outFile.open(outputFileName); at the end of the code file is opened for Writing

If we open a file stream myfile for reading, what will give us the current position of the file pointer?

tellg()

If we open a file stream myfile for reading, what will give us the current position of the file pointer?

tellp()

Which of the following classes handlers file input?

Ifstream

By writing: aFile.seekg (10L, ios::beg) We are

asking to move 10 bytes forward from the

beginning

By using seekg () function, we can know the actual

data length

we will call tellg () to give the current position in number. This number is the actual data bytes inside the file.

Long

We can use inputFile.getc () to get a andoutputFile.putc () to

write

a into a file.

Character,

character

will return the number of bytes reserved for

a variable or data type. sizeof operator

To access the members of a structure,

which symbol is used ? .

A member is a

Variable in a

structure

Which of the following is a properly defined struct?

structa_struct {int a;};

Which properly declares a variable of struct

Student?

struct Student;

Using structures we can declare:

Simple variables, Pointers and Arrays of structure

During compilation compiler looks for the
and process it first
Preprocessor directives

When we write a class template the first line must be:

template< class T >, Here T can be replaced

with any name but it is preferable

What does 5 | 6 evaluate to in decimal?

**5 | 6 =
 0 1 0 1
 0 1 1**

**0
 ----
 0 1 1 1 = 7**

What does 5 & 6 evaluate to in

decimal?

**5 & 6 = 0 1 0 1
 0 1 1 0
------
 0 1 0 0 = 4**

What does 5 ^ 6 evaluate to in decimal?

**5 ^ 6 = 0 1 0 1 0 1 1 0-----
 0 0 1 1 = 3**

In order to get 256 from the number 2568 we

divide this number by 10 and take,

Its quotient

The correct syntax of do-while

loop is,

While (condition); do {statements

;};

Which of the following function(s) is/are included in stdlib.h header file?

1 and 2 only

If the break statement is missed in switch

statement then,

No effect on program

The data type before a function name

represents its,

Return Type

What does 5 | 6 , evaluate to in decimal

where '|' is bitwise OR operator?

5

What will be the correct syntax for initialization of pointer ptr with string "programming?"

charptr = 'programming' ;

What will be the result of

expression x%= 2, if x =

7?

x = 3

A precise sequence of

steps to solve a problem

is called

Program

The Compiler of C language is

written in

UNIX

Initialization of variable at the time of

definition is,
Good Programming

In if structure the block of statements is

executed only,

When the condition is true

Pointer is a variable which

store,

Memory Address

Preprocessor program perform its function before phase takes place.
Compiling

Which character is inserted at the end of

string to indicate the end of string?

Null

How many bytes are occupied by declaring following array of characters? charstr[] = “programming”;

12

Which of the following

header file defines the

rand() function?

stdlib.h

Commenting the code

Makes a program easy to understand for

others

What's wrong with this for loop? for (int k = 2, k <=12, k++)

The commas should be semicolons

For which array, the size of the array should be one more than the number of elements in an array?

Char

To Which category of the software

“Compiler and Interpreter” belongs?

System Software

In C/C++ the string constant is

enclosed
In double quotes

The size of int data

type is

4 bytes

In Flow chart process is

represented by

Rectangle

If the break statement is missed in switch

statement then,

No effect on program

Which of the following is the correct way to assign an integer value 5 to element of a matrix say 'm' at second row and third column?

m[2][3] = 5 ;

How many total elements must be in two-dimensional array of 3 rows and 2 columns?

6

Consider the following code segment. What will be the output of this code segment? intarr[6] = {2, 3, 7, 4, 5, 6} ; int *ptr1 =&arr[1] ;

int *ptr2 =

&arr[4] ; cout<<

(ptr2-ptr1) ;

ptr is a pointer to constint

What will be the correct syntax to assign an array named arr of 5 elements to a pointer ptr?
C is a/an

languag

e

function oriented

Syntax of union is identical to

Structure

Most efficient method of dealing with structure variables is to define the structure globally.

False

In order to get 256 from the number 2568 we divide this number by 10 and take,

Its quotient

There are mainly ----------types of software

Two

In C/C++ the #include is called,

Preprocessor Directive

&& is---------- operator

Logical

In flow chart, the symbol used for decision

making is,

Diamond

The correct syntax of do-while

loop is,
do { statements; } while

(condition);

C++ views each file as a sequential stream of .Bytes
If the elements of an array are already

sorted then the useful search algorithm is,

Binary search

The address operator (&) can be used

with,

Variable

When a pointer is incremented, it actually jumps the number of memory addresses

,

According to data type

Each pass through a loop is called

a/an

Iteration

Call by reference mechanism should be used in a program when there is

large amount of data to be passed
ii. small amount of data to be passed iii. need to change the passed data
iv. no need to change the passed data Choose the appropriate option for the above case.

and (iii) only

Which of the following is the starting index of an array in C++?

0

The return type of a function that do not

return any value must be Void

Which of the following is an extension of header file?

.h

We want to access array in random

order which approach is better?

Pointers

When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,

Pointers

When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,

Contiguous memory

location

The function of cin is

To read data from keyboard

Care must be taken about the correct of operator while overloading. (Choose the most appropriate).

In functions, that returns reference use .

Both Semantic and Complexity

Global or static variables

In overloading the assignment (=) operator, which object(s) will call the operator function?

Right object of the assignment operator

Friend functions are .

Unidirectional (not confirm)

We cannot increment .

References

A pointer is .

The address of a variable

Overloaded assignment operator must be Non-member function of class (not confirm)

The concept of friend function negates the concept of .

Encapsulation

If class A is a friend of class B, and class B is
a friend of class C. If class A wants
class C to be a friend,

It has to declare, class C as a friend
The difference between pointers and references is that .

We can do arithmetic with pointer
A reference cannot be .
NULL

An address is a , while a pointer is a .

Variable, constant

The reference data types are used as variables
without any
operator

Local, &
The syntax of declaration of a function that returns the
reference to an .
integer is

int&myfunc() ;

References cannot be uninitialized. Because it is impossible to

Initialize a NULL pointer
<and> both are

operators
.
Logical

Find out the logical error in following lines of code.
If (x = 10) cout << "x is 10"; 10 should be enclosed in quotations
There is no semicolon at the end of if condition
What will be the result of the expression j = i++; if initially j = 0 and i = 5? 5

Default mechanism of calling a function by passing it array is call by and in case of passing variable is call by .
Reference, value

When the break statement is encountered in a loop's body, it transfers the *from the current loop.*
control
Outside

statement is used to terminate the processing of a particular case and exit from switch structure.

Break

When the if statement consists of more than one statement then enclosing *statement in braces is .*
these
Compulsory
What will be the value of the variable output in the given piece of code? double output = 0; output = (2 + 2) * 4 + 2 / (4 – 2);
17
If we assign 2.06721 to an integer variable x, what will be the output if we print x using cout<< statement?

2
will be used for clarity and to force the order of evaluation in an expression. ()
What does STL stand

for? Standard

template library

Skill(s) that is/are needed by programmers
.All of the given options
For which array, the size of the array should be one more than the number of elements in an array?
char

new and delete are whereas malloc and free are . Operators, functions

Friend functions are of a class.
Non-member functions

If overloaded plus operator is implemented as non-member function then which of the following statement will be true for the statement given below?
obj3 = obj1 + obj2 ;

obj2 will be passed as an argument to + operator whereas obj2 will drive the + operator

Which one of the following is the declaration of overloaded pre increment operator implemented as member function?
Class-name operator ++(int) ;

For cin, the source is normally a and destination can be . Keyboard, variable

We can also do conditional

compilation with

preprocessor directives. True

The programs, in which we allocate static

memory, run essentially on Stack

The default value of a parameter

can be provided inside the function

definition

While calling function, the

arguments are assigned to

the parameters from no specific

order is followed

When an operator function is defined as member function for a binary Plus (+) operator then the number of argument it take is/are.

N arguments

With user-defined data type variables (Objects), self-assignment can .
produce
Logical error

Assignment operator is used to initialize a newly declared object from existing object.
True

When an object of a class is

defined inside another

class then, Constructor of inner

object will be called first

In the member initializer list, the data members are

initialized, In the order in which

they are defined within class

new operator allocates memory from free store and return .A pointer

"new" and "delete" keywords are in C++ language. Memory Allocation Function

Return type of a function that does not return any value must be . void
A function's prototype is written the function call.
Before

What will be the size of the following character array? char name[] = "Adeel"; 5

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?
doublearr[10] = {0.0};

Which of the function call is call by value for the following function prototype? float add(int);
add(x);
Null character is represented by in C++.
\0

What is the output of the following code, if the first case is true switch (var) { case 'a': cout"apple"endl; case 'b': cout"banana"endl; case 'm': cout"mango"endl; default: cout"anyfruit"endl; }

apple banana mango

Which of the following function call is "call by reference" for the following function prototype? int add (int)

add(x);

The string in the array is terminated by a

null

Default mechanism of calling a function by passing it array is call by and in case of passing variable is call by

Reference, value

<.<=>.> = are called

operator

s Relational

Why the use "cin"?

To read data from keyboard

!(x<3) means in c++

that X is greater than

3

The data in the memory is

Volatile

Each array declaration must provide the information about all these thing except.

The location of the first element to be stored

What will be the output of the program if x=10? If(x! =0&& x<=10)

{

cout<<"condition 1is true";

}

{

If(x>=10&& x<20)

}

Condition 1 is true condition 2 is true

C is widely known as development

language of operating system.

Window

A repetition statement specifies that an action is to be continued while some remains true

Condition



Question # 3

2ND FILE CORRECT

What will be the result of the expression j = i++; if initially j = 0 and i = 5?

0

5

6

4

Question # 4

Default mechanism of calling a function by passing it array is call by _____ and in case of passing variable is call by _____.

Reference, Reference

Reference, value

Value, Reference

Value, Value

Question # 5

When the break statement is encountered in a loop's body, it transfers the control _____from the current loop.

Inside
Outside
To break statement
To continue statement

Question # 6

_____statement is used to terminate the processing of a particular case and exit from switch structure.
If
Goto
Break
Continue

Question # 7

If we pass more than one arguments to a function then they are separated by____ .

Comma, Lecture 9

Semicolon;

Colon:

Brackets ()

Question # 8

What will be the value of the variable output in the given piece of code? double output = 0; output = (2 + 2) * 4 + 2 / (4 – 2);

15

17

12

1

Question # 9

If we assign 2.06721 to an integer variable x, what will be the output if we print x using cout statement?

2

2.1

2.06

2.07

Question # 10

_____ will be used for clarity and to force the order of evaluation in an expression.

" "

() PG32

' '

[ ]

Question # 11

What will be the size of following array? int arr[29];

0

30 PAGE 105-106

29

28

Question # 12

If a function has not been declared before its definition, It is logical error

syntax error LECTURE NO 9

logical Error

run time error

none of these

Question # 13

When the break statement is encountered in a loop‟s body, it transfers the control from the current loop.

Inside

Outside By using break the loop will terminate.
To break statement

To continue statement

Question # 14

ss a multidimensional array, each array index is surrounded by_ .

Single quotes ' '

Double quotes " "

Brackets[] Lecture 11

None of the given

Question # 15

char name [] = “Hello World” ; In the above statement, a memory of ____characterswill be allocated

12 Lecture 12

10

11

13

Question # 16

A variable declared within a code block becomes variable for that block.

Static

Integer

Local Lecture 9

Global

Question # 17

When the if statement consists of more than one statement then enclosing these statement in braces is _____.

Compulsory

Optional

Not required

Relevant

Question # 18

Characters of a string stored in an array can be accessed directly using array .

Manipulation

Superscript

Subscript **Page No 123**

Postscript

Question # 19

A variable declared within a code block becomes for that block.

Static

Integer

Local Lecture 9

Global

Question # 20

The data type before a function name represents its,

Return Type

variable

Function data

Function arguments

Function name

Question # 21

From following; which one is the correct syntax of an array initialize: Array size is 10 andit is of double data type to value 0?

arr[10] = {0.0};

double arr[10]= 0.0;

Double arr[10] = {0.0}; Lecture 12

double arr[] = 0.0;

Question # 22

In C/C++, by default arguments are passed by to a function.

Value Lecture 9

Reference

Prototype

None of the given

Question # 23

By default, the starting index of an array in C++ is

0 Lecture 11

2

1

-1

3rd file correct

1. We use _____ to open a file or stream for extraction
In

2. Null character is represented by _____ in C++.
/0

3. An object of _____ class can be created for saving the current position of any opened file before reading from the file.
Streampos

4. _____ Returns true if c is a digit or a letter and false otherwise. intisalnum(int c)

5. We use _____ to open a file or stream for insertion.
Out

6. Base address is the memory address of _____ element of an array. 1st

7. _____ allow us to have a memory location and use it as int or char interchangeably
Union

8. To read command-line arguments, the main() function itself must be given _____ arguments.
2

9. Individual characters in a string stored in an array can be accessed directly using array _____.
Subscript

10. To manipulate n-dimensional array _____ nested loops are required. n-1

11. A character is stored in the memory in _____

String

12. What will be the size of following array?
Intarr[29];
29

13. An object of _____ class can be created for saving the current position of any opened file before reading from the file.
Streampos

14. We use _____ to open a file or stream for extraction.
in

15. We use _____ to open a file or stream for Insertion.
Out

16. _____are conventional names of the command line parameters of the 'main()' function.
'argc' and 'argv'

17. In_____, we have different data members and all of these have their own memory space.
Structures

18. How we declare an array of integer data whose size is 20 with array name "count".
int count[20];

19. A _____is an array of characters that can store number of character specified.
String

20. File. seekg (-10L, ios:cur)
backword direction

21. A function is a block of statements that can be defined once and used _____ in the program.

As many times as user wants

22. What will be the output of the following while loop? int counter = 0 ; while(counter < 15)

cout<< counter << " "; counter

Compile time error

23. We can access a global variable _____

From anywhere in the program

23. A repetition statement specifies that an action is to be continued while some_____ remains true.

Condition

24. Loops are _____ Structure.

Repetition

25. _____ operator is used to pass the address of a variable in call by reference method.

&

26. How many times the following do-while loop will execute?
int k = 10; do { cout<< "Statements" <<endl; k -= 2; } while(k>0);

5

27. What is the output of the following code if the 3rd case is true
switch (var) { case 'a': cout<<"apple"<<endl; case 'b': cout<<"banana"<<endl; case 'm': cout<<"mango"<<endl;
Default: cout<<"any fruit"<<endl; }

mango any fruit

28. By default, the starting index of an array in C++ is _____.

2

-1

Question No.: 1 (M a r k s: 1)

Compiler is a

System software

Application Software

Driver

Editor

Question No.: 2 (M a r k s: 1)

If Num is an integer variable then Num++ means,

Add 1 two times with Num

Add 1 with Num

Add 2 with Num

Subtract 2 from Num

Question No.: 3 (M a r k s: 1)

For one byte there are _____ combinations of values that can be stored in computer.

2

6

2

7

2

8

2

4

Question No.: 4 (M a r k s: 1)

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

cplext.h

ctype.h pg 188

stdio.h

delay.h

Question No.: 5 (M a r k s: 1)

Default case in switch statement is,

Optional
syntax error
Necessary
http://www.arduino.cc/en/Reference/SwitchCase

Question No.: 6 (M a r k s: 1)
When break statement is encountered in switch statement, it
Stops the entire program
Stops the execution of current statement
Exits from switch statement
None of the given options
http://docs.oracle.com/javase/tutorial/java/nutsandbolts/switch.html

Question No.: 7 (M a r k s: 1)
What will be the result of arithmetic expression 6+27/3*3?
33
45
9
30

Question No.: 8 (M a r k s: 1)
What is the correct syntax to declare an array of size 10 of int data type?
int [10] name ;
name[10] int ;
int name[10] ;
int name[] ;

Question No.: 9 (M a r k s: 1)
How many dimensions does n-dimensional array has?
n dimensions
2n dimensions
(n+1) dimensions
(n-1) dimensions (Array starts from 0th element)

Question No.: 10 (M a r k s: 1)
What will be the correct syntax to access the value of fourth element of an array using pointer ptr?
ptr[3]
(ptr+3)
*(ptr+3)
Both 1and 3

Question No.: 11 (M a r k s: 1)

Which of the following values C++ use to represent true and false?

1 and 0

1 and -1

11 and 00

Any numerical value

Question No.: 12 (M a r k s: 1)

Declaring structures does not mean that memory is allocated.

True

False

Question No.: 13 (M a r k s: 1)

For which array, the size of the array should be one more than the number of elements in an array?

Int

double

float

char Pg113

Question No.: 14 (M a r k s: 1)

If a variable is passed by value to a function and the function makes some changes to that variable then it

Does not affect the original variable pg 83

affects the original variable

causes syntax error

None of the given options

Question No.: 15 (M a r k s: 1)

In C/C++ the #include is called,

Header file

Preprocessor Directive pg 269

Statement

Function

Question No.: 16 (M a r k s: 1)

Loops are ---------- Structure.

Decision

Repetition pg 560

Sequential

Hierarchical

Question No: 1 (M a r k s: 1)

Que

In C/C++ the string constant is enclosed

► In curly braces

► In small braces

► In single quotes

► **In double quotes**

http://www.lugaru.com/man/String.Constants.html

Question No.: 2 (M a r k s: 1)

For one byte there are _____ combinations of values that can be stored in computer. 2

2^6

2^7

2

2^8

2^4

Question No: 3 (M a r k s: 1)

Switch statement deals with,

► Integer data only

► float data only

► character data only

► **Integer and character data**

http://docs.oracle.com/javase/tutorial/java/nutsandbolts/switch.html

Question No: 4 (M a r k s: 1)

A record is a group of related _____.

► Files

► Bytes

► **Fields**

► Data

Question No: 5 (M a r k s: 1)

C++ views each file as a sequential stream of _____.

► **Bytes**
► Bits
► 0's or 1's
► Words

Question No: 6 (M a r k s: 1)

To access the element of two dimensional array we use,

► Single referencing
► Single dereferencing
► Double dereferencing
► **Double referencing** Pg175

Question No: 7 (M a r k s: 1)

If it is required to copy an array to another array then,

► **Both arrays must be of the same size and data type** Pg 105
► Both arrays may be of different size
► Both arrays may be of different data type
► Both arrays may be of different size and type

Question No: 8 (M a r k s: 1)

The precedence of * is higher than dot operator

► True
► **False**

http://docs.realsoftware.com/index.php/Operator_Precedence

Question No: 9 (M a r k s: 1)

Pointers works by pointing to a data type, which can be of the _____ form,

► Integer only
► double only
► character only
► **All of the given options** Pg 144

Question No: 10 (M a r k s: 1)

Which of the following data type(s) can operate on modulus operator '%'?

► float, int
► float, double
► **int** Pg 22
► char

Question No: 11 (M a r k s: 1)

What will be the output of following code?

int x = 10 ;
cout << "x =" << x ;

► 10
► "x=10"
► **x=10**
► 10=x

Question No: 12 (M a r k s: 1)

Which looping process checks the test condition at the end of the loop?

► for
► while
► **do while**

Question No: 13 (M a r k s: 1)

What will be the correct syntax of the following statement?

ptr is a constant pointer to integer.

► const int *ptr ;
► const *int ptr ;
► int const *ptr ;
► **int *const ptr ;** Pg 154

Question No: 14 (M a r k s: 1)

A function must always return value.

► True
► **False**

(

Question No: 1 (M a r k s: 1)
Compiler is a

No: 15 (M a r k s: 1)
C is a/an _____ language
► low level
► object based
► object oriented
► **function oriented** pg 82

Question No: 16 (M a r k s: 1)
Assignment operator is used for _____.
► calculation
► reading
► **assigning value to variables** Pg 17
► None of the given options.

Q

Question No: 3 (M a r k s: 1)
Which of the following function(s) is/are included in ctype.h header file?
► isdigit(int c)
► isxdigit(int c)
► tolower(int c)
► **All of the above** Pg 188

Question No: 4 (M a r k s: 1)
To access the data members of structure _____ is used.
► **dot operator (.)** pg 231
► * operator
► operator
► None of given.

Question No: 5 (M a r k s: 1)
The address operator (&) can be used with,
► Statement
► Expression
► **Variable** Pg 149
► Constant

Question No: 6 (M a r k s: 1)

Both compiler and interpreter are used to translate program into machine language code. ► **True**

► False

http://readanddigest.com/what-are-the-differences-between-compiler-and-interpreter/

Question No: 7 (M a r k s: 1)

Missing semicolon ';' at the end of C++ statement is

► Logical error

► **Syntax error Pg 16**

► Runtime error

► None of the given options

Question No: 8 (M a r k s: 1)

Switch statement is an alternative of _____ statement

► **multiple if**

► continue

► break

► goto

Question No: 9 (M a r k s: 1)

Array is passed by value to a function by default.

► True

► **False Pg 266**

Question No: 10 (M a r k s: 1)

Which of the following is the correct function call having array named *student* of 10 elements as a parameter.

► addRecord(student[]) ;

► addRecord(student) ;

► addRecord(student[10]) ;

► addRecord(*student) ;

Question No: 11 (M a r k s: 1)

What will be the result of expression x%= 2, if x = 7?

► x = 1

► x = 3

► x = 7
► x = 2

Question No: 12 (M a r k s: 1)
What will be the output of following code segment?

```
main(){
int x = 5 ;
{
int x = 4 ;
cout <x
}
cout <x
}
```

► 5, 5
► 4, 4
► **4, 5**
► 5, 4

Question No: 13 (M a r k s: 1)
Which of the following operator is used to access the value of variable pointed to by a pointer?
► * operator
► -> operator
► && operator
► & operator

Question No: 14 (M a r k s: 1)
The object _____may be used both for file input and file output
► **fstream, Pg 199**
► ifstream,
► ofstream,
► none of the given options.

Question No: 15 (M a r k s: 1)
What's wrong with this for loop?
```
for (int k = 2, k <=12, k++)
```
► the increment should always be ++k
► the variable must always be the letter i when using a for loop
► there should be a semicolon at the end of the statement
► **the commas should be semicolons**

Question No: 16 (M a r k s: 1)
Let suppose

```
Union intorDouble{
Int ival;

Double charvar;
};
main(){
intorDouble VAZ;

int size ;
size = sizeof(VAZ);
}
```

What will be the value of variable "size", if int occupies 4 bytes and double occupies 8 bytes?

► 2
► 4
► 8
► 12

Write code which read a string not greater than 20 characters from keyboard stored it in an array Name and display it on the screen.

Question No: 23 (M a r k s: 5)

Write a C/C++ program which defines an array of 15 elements. This program changes all uppercase letters of an array into lowercase letters and all lowercase letters to uppercase using Character handling functions.

Question No: 1 (M a r k s: 1)

C language is developed by

► Bill Gates
► Robert Lafore

► **Dennis Ritchie** Pg 12
► Deitel & Deitel

Question No: 2 (M a r k s: 1)
Which of the following choice is not an example of an int datatype?
► 0
► -32
► 65531
► **-4.0**

Question No: 3 (M a r k s: 1)
In flow chart, the symbol used for decision making is,
► Rectangle
► Circle
► Arrow
► **Diamond** Pg 51

Question No: 4 (M a r k s: 1)
Switch statement deals with,
► Integer data only
► float data only
► character data only
► **Integer and character data**
http://docs.oracle.com/javase/tutorial/java/nutsandbolts/switch.html

Question No: 5 (M a r k s: 1)
Default case in switch statement is,
► Must

► **Optional**
► syntax error
► Necessary
http://www.arduino.cc/en/Reference/SwitchCase

Question No: 6 (M a r k s: 1)

***doc is _____ by type.**

► **Sequential File**
► Random Access File
► Data File
► Record File

Question No: 7 (M a r k s: 1)

Member function tellg() returns the current location of the _____ pointer.

► tellptr()
► write()
► seekg()
► **get()**

http://enggedu.com/tamilnadu/university_questions/question_answer/be_nd_2007/3rd_sem/cse/ cs1204/part_b/13_a_1.html

Question No: 8 (M a r k s: 1)

Dealing with structures and functions passing by reference is the most economical method

► **True**
► False

http://mathbits.com/MathBits/CompSci/Structures/Functions.htm

Question No: 9 (M a r k s: 1)

In C/C++ all character strings are terminated with,

► Null character
► String
► **Zero Pg 166**
► Full stop

Question No: 10 (M a r k s: 1)

Word processor is

► Operating system
► **Application software**
► Device driver
► Utility software

Question No: 11 (M a r k s: 1)

Which of the following can not be a variable name?

► area
► _area
► **10area**
► area2

Question No: 12 (M a r k s: 1)

Which looping process is best, when the number of iterations is known?

► **for**
► while
► do-while
► all looping processes require that the iterations be known

http://en.wikipedia.org/wiki/For_loop

Question No: 13 (M a r k s: 1)

By default an array of characters is passed by value to a function.

► True
► **False**

Question No: 14 (M a r k s: 1)

Which of the following operator is used to access the address of a variable?

► * operator
► -> operator
► && operator
► **& operator** **Pg 480**

Question No: 15 (M a r k s: 1)

The name of an array represents address of first location of array element.

► **True** **Pg 120**

► False

Question No: 16
Let suppose
(M a r k s: 1)

```
Union intorDouble{

Int ival;
 Double charvar;
 };
 main(){
 intorDouble VAZ;
 int size ;
 size = sizeof(VAZ);
 }
```

What will be the value of variable "size", if int occupies 4 bytes and double occupies 8 bytes?

► 2
► 4
► 8
► 12

Question No: 1 (M a r k s: 1)
In C/C++ the #include is called,
►Header file
►**Preprocessor Directive** **pg 269**
►Statement
►Function

Question No: 2 (M a r k s: 1)
To access the element of two dimensional array we use,
►Single referencing
►Single dereferencing
►**Double dereferencing** **Pg175**
►Double referencing

Question No: 3 (M a r k s: 1)

Data Size of the file is always_____ the actual size of the file.

►Greater than
►Equal to
►Less than or equal to

►**None of the above** Pg 216
Similarly in case of files, the space occupied by a file (file size) can be more than the actual data length of the file itself.

Question No: 4 (M a r k s: 1)
When an identifier is declared with keyword const then,
►Its value can be changed during execution.
►**Its value can not be changed** Pg110
►Its value can be changed with arithmetic operator
►Its value can be overwritten

Question No: 5 (M a r k s: 1)
In C/C++ if we define an array of size eight (8) i.e. int Arr [8]; then the last element of this array will be stored at,
►Arr[0]
►Arr[8]
►**Arr[7]**
►Arr[-1]

Question No: 6 (M a r k s: 1)
If it is required to copy an array to another array then,
►**Both arrays must be of the same size and data type** Pg 105
►Both arrays may be of different size
►Both arrays may be of different data type
►Both arrays may be of different size and type

Question No: 7 (M a r k s: 1)
In C/C++ all character strings are terminated with,
► **Null character** Pg 166
► String
► Zero
► Full stop

Question No: 8 (M a r k s: 1)
Let suppose

```
intorDoubl
e {
struct
 int ival; Double
        charvar;
 };

main(){
 intorDouble
 VAZ;
 int size ;
 size =
 sizeof(VAZ);
 }
```

What will be the value of variable size, if int occupies 4 bytes and double occupies 8 bytes?

► 2
► 4
► 8
► 12

Question No: 9 (M a r k s: 1)

When a pointer is incremented, it actually jumps the number of memoryaddresses ►According to data type Pg 160

►1 byte exactly
►1 bit exactly
►A pointer variable can not be incremented

Question No: 10 (M a r k s: 1)

Do-while loop executes at least,

►Zero Time
►One Time
►Two Times
►N Times

Question No: 11 (M a r k s: 1)
+= , *= , /= , etc are called,

CS201

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RAQIA

1. ------ is used for input file or for reading from the file.
Tellg()

2. Following is the declaration a ------- array. Int arr[2][2][2] 3-demensional

3. ! (x < 3) means in c++ that

X is greater than 3

4. Which of the following option is correct to compare the declaration of the function?
---------- (parameter1, parameter2)

{

// code to be executed
}

Void functionNAME

5. Ofstream is ued for --------

Output file stream

6. By default, the starting index of an arrar in c++ is
____ 0

7. How we declare an array of integer data whose size is 20 with array name “count”.
Int count [20];

8. Which of the following is a reserve word for data types in c/c++? Int

9. C was developed with the help of ---------- language
BCPL and B

10. An object of ----- class can be created for saving the current position of any opened file before reading from the file. Streampos

11. C ++ is a ----- language.

High level
12. In while loop, the loop counter is initialized at -----
Before entering the loop

13. What is the output of thw following code if the 3rd case is true
Switch (var)

{Case ‘a’;Cout<<”apple”<<endl;

Mango

14. ---------- character is used to indicate the end of the string.

Null

15. Which of the following is used to perform bit-wise exclusive OR operation?

|

16. If x = 11, and x % = 3, then value of x will be-

--- 2

17. A variable of character data type occupies ---- bytes in memory.

1

18. Null character is represented by ---- in c ++?

\0

19. In computer system there are mainly ---- type of softwares.

2

20. There is pointer variable named ptr of type float. Which type of variable address can be store by ptr? Float

21. A character is stored in the memory in -----

Byte

22. X is an integer variable; what does x++ means, Add 1 in x value

23. When we call a function, its control--------

Transfers to its definition

24. ‘\0’ takes ---- space in the memory.

1 byte

25. -------- will be used for enclosing function statements into a block?

{ }

26. How can we declare an array of characters whose size is 12 with array name “country”?

Char country[12];

27. Following is the declaration of a 2d array, how many columns are declared for this array.

Int arr[3][2];

2

28. If we assign 2.06721 to an integer variable x, what will be the output if we print x using cout<< statement?

2

29. We can access a global variable ----

From anywhere in the program

30. We use ---- to include all those functions which are located in different files.

Linker

31. A character is stored in the memory in ----

Byte

32. Which is not true regarding structure?

We can declare array of structure

33. Mr. ahmad sleeps thirty hours every day. This sentence is ----

Grammatically correct but illogical

34. ----- will explain the function of a program.

Comments

35. Char **argv can be read as ----

Pointer to pointer to char

36. What will be output of the following code?

String name [4] = {“ali”, “bilal”,“omer”, Ayesha”}; Cout<< name [0];

Ali

37. The data type before a function name represents its, Return type

37. The expression ((a+b) = = 10) || ((x+y) = = 20) is true only if?

Either ((a+b) = =) OR ((x + y) = =20) is true

38. = operator is used for ----

Assigning values to varaibles

39. What is the use of ios::trunc mode?

To truncate an existing file to zero

40. X is an integer variable; what does x ++ means, Add 1 in x value

41. Structures use ---- allocation.

Heap

42. What will be the size of the following character array?
Char name[] = “adeel”;
6

43. A ---- is an array of characters that can store number of character specified.
String

44. ----- statement is used to terminate the processing of a particular case and exit from switch structure.
Break

45. If y = 20 and z = y ++, then the valye of z will be------
2146. If
Int a = 17;

int b = 3;

double c = a/b;

what will be value of variable c?

5

47. What will be the output of the following code? String grade [3] = {“a’, “b”, “c”};
Grade[2] = “f”;

Cout<< grade[2];

F

48. Declaration of two-dimensional array of integers having 3 rows and 5 columns is following?

Int arr [3][5];

49. A = a + 1; can be written as ----

A+ = 1;

50. A record is a group of related Fields

51. What will be the result of arithmetic expression 6+48/4*3?

42

52. ---------- construct is used to execute a set of instructions when a condition is true and other set when it is false? If\else

53. If an array has 50 elements, what is allowable range of subscripts?

0 – 49

54. If int a = 50; then the value of a/= 3; will be?

16

55. Which of the following option is/are correct about array?
Only one type of elements can store in an array

56. Whenever some number is added in an array name, it will jump as many --- as the added number?

Rows

57. --------- returns true if c is a digit or a letter and false otherwise. Int isalnum(int c)

58. which of the following is the default mode of the opening using of ofstream class?

Ios::trunc

59. In which language the compiler of c language is written? C

60. While loop executes at least?

One time

61. String are accessed by variable of type----

Char

62. Which of the following is the correct operator to compare the values of two variables?

= =

63. Not operator is a -----

Single input operator

64. Pointer points to a particular-----

Memory address

65. A function is a block of statements that can be defined once and used- ---in the program.

As many times as user wants

66. -------- function is used to find the number of characters in a string?

Strlen()

67. ! = operator is used to check whether the operand on the left-hand side is------to the operand on the right-hand-side.

Not equal

68. A while loop may execute ----- or more times.

0

69. How we declare an array of integer data whose size is 20 with array name “count”.

Int count[20];

70. A variable declared within a code block becomes ---- variable for that block.

Local

71. If a file is opened with ios::out mode, then -------

We can write in this file

72. A function’s prototype is written --- the function call.

Before

73. ---- Loop is mostly used to perform repetition of a tasks for a known number of times.

For

74. In shifting operations if zero is inserted at the lest most bit, the negative number will become a ---- number.

Positive

75. It is the job of ---- to transfer the executable code from hard disk to main memory.

Loader

76. RAID stands for------

Redundant array of inexpensive devices

77. Array indexes start from ----

0

78. In call by reference, ----- of a variable is passed to the called function.

Address

79. How many times the following do-while loop will execute?

Int k = 10;

Do

{

Cout << “statements” << endle; ?

6

80. The name of a location in memory is called ----

Variable

81. ----- function is used to find the number of character in a string.
Strlen()

82. Which statement is used to close a file?

Myfile.close();

83. ------- allow us to have a memory location and use it as int or char interchangeably.

None of the given

84. While handling files, one can have ---- options

All of the given

85. ------- function is used to determine the next position to write a character while writing into a file.

Tellp()
86. Which is the correct syntax to define a structure named 'student'? Struct student{
//varaibles

};

87. < and > both are ---- operators.

Logical

Identify the logical error in the following if condition

88. If ((i<5) & & (i>15)) ?

Condition is always false

89. Not operator is a ----

Single input operator

90. The use of *sign in first and second statements is called --- and ---- of pointer.

Int *ptr = &x;

Cout<<*ptr; ?

Referencing, dereferencing

91. C is widely known as development language of ---- operating system.

Linux

92. If x is declare as an integer, what will be result of the given expression?

X = 2 + 3 * 5 % 2 + 3 / 2 ??

4

93. What will be the correct syntax of declaration of the following statements?

“ptr is a pointer to const int” ??

Const int *ptr

94. After evaluating the expression

95. X = 10 +3 * 4 / 2 – 1, the value of x will be?

15

96. We can read, write and manipulate the same file using ----
Fstream.h

97. Return type of a function that does not return any value must be ----
Void

98. Pointers store the ----

Memory address

99. ----- operator uses the sign ^.

Exclusive OR

100. To get the value stored at a memory address, we use the ----
Dereferencing operator

101. Telling a computer what to do is called ----

Programming

102. Compiler translates high level language program into ---- language code.

Machine

103. Each array declaration must provide the information about all these things except----

The location of the first element to be stored

104. Eof is used to check for the --- of file when a file is being resd.
End

105. The result of 4%3 will be?

1

106. When the logical operator AND (&&) combine two expression exp1 and exp2 then the result will be true only?

When both exp1 and exp2 are true

107. ‘multi[3][3]’ element can also be accessed by ------

((multi + 3) + 3)

108. What is output of following code?

Int data [10] = {10,20,30,40,50,60,70,80,90,100};

Int *xptr =&data [4];

Int *xptr =&data [6];

Cout<<xptr + yptr ++; ??

120

109. Which of the following is not the subcategory of the system software? None of the above

110. We get 12 | 8 = ------ where “|” is (bit-wise OR) ?

12

111. ------ is a substitute of multiple if statement.

If..elseif statement

112. Find out the logical error in following lines of code.

If (x = 10)

Cout << “x is 10”; ?

Assignment operator should not be used for comparison 113.

Which is not true regarding structure?

c) we can’t declare pointers to structure

114. -------- are used to compiler the code.

Compiler

115. #include <iostream>

#include <cstring>

Using namespace std;

Int main ()

{

Char str1[10] = “hello”;

Char str2[10] = “world”; ?

10

116. A --- structure specifies that an action is to be repeated while some condition remains true.

Repetition

117. In which language the compiler of c language is written? C

118. Characters string are terminated by -----

\0

119. A function is a block of statements that can be defined once and used - -- in the program.

As many times as user wants

120. -------- is used for output during the process of writing to the file. Seekp()

In case of two-dimnstional array, if you add some number in a two dimensional name, it will jump to the next----

Row

121. In while loop the condition is checked ---- the execution of loop. Before

122. Array indexes start from ----

0

123. Pointers store the ----

Memory address

124. Which step is not not performed during a proper program design? Write details about the performance of program

125, We can say that a pointer is a variable that holds the --- address. Memory

126. When accessing a structure memory, the identifier to the left of the dot operator is the name of ----

Structure variable

127. From the following; which one is the range of random number generator rand() ?

O – 32767

128. To read command-line arguments, the main () function itself must be given ---- arguments.

2

129. Which operator has the highest precedence?

(*, -, /, +) ?

* and / both hane the same highest precedence

130. Suppose we have int y[10];

To access the 4th element of the array we write----

Y[3];

131. What will be the value of the variable output in the given piece of code? Double output = 0;
Output = (2 +2) * 4 + / (4 – 2);

17

132. What is the output of the following statement?

int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);

error

133. Searching is easier when an array is already sorted True

134. If an array has 100 elements, what is allowable range of subscripts?

0 - 99

While developing a program; should we think about the user interface? //handouts main

Yes

A character is stored in the memory in _____

String

These functions seekg() and seekp() requires an argument of type _____to let them how many bytes to move forward or backward.

Int

dereferencing operator is represented by _____

*

_____ transfers the executable code from main memory to hard disk.

Loader

When the logical operator OR (||) combine two expressions exp1 and exp2 then the result will be false only, //bitwise “or” applies here….

When both exp1 and exp2 are false

suppose we have int y[10]; To access the 4th element of the array we write_____

none of given

we have opened a file stream myfile for reading (getting), myfile.tellg () gives us the current get position of the file pointer. It returns a whole number of type_____

int

ofstream is used for_____

Output file stream

A structure is a collection of _____under a single name. Variables

In C/C++ the string constant is enclosed ……. corrected r red one In curly braces
The size of int data type is

4 bytes

In Flow chart process is represented by

Rectangle

If the break statement is missed in switch statement then,// a break statement with no label always completes abruptly, the reason being a break with no label. If no switch, while, do, or for statement in the immediately enclosing method, constructor or initializer encloses the break statement, a compile-time error occurs?

This may cause a logical error

When we are using const keyword with a variable x then initializing it at the time of declaration is, ?

Optional

Which of the following is the correct way to assign an integer value 5 to element of a matrix say ‘m’ at second row and third column?

m[2][3] = 5 ;

How many total elements must be in two-dimensional array of 3 rows and 2 columns?

6

Which of the following is the correct statement for the following declaration?
*ptr is a pointer to const int

What will be the correct syntax to assign an array named arr of 5 elements to a pointer

ptr?

*ptr = arr[5] ;

C is a/an _____ language

object oriented

The variables having a name, type and size are just like empty boxes. True

What's wrong with this for loop?

for (int k = 2, k <=12, k++)

the commas should be semicolons

Most efficient method of dealing with structure variables is to define the structure globally

True

There are mainly ---------- types of software.// Two

When a pointer is incremented, it actually jumps the number of memory addresses ?
According to data type

setw is a parameterized manipulator.

True

if (a>b && a>c) then the condition will be true only if

Both a>b and a>c are true

In while loop the loop counter must be initialized,

Before entering the loop

_____ of a variable means the locations within a program from where it can be accessed.

Reference

Switch support_____ data.

Integer

Character

Float

Both integer and character

A function is a block of statements that can be defined once and used _____ in the program.

As many times as user wants

_____statement is used to terminate the processing of a particular case and exit from switch structure.

break

The most suitable data type for number 325.25 is _____. float

X is an integer variable; what does X++ means,

Add 1 in X value

The operators ++ and –- are used to increment or decrement the value of a variable by _____

1

Which of the following loops checks the test condition at the end of the loop?

Do-While

The operator to free the allocated memory using new operator is _____.

delete

suppose we have int y[10]; To access the 4th element of the array we write_____

y[3];

From the following; which one is the range of Random number generator function rand()?

0 – 32767

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

double arr[10] = {0.0};

The string in the array is terminated by a_____

null

In C/C++; by default arguments are passed by_____to a function. Value

char name [] = “Hello World” ; In the above statement, a memory of_____characters will be allocated

12

_____Keyword is used to return some value from a function.

return

Which of the function call is call by value for the following function prototype? float add(int);

add(x);

The increment of a pointer depends on its_____.

data type

The ASCHI code of null character is_____

000

Pointers are a special type of _____in which a memory address is stored

variables

Transpose of a matrix means that when we interchange rows and columns_____

the first row becomes the first column

Pointers store the _____

value of a variable

Which of the following function call is “call by reference” for the following function prototype? int add (int *);

add(&x);

The name of the array is a constant pointer which contains the memory address of the _____of the array.

first element

array name always contains the memory address of the _____of the array

first element

At the_____, we try to break up the problem into functional units design phase

Syntax of a union is identical to _____ .

structure

A union is a user-defined data type that contains only _____from its list of members at a

time.

one object

Which of the given file handling modes are similar in their functionality ?
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

In C/C++, the header file used for string manipulation is _____. string.h

A 2D array multi[5][10] can be accessed using the array name as **multi , this technique is

called _____.

Double dereferencing

C language was evolved from _____ language(s).

B and BCPL

The _____ statement forces the immediate next iteration of the loop. Continue

_____ are very good tools for code reuse.

Functions

When an argument is passed by reference, _____

the function accesses the argument's original value in the calling program.

_____ executes all the lines before error and stops at the line which contains the error.

Intrepreter

Analysis is the ---------- step in designing a program.

First

Which of the following is the correct function call, having array named student of 10

elements as a parameter?

addRecord(student);

When an array element is passed to a function, it is passed by _____.

Reference

What is the correct syntax to declare an array of size 10 of int data type? int name[10] ;

If we want to copy an array, both arrays need to be of same_____. Data type and size

Which of the following is the correct syntax to print multiple values or variables in a single command using cout?

cout << "H" << x << "\n";

Which one of the statements given below is equivalent to x %= 5? x = x % 5

The condition in loop should be a(n) _____.

Boolean Expression

Which structure is represented by following flow chart ? if structure

Stream which sends data to the program is called _____. Input stream

Syntax of a union is identical to _____ .

Structure

When accessing a structure member, the identifier to the left of the dot operator is the

name of _____.

a structure variable

The parameter passed to isdigit() function is _____. a character variable

TWAIN stands for _____ .

Technology Without An Interesting Name

_____ translates high level language program into machine language code.

Compiler

From the option given below, what will be the correct output of the code?

```
for (int a = 1; a <= 3; a++)
 cout<<a*3-1<<" ";
```

2 5 8

If the return type of a function is void then it means that it will _____. return any type of data

return no data

The functions that have already been defined as a part of the language are called

_____.

built-in functions

Given that doubleArray is an array of 7 integers. Which of the below is the correct statement to access the 5th element of the array?

doubleArray[4]

The symbol which is used to represent a process in a flow chart is _____.

Rectangle

When an array is passed to a function, by default it will be passed by_____.

Reference

What is the range of Random number generator function rand()? 0 – 32767

The first character of a variable name must be an alphabet or _____.

Underscore

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference
Initialization of variable at the time of definition is ----------practice.
Good Programming

Which looping process checks the test condition at the end of the loop? do-while

You can use a _____ statement to transfer control elsewhere out of the nested structure.

Goto

Which of the following array is the most suitable for storing a matrix structure?

Single-dimensional array

The microsoft word document(.doc) is a kind of _____ . Random Access File

A union is a user-defined data type that contains only _____from its list of members at a time.

one object

In C/C++, _____ are the doors through which data can enter and come out of a program.

Streams

Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

C++ views each file as a sequential stream of _____. Bytes

In 2D array, the technique used to access the array elements is called _____

Double dereferencing

From the options given below, identify the correct option which is used for calling the function float square (int &);

square (num);

Identify the correct option which is used for calling the function float area (int).

area(num) ;

Which kind of error occurs in the code below to access the variable num in the main

function?

```
int num =10;

int main(){

int x ;

x = num ;
}
```

No error

A program statement that invokes a function is called _____. function call

What will be the output of the following code segment?

```
main(){

int a = 10 ;

int b =0;

int *x = &a;

b = (*x)+3 ;

cout << a << —, ‖ << b ;

}
```

10,13

When the logical operator AND (&&) combines two expressions exp1 and exp2 then the result will be true only _____

When both exp1 and exp2 are true

For which array, the size of the array should be one more than the number of elements in an array?

char

What is the range of Random number generator function rand()? 0 – 32767

To assigned a value to a character type variable, _____ are used around the value.

single qoutes ' '

In C/C++, the #include is called_____.

Preprocessor Directive

The number 544.53 must be stored in _____ data type.

Float

Use of the _____ statement violates the rules of structured programming.

Goto

In Flow Chart, flow of control is represented by _____. Arrow

What will be the correct syntax for initialization of pointer ptr of type int with variable x?

int *ptr = &x ;
Syntax of a union is identical to _____ .

structure

A union is a user-defined data type that contains only _____from its list of members at a time.

one object

Which of the given file handling modes are similar in their functionality ?
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

Trunk

Stream which sends data to the program is called _____. Input stream

Syntax of a union is identical to _____ .

Structure

When accessing a structure member, the identifier to the left of the dot operator is the name of _____.

a structure variable
The parameter passed to isdigit() function is _____. a character variable

TWAIN stands for _____ .

Technology Without An Interesting Name

_____ translates high level language program into machine language code.

Compiler

From the option given below, what will be the correct output of the code?
for (int a = 1; a <= 3; a++)
cout<<a*3-1<<" ";

2 5 8

If the return type of a function is void then it means that it will _____. return no data

The functions that have already been defined as a part of the language are called

_____.

built-in functions
Given that doubleArray is an array of 7 integers. Which of the below is the correct

statement to access the 5th element of the array?

doubleArray[4]

The symbol which is used to represent a process in a flow chart is _____.

Rectangle

When an array is passed to a function, by default it will be passed by_____.

Reference

The first character of a variable name must be an alphabet or _____.

Underscore

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference

Initialization of variable at the time of definition is ----------practice.
Good Programming
Which looping process checks the test condition at the end of the loop? do-while

You can use a _____ statement to transfer control elsewhere out of the nested structure.

Goto

An object of _____ class can be created for saving the current position of any opened file

before reading from the file

Stream

The value returned by the eof() function is of _____
type. Character

If a file is not properly closed in a program then what is the status of the program ?

The program will terminate normally

The parameter passed to isdigit() function is
_____. a character variable
In C/C++, the header file used for string manipulation is
_____. string.h

Arrays are best data structures _____.

for relatively permanent collections of data

Each array declaration must provide the information about all these things except

_____.

Number of elements of the array

The First step for developing a program is _____.

Linking

Analysis

_____ transfers the executable code from hard disk to main memory. Loader

_____ operator is used to pass the address of a variable to the called function.

&

In call by reference, _____ of a variable is passed to the called function.

Address

_____ of a function is also known as signature of a function. Declaration

Preprocessor program performs its function before _____ phase takes place.

Compiling

Which of the following is the correct function call, having array named student of 10 elements as a parameter?

addRecord(student[10]);

The remainder (%) operator is a _____operator.

Arithmetic

Which of the following array is the most suitable for storing a matrix structure?

Two-dimensional array

*.doc is _____ by type.

► Random Access File

Which of the following is NOT a preprocessor directive?

► #define

The return type of operator function must always be void.

► False

Question No: 4 (Marks: 1) - Please choose one

What does (*this) represents?

► A value of the data member

The statement cin.get (); is used to,

► Read a character from keyboard

When we do dynamic memory allocation in the constructor of a class, then it is necessary to provide a destructor.

► True

Overloaded new operator function takes parameter of type size_t and returns

► void pointer

The second parameter of operator functions for << and >> are objects of the class for which we are overloading these operators.

► True

C++ is a case-sensitive language

► True

To include code from the library in the program, such as iostream, a directive would be called up using this command.

► #include <iostream.h>

A template function must have only generic data types.

► True

Template class can not have static variables.

► False

What will be the correct syntax to assign an array named arr of 5 elements to a pointer

ptr?

► *ptr = arr[5] ;

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

► Both 1and 3

If most significant bit of un-signed number is 1 then it represents a positive number.

► True

If there is a symbol (& sign) used with the variable name followed by data type then it

refers to _____ and if & is being used with variable name then it refers to _____.

► Reference variable, address of variable

We can also do conditional compilation with preprocessor directives.

► True

The default value of a parameter can be provided inside the _____

► function definition

Classes defined inside other classes are called _____ classe ► nested

What purpose do classes serve?

► All of the given options

Every class contains _____.

► Constructor

new operator is used to allocate memory from the free store during ► None of the given options

When an object of a class is defined inside another class then, ► Destructor of inner object will be called first

It is possible to define a class within another class.

► True

New and Delete are also used with _____ and data types as well. ► Class, Objects

With New keyword, data types and class members are initialized with meaningful values instead of garbage.

► True

C language is developed by

► Dennis Ritchie

Which of the following choice is not an example of an int data type?

► -4.0

In flow chart, the symbol used for decision making is,

► Diamond

Switch statement deals with,

► Integer and character data

Default case in switch statement is,

► Optional

*.doc is _____ by type.

► Sequential File

Member function tellg() returns the current location of the _____ pointer.

► tellptr()

Dealing with structures and functions passing by reference is the most economical method

► True

In C/C++ all character strings are terminated with,

► Null character

Word processor is http://vustudents.ning.com

► Application software

Which of the following can not be a variable name?

10area

Which looping process is best, when the number of iterations is known?

► while

By default an array of characters is passed by value to a function

► False

Which of the following operator is used to access the address of a variable?

► & operator

The name of an array represents address of first location of array element.

► False

Compiler is a

► Application Software

If Num is an integer variable then Num++ means,

► Add 1 with Num

For one byte there are _____ combinations of values that can be stored in computer.

► 2^8

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

► ctype.h

Default case in switch statement is,

► Optional

When break statement is encountered in switch statement, it

► Exits from switch statement

What will be the result of arithmetic expression 6+27/3*3? ► 33

What is the correct syntax to declare an array of size 10 of int data type?

► int name[10] ;

How many dimensions does n-dimensional array has?

► n dimensions

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

► ptr[3]

Which of the following values C++ use to represent true and false?

► 1 and 0

Declaring structures does not mean that memory is allocated.

► True

For which array, the size of the array should be one more than the number of elements in an array?

► char

If a variable is passed by value to a function and the function makes some changes to that variable then it

► does not affect the original variable

In C/C++ the #include is called,

► Preprocessor Directive

Loops are ---------- Structure.

► Repetition

the sizeof operator is used to determine the size of _____. data type

Structures use _____ allocation.

Stack

Which header file must be included to use the functions tolower() and toupper()?

ctype.h

In Analysis, we try to have a_____

Precise problem statement

Pointers store the _____

memory address

_____ Returns true if c is a digit and false otherwise. int isdigit(int c)

eof is used to check for the _____ of file when a file is being read. End

The statement cout << yptr will show the _____the yptr points to. memory address

Which of the following is true about streams?

A& B

While handling files, one can have _____
options All of the given

If an array has 50 elements, what is allowable range of subscripts?
0 – 49

A structure is a collection of _____under a single name. variables

Ifstream is used for_____

Input file stream

The ASCHI code of null character is_____

000

dereferencing operator is represented by _____

*

Whenever some number is added in an array name, it will jump as many _____as the added number.

rows

To access the data members of structure, _____ is used. Dot operator

Which of the following is true about streams? A. It is a sequence of bytes B. It is an ordered sequence C. All bytes can

go through the stream simultaneously D. Bytes that enters first into the stream will go out at last

A and B

We use _____ to open a file or stream for extraction

in

char **argv can be read as_____.

pointer to pointer to char

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

double arr[10] = {0.0};

Pointers work by pointing to a particular_____

data type

_____function give the position of the next character to be read from that file.

tellg()

aFile. seekg (-10L, ios:cur)

backward direction

An object of _____ class can be created for saving the current position of any opened file before reading from the file.

Stream

Structures are syntactically defined with the word_____. struct

_____ allow us to have a memory location and use it as int or char interchangeably

union

Question # 9 of 10 (Start time: 12:25:41 PM) Total Marks: 1

A hierarchy of classes which are used to deal with console and disk files are called _____.

IO classes

_____function is used to determine the next position to write a character while writing into a file.

tellp()

For binary member operators, operands on the _____ drives (calls) the operation.

Left

We cannot increment _____.

references

We can _____ pointer.

all of the given

We can _____ references.

None of the given

What will be the correct syntax for the following function call?
add(x);
An instance of a class is called _____.

object

The _____ is called automatically when an object destroys destructor

The destructor is used to _____.

deallocate memory

_____ data isn't accessible by non-member functions or outside classes. private

Member functions of the class _____ main program.

are accessible from

Overloading means :

Using the same name to perform multiple tasks or different tasks depending on the situation.

The main advantage of function overloading is _____.

The program becomes more readable

You cannot overload the _____ operator.

? :

In C++, a variable can be declared anywhere in the program this will increase _____.

efficiency

Memory allocated from heap or free store _____.

cannot be returned back unless freed explicitly using free and delete operators

We cannot use _____ pointer for storing and reading data from it. 'NULL

The dynamic memory allocation uses _____ whereas static memory allocation uses _____.

heap , stack

What will be the output of the given code?

```
#include #define MAX( A, B ) ((A) > (B) ? (A) : (B))
void main() {
int i, x, y;
x = 23;
y = 45;
i = MAX( x++, y++ );
// Side-effect: // larger value incremented twice
cout << "x = " << x << " y = " << y << '\n';
}
```
x=24 y=47

NULL has been defined in _____ header file.

Stdlib.h

Symbolic constant PI can be defined as:

#define PI 3.14

The friend function of a class can have access _____. to the private data members

C++ was developed by _____.

Bejarne Stroustrup

Once the _____ are created, they exist for the life time of the program. static variables

Encapsulation means _____.

that the data of a class can be accessed from outside

An address is a _____, while a pointer is a _____.

constant, variable

The syntax of declaration of a function that returns the reference to an integer is _____.

int & myfunc();

Which one of the following is mandatory preprocessor directive for c++?
#include

The members of a class declared with the keyword struct are _____ by default.

Public

getche() is a _____ function and defined in _____ header file. built-in function , conio.h

_____ operators are the ones that require two operands on both sides of the operator.

Binary

_____ will return the number of bytes reserved for a variable or data type.

sizeof operator

_____ are not available in C language.

Library functions

The members of a class declared without any keyword are _____ by default.

private

For console input and output we use _____.

conio.h header file

The name of the destructor is the same as that of a class proceeding with a _____.

~ sign

A reference cannot be NULL it has to point a data type.

True

A pointer is _____.

a variable for storing address

Constructor is a special function, called whenever we _____. instantiate an object of a class

Symbolic constant PI can be defined as:

#define PI 3.14

Object code is machine code but it is not _____ and _____. relocatable, executable

The default visibility for the data members of the class is private

accessible outside the class

The _____ is called automatically when an object destroys. destructor

Constructor is special type of function :

which has no return type

_____ variables are those that are defined outside of main. Global

Within the statement obj1=obj2; obj1 will call the assignment operator function and obj2 will be passed as an argument to function.

True

When the compiler overload the assignment (=) operator by default then Compiler does member wise assignment.
It is possible to return an object from function using this pointer.
True

Overloaded assignment operator must be

Member function of class

Let suppose

int a, b, c, d, e;

a = b = c = d = e = 42;

This can be interpreted by the compiler as

a = (b = (c = (d = (e = 42))));

In statement a+b+c, at first

b+c is executed first

Suppose int i = 10; then what is the output of
cout<<oct<<i; 12

ostream is a _____ operator.

Standalone

_____ must be included to use stream manipulation in your code. Iomanip
_____ operators are the ones that require only one operator to work. Unary

The endl and flush are _____.

Manipulators

When operator function is implemented as member function then return type of function _____.

Can be any data type

When a variable is defined as static in a class then _____. Only one copy is created for all objects of this class

Automatic variables are created on _____.

Stack

cout << i << " ";

cout << d <<" ";

cout << f;

Above statements can be written within statement of one line as:
cout << i <<" "<< d <<" "<< f;
dec, hex, oct are all _____.

Non-parameterized manipulators

What will be the output of following statement?

cout<<setfill('0')<<setw(7)<< 128;

0000128

Which of the following syntax is best used to delete an array of 5 objects named 'string' allocated using new operator.

delete []string;

If we have a program that writes the output data(numbers) to the disc, and if we collect the output data and write it on the disc in one write operation instead of writing the numbers one by one.

In the above situation the area where we will gather the number is called Buffer

The first parameter of operator function for << operator _____. Must be passed by reference

The second parameter of operator function for >> operator must always be passed

By reference

The only operator that the compiler overloads for user define data type by default is------

Assignment (=) operator

Consider the following code, the printed value will be converted into:
int n=10;
cout <<oct<<n;

Base 8

_____ variables are defined in the main.

Local

ostream class is _____ and not under our control.

built-in

The memory allocation in C++ is carried out with the help of _____. new operator

If B is designated as friend of A, B can access A's non-public members. A can access non-public members of B

If the request of new operator is not fulfilled due to insufficient memory in the heap _____.

the operator returns 0
We should not use such variable names that are starting with _____ because in C++, there are lots of internal constants and symbolic names that start with it.

double underscore

The friend keyword provides access _____.

in one direction only

The malloc function takes _____ argument(s).

one

The constructor contains _____.

no return type

What will be the output of the following c++ code?

```
#include<iostream.h>
#define max 100
main()
{
#ifdef max
Cout<<"Hellow;
}
```

Error

Once we have defined a symbolic constant value using #define, that value _____ during program execution

cannot be changed

The memory allocation functions return a chunk of memory with a pointer of type _____.

ptr

A class can be declared as a _____ of other class.

member

To avoid dangling reference, don't return _____.

the reference of a local variable from the function

Constructor is itself a _____ of C++ and _____.

function, can be overloaded

The parameter passed to isdigit() function is _____ variable. Integer

char **argv can be read as _____.

pointer to pointer to char

To read command-line arguments, the main() function itself must be given _____ arguments.

2

How many bytes an integer type pointer intPtr will jump in memory if the statement below is executed?

intPtr += 2;

8

The increment of a pointer depends on its _____.

data type

The statement cout << yptr will show the _____ the yptr points to. memory address

_____ is used as a dereferencing operator.

*

Transpose of a matrix means that when we interchange rows and columns _____.

the first row becomes the first column

Individual characters in a string stored in an array can be accessed directly using array _____.

subscript

We can define a matrix as _____ array.

Multi dimensional

A _____ is an array of characters that can store number of character specified.

String

Given a two dimensional array of integers, what would be the correct way of assigning the value 6 to the element at third row and fourth column?

array[2][3] = 6;

_____ of a variable means the locations within a program from where it can be accessed.

Visibility

Which of the following function call is "call by reference" for the following function prototype? int add (int *);

add(&x);

Which of the following function call is "call by reference" for the following function prototype? float add (float *);

add(&x);

Which of the function call is call by value for the following function prototype? float add(float);

add(x);

Which of the function call is "call by value" for the following function prototype? float add(int);

add(x);

Return type of a function that does not return any value must be _____. void

_____ will be used for enclosing function statements into a block. { }

What is the output of the following code if the 2nd case is true

```
switch (var) {
case 'a': cout<<"apple"<<endl;
case 'b':cout<<"banana"<<endl;
case 'm':cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl;
}
```

Banana mango any fruit

When the break statement is encountered in a loop's body, it transfers the control _____ from the current loop.

Outside

What is the output of the following code if the 3rd case is true

```
switch (var) {

case 'a':cout<<"apple"<<endl;
case 'b':cout<<"banana"<<endl;
case 'm':cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl;
}
```

Mango any fruit

What is the output of the following code, if the first case is true

```
switch (var) {
case 'a':cout<<"apple"<<endl;
case 'b':cout<<"banana"<<endl;
case 'm':cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl;
}
```

Apple banana mango any fruit

What will be the output of following code segment?

```
for (int i = 2; i<10; i++) {
if ( i == 5) continue;
```

cout << i << "," ;

}

2,3,4,6,7,8,9

_____ statement is used to terminate the processing of a particular case and exit from switch structure.

break

What will be the result of the expression j = i++; if initially j = 0 and i = 5? 5

What will be the result of the expression k = ++m; if initially k = 0 and m = 5

What will be the result of the expression k = ++m; if initially k = 0 and m = 5?

6

How many times the following do-while loop will execute? int k = 10; do { cout << "Statements" << endl; k -= 2; } while(k>0);
6

Which of the following loops checks the test condition at the end of the loop?

Do-While

The operators ++ and -- are used to increment or decrement the value of a variable by _____.

1

How many times the following loop will execute?

int j = 3; while(j > 0) { cout << "Statements" << endl; j -=
2; } 2

A _____ structure specifies that an action is to be repeated while some condition remains true.

Control

!(x > 3) means in C++ that

x is less than or equal to 3

When the logical operator && combines two expressions then the result will be true only when the both expressions are _____.

true

< and > both are _____ operators.

Relational

What will be the value of variable “input” if the initial value of input is 67?

if(input >= 50)

input = input + 1;

if(input <= 75)

input = input + 2;
else

input = input - 1;

!(x < 3) means in C++ that

x is greater than or equal to 3

!= operator is used to check whether the operand on the left-hand-side is _____ to the operand on the right-hand-side.

Not equal

When the if statement consists more than one statement then enclosing these statement in curly braces is,

Must

The most suitable data type for number 325.25 is _____. Float

What will be the result of arithmetic expression 6+48/4*3?
42

Which of the following will be the most appropriate data type to store the value 63.547?

Float
In the given expression which operator will be evaluated first? 10 + (6 / 2) - 2 * 3?

/

What will be the value of the variable output in the given piece of code? double output = 0;
output = (2 + 2) * 4 + 2 / (4 - 2);

It is the job of _____ to transfer the executable code from hard disk to main memory.

Loader

In computer systems there are mainly _____ type of softwares. 2

_____ will explain the function of a program.

Comments

if (a>b && a>c) then the condition will be true only if

Both a>b and a>c are true

A variable of character data type occupies _____ byte(s) in memory. 1

We must include the header file _____ to convert the value of one type into another type using built-in functions.

string.h

A function is a block of statements that can be defined once and used _____ in the program.

As many times as user wants

Select the correct way to assign the address of first element of array to pointer?

int *ptr = &data;

Consider the following code segment. What will be the output of following code?

```
int addValue (int *a){
int b = (*a) + 2;
return b;
}
main() {
int x = 6;
cout<<addValue(&x)<<",";
cout<<x;
}
```

6,8,6

Here the code is given below. You have to identify the problem in the code. while(i < 10) && (i > 24))
the test condition is always false

The correct syntax of do-while loop is _____.

do {statements;} while (condition);

Matrix is defined as _____.

Multi-dimensional array

In programming, comments are used to explain the functioning of the _____.

Program

Operating System is a type of a/an _____.

system software

From the options given, you need to choose the option which is true for the given code.

```
for (int i = 1; i>0; i++) {
/*loop code*/
}
```

the test condition is always true

Which of the following values are used in C/C++ to represent true and false?

1 and 0

'While' loop may execute _____ or more times.

zero

Body of any function is enclosed within _____.

{ }

What will be the correct syntax for initialization of a pointer ptr with string "programming"?

char *ptr = "programming";

Which one of the given option is not a mode for reading/writing the data from a file?

Get

Which of the following operators is used to access the value of variable pointed by a pointer?

* operator

CS201 MID-Term BY Attiq Kundi

Q 1; The ASCll code of null character is ----------.

(000) correct answer

Q2; Which step is not not performed during a proper program design? **(Write details about the performance of program) correct answer**

Q3; How many elements are stored in the following ? int matrix [4][5]; **(20) correct answer**

Q4; Which of the following is not a valid variable name in c++?

(@studentName) correct answer

Q5; If an array has 50 elements.What is allowable range of subscripts? **(0-49) correct answer**

Q6; <. <=.> .>= are called ----------operators.

(Relational) correct answer

Q7; Why we use “cin “?

(To read data from keyboard) correct answer

Q8; !(x<3)means in c++ that

(x is greater than 3) correct answer

Q9; The data in the memory is ---------

(volatile) correct answer

Q10; Each array declaration must provide the information about all these things except ----- ----

The location of the first element to be stored

Q11; What will be the output of the program if x=10?

```
If (x!=0&&x<=10)
{
Cout <<"condation 1 is true";
}
If(x>=10 && x<=20)
{
```

Condation 1 is true condation 2 is true

Q12; C is widely known developpment language of ____ operating system. **Windows**

Q13; A repetition statement specifies that an action is to be continued while some_____remains true.

Condation

Q14; _____is a substitute of multiple if statement.

If—elseif statement

Q15; If a _____finds an error. It stops translating without generating any executable code. **Compiler**

Q16; Function prototype is wrriten .

Before call of that function

Q17; The____ is an unconditional branch of execution .

Goto statement

Q18; What will be the output of the following code snippet?

String str1 = “Hello beautiful”;

String str2 = “yes we can”;

String str3 = strcpy(str1,str2);

Cout<<str3<<endI;

Hello beautiful Yes we can

Q20; In two dimensional array .We use _____ „for oop(s)“to populate the array. **2**

Q21; eof is used to check for the _____ of file when a file is being read.

End

Q22; How many times the following loop will execute?

Int j = 3;

While(j>0)

{

Cout << “statements” << endI;

J=2;

}

2

Q23; Null character is used to indicate the____ of string.

End

Q24; There is a pointer named ptr of type float. Which type of variable address can be stored by ptr?

Float

Q25; How many bytes an integer type pointer intPtr will jump in memory if the statement below is executed?

intPtr +=2;

4

Q26; We must include the header file ____to convert the value of one type into another type using built-infunctions.

iostream.h

Q27; Use of word processor for writing the code of a program is not good because. **It has no compiler**

Q28; _____Loop executes atleast one times.

Do while

Q29; The data . contained in the structure. is defined in the___

Curly braces

Q30; What is the use of ios::trunk mode?

To truncate an existing file to zero

CS201 Solved Quiz No-1 December 13, 2015

1. We use _____ to open a file or stream for extraction
   in

2. Null character is represented by _____ in C++.
   /0

3. An object of _____ class can be created for saving the current position of any opened file before reading from the file.
   Streampos

   pg215

4. _____ _____ Returns true if c is a digit or a letter and false otherwise. **int isalnum(int c)**

5. We use _____ to open a file or stream for insertion.
   out

6. Base address is the memory address of _____ element of an array. **1st**

7. _____ allow us to have a memory location and use it as int or char interchangeably
   union

8. To read command-line arguments, the main() function itself must be given _____ arguments.
   2

9. Individual characters in a string stored in an array can be accessed directly using array _____.

Subscript

10. To manipulate n-dimensional array _____ nested loops are required. **n-1**

11. A character is stored in the memory in _____

String

12. What will be the size of following array?
int arr[29];
29

13. An object of _____ class can be created for saving the current position of any opened file before reading from the file.
Streampos
pg215

14. We use _____ to open a file or stream for extraction.
In

15. We use _____ to open a file or stream for insertion.
Out

16. _____are conventional names of the command line parameters of the „main()“ function.
_argc‘ and _argv‘

17. In_____, we have different data members and all of these have their own memory space.
Structures

18. How we declare an array of integer data whose size is 20 with array name “count”. **int count[20];**

19. A _____is an array of characters that can store number of character specified. **String**

20. File. seekg (-10L, ios:cur)

backword direction

21. What will be the output of the following while loop? int counter = 0 ; while(counter < 15) cout << counter << " "; counter++;

1 2 3 4
1 2 3 4 5
Compile time error
Infinite loop

22. We can access a global variable _____

From the functions only
From the loops only
From the main() function only
From anywhere in the program

23. A repetition statement specifies that an action is to be continued while some_____ remains true.

Condition
Control
Asignment
Operator

24. Loops are _____ Structure.

Decision
Sequential
Repetition
None of the given options

25. _____ operator is used to pass the address of a variable in call by reference method.

%
+
@

&

26.How many times the following do-while loop will execute? int k = 10; do { cout << "Statements" << endl; k -= 2; } while(k>0);

4

5

6

7

27.What is the output of the following code if the 3rd case is true switch (var) { case „a“: cout<<”apple”<<endl; case „b“: cout<<”banana”<<endl; case „m“: cout<<”mango”<<endl; default: cout<<”any fruit”<<endl; }

mango

mango any fruit

Apple

CS201 SOLVED QUIZ NO 1 DECEMBER 09, 2019 Q1; The ASCll code of null character is____

010

Q2; Each array declaration must provide the information about all these things except_____

The location of the first element to be stored

Q3; Arecord is agroup of related_____

Data

Q4; Pointers store the____

Value of the variable

Q5; We can say that a pointer is a variable that hold the ___adress. **Source code**

Q6; afile.seekg(-10-ios::cur

Backward direction

Q7; Deferencing operator is represented by____

***,+,- non of the given**

Question No: 1 (Marks: 1) - Please choose one

A precise sequence of steps to solve a problem is called

- Statement
- **Program**
- Utility
- Routine

Question No: 2 (Marks: 1) - Please choose one

The Compiler of C language is written in

- Java Language
- UNIX
- FORTRON Language
- **C Language**

Question No: 3 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

- Must
- Necessary
- **Good Programming**
- None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

- When the condition is false
- When it contain arithmetic operators
- When it contain logical operators
- **When the condition is true**

Question No: 5 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in **stdlib.h** header file?

- double atof(const char *nptr)
- int atoi(const char *nptr)
- char *strcpy (char *s1, const char *s2)
- **1 and 2 only**

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method

- **True**
- False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

- Data
- **Memory Address**

- Data Type
- Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before phase takes place.
- Editing
- Linking
- **Compiling**
- Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?
- area
- _area
- **10area**
- area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?
- for
- **while**
- do-while
- all looping processes require that the iterations be known

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?
- new line
- tab
- **null**
- carriage return

Question No: 12 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?

char str[] = —programming‖;
- 10
- 11
- **12**
- 13

11 plus one for null char (11+1= 12)

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the **rand()** function?
- iostream.h
- conio.h
- **stdlib.h**
- stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code

Makes a program easy to understand for others.

- Make programs heavy, i.e. more space is needed for executable.
- Makes it difficult to compile
- All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop? for (int k = 2, k <=12, k++)

- the increment should always be ++k
- the variable must always be the letter i when using a for loop
- there should be a semicolon at the end of the statement
- **the commas should be semicolons** **Question No: 16**

(Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array? ➢ int

- double
- float

char

Question No: 17 (Marks: 1)

To Which category of the software "Compiler and Interpreter" belongs?

Solution:

They belong to system software.

Question No: 18 (Marks: 1)

What is the result of the expression x = 2 + 3 * 4 – 4 / 2

12

Solution:

Question No: 19 (Marks: 2)

Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

Solution:

float tmp [10] = {1.0,2.0,3.0,4.0};

Question No: 20 (Marks: 3)

Write down the output of the following code? int array[7], sum
= 0;
for(int i=0;i<7;i++)

```
{
array[i] = i; sum+= array[i];
}
cout<< " Sum = " <<sum;
```

Solution:

21

Question No: 21 what will be the output of the following segment of C++ code?

```
int A[5] = {1 , 2, 3, 4};
int i;
for (i=0; i<5; i++)
{
A[i] = 2*A[i];
cout << A[i] << " ";
}
```

Solution:

2 4 6 8 0

Question No: 22 (Marks: 10)

Write a C++ program that will determine if a departmental store customer has exceeded the credit limit on a charge account.

Program should input the following facts in five variables

1. Account number
2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit Calculate the new balance

New balance = Beginning balance + charges – credits

Determine if **new balance** exceeds the **allowed credit limit**. For those customers whose credit limit is exceeded. The program should display the message "Credit Limit exceeded."

MIDTERM EXAMINATION

Fall 2008

Programming (Session - 2) Time: 60 min

Marks: 38

Question No: 1 (Marks: 1) - Please choose one

What is the output of the following statement?

```
int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);
```

(a) 510

(b) 5

(c) 48
(d) error

Question No: 2 (Marks: 1) - Please choose one

What does !(7) evaluate to in decimal where ! is a NOT operator?
(a) 7
(b) 8
(c) 9
(d) 10

Question No: 3 (Marks: 1) - Please choose one

The condition in while loop may contain logical expression but not relational expression. (a) True
(b) False

Question No: 4 (Marks: 1) - Please choose one

Searching is easier when an array is already sorted
(a) True
(b) False

Question No: 5 (Marks: 1) - Please choose one

If an array has 100 elements, what is allowable range of subscripts? (a) **- 99**
(b) 1 - 99
(c) 0 - 100
(d) 1 - 100

Question No: 6 (Marks: 1) - Please choose one

What will be the value of „a“ and „b“ after executing the following statements? a = 3;
b = a++;

(a) 3, 4
(b) 4, 4
(c) 3, 3
(d) 4, 3

Question No: 7 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to value 0?

(a) int arr[2][3] = {0,0} ;
(b) int arr[2][3] = {{0},{0}} ;
(c) int arr[2][3] = {0},{0} ;
(d) int arr[2][3] = {0} ;

Question No: 8 (Marks: 1) - Please choose one

Which of the following function returns the size of a string variable?

(a) strlength()
(b)stringlen()
(c) **s trlen()**
(d) strLength()

Question No: 9 (Marks: 1) - Please choose one

What will be the range of numbers generated by function
rand () % 9? (a) 0 to 9
(b)1 to 9
(c)0 to 8
(d)1 to 8

Question No: 11 (Marks: 1) - Please choose one

Computer can understand only machine language code.
(e) True
(c) False

Question No: 13 (Marks: 1) - Please choose one

What does 5 ^ 6 , evaluate to in decimal where „^" is Exclusive OR operator?

(a) True
Fals

It mean
5 = 0101
6 = 0110
5 ^ 6 = 0011
If both input is same then the output is 0 and if different then output is 1

Question No: 14 (Marks: 1) - Please choose one

If the file is not properly closed in the program, the program .
(a)Terminate normally
(b) Indicate Runtime error
(c)Indicate Compile time error
(d)Crashes

Question No: 15 (Marks: 1) - Please choose one

Which of the following header file include string conversion functions?

(a) **string.h**
(b) stdlib.h
(c)ctype.h
(d)sconvert.h

Question No: 16 (Marks: 1) - Please choose one

In Program commenting the code liberally is

Solution:-

It need to be self-contained and understandable. Comments should be placed liberally. The comments should explain the logic, not the mechanics. Try to avoid fancy programming.

Question No: 17 (Marks: 1)

Which header file must be included while handling files?

Solution:-

<fstream.h>

Question No: 18 (Marks: 1)

What is meant by C++ statement: const int *ptr = &x;

Solution:-

ptr is a pointer to data of type const int type. And to assign the address of x to pointer ptr

Question No: 19 (Marks: 2)

What is a truth Table?

Solution:-

We know the concept of truth table. The truth tables are very important. These are still a tool available for analyzing logical expressions. We will read logic design in future, which is actually to do with chips and gate. We find it difficult to evaluate a complicated logical expression. Sometimes the logic becomes extremely complicated so that even writing it as a simple syntax statement in any language.

Question No: 20 (Marks: 3)

(1) An array day is declared as: int day[] = {1, 2, 3, 4, 5, 6, 7};

How many elements does array 'day' has?

Solution:-

7 elements

(2) If the declaration is changed as: int day[7] = {1, 2, 3, 4, 5, 6, 7};
How many elements does array 'day' has?

Solution:-

7 elements

Question No: 21 (Marks: 5)

What are similarities and differences between Structures and Unions?

In structures, we have different data members and all of these have their own memory space. In union, the memory location is same while the first data member is one name for that memory location. However, the 2nd data member is another name for the same location and so on. Consider the above union (i.e. intOrChar) that contains an integer and a character as data members. What will be the size of this union? The answer is the very simple. The union will be allocated the memory equal to that of the largest size data member. If the int occupies four bytes on our system and char occupies one byte, the union *intOrChar* will occupy four bytes

Question No: 22 (Marks: 10)

Write a **void function( );** that takes integer numbers from the user and then displays the sum of odd and even numbers entered by the user. Your program should terminate if user enters a negative number

Solution:-

```
#include<iostrea
m.h>
#include<conio.h
> void
function(void);
main()
{
function();

getche();
}
void function(void)
{
int n[5];
for(int i=0; i<=5; i++)
{
   cout <<"Enter Element = ";
   cin >>n[i];
```

```
    }
cout <<"\nODD Inputs are = \n";
for(int i=0; i<=5; i++)
    {

      if(n[i]%2==0)
      {
        cout <<n[i]<<endl;
      }

    }
cout <<"\nEVEN Inputs are = \n";
for(int i=0; i<=5; i++)
    {
      if(n[i]%2==1)
      {
        cout <<n[i]<<endl;
      }

    }
    }
```

MIDTERM EXAMINATION
Spring 2009
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

The function of cin is

(a) To display message

To read data from keyboard

(b) To display output on the screen

(c) To send data to printer

Question No: 2

(Marks: 1) - Please choose one

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

(a) cplext.h

(b) ctype.h

(c) stdio.h

(d) delay.h

Question No: 3 (Marks: 1) - Please choose one

How many parameter(s) function getline() takes?

(a) 0
(b) 1
(c) 2
(d) 3

(e) Question No: 4 (Marks: 1) - Please choose one

Word processor is

(a) Operating system
(e) Application software
(b) Device driver
(c) Utility software

Question No: 5 (Marks: 1) - Please choose one

For which values of the integer _value will the following code becomes an infinite loop?

```
int
number
=1;
while
(true) {
  cout << number;
  if (number == 3) break;
  number += integer_value; }
```

(a) any number other than 1 or 2
(b) only 0
(c) only 1
(d) only 2

Question No: 6 (Marks: 1) - Please choose one

Each pass through a loop is called a/an

(a) enumeration
(f) Iteration
(b) culmination
(c) pass through

Question No: 7 (Marks: 1) - Please choose one

A continue statement causes execution to skip to

(a) the return 0; statement
(b) the first statement after the loop
(c) the statements following the continue statement
(d) the next iteration of the loop

Question No: 8 (Marks: 1) - Please choose one

What is the correct syntax to declare an array of size 10 of int data type? (a) int [10] name ;
(b) name[10] int ;
(g) int name[10] ;
(c) int name[] ;

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will the following code segment display? int main(){
int age[10]
= {0}; cout
<< age ;
}

(a) Values of all elements of array
(b) **Value of first element of array**
(c) Starting address of array
(d) Address of last array element

Question No: 10 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to value 0?

(a) int arr[2][3] = {0,0} ;
(b) int arr[2][3] = {{0},{0}} ;
(c) int arr[2][3] = {0},{0} ;
(d) int arr[2][3] = {0} ;

Question No: 11 (Marks: 1)- Please choose one

How many bytes will the pointer *intPtr* of type int move in the following statement? intPtr += 3 ;

(a) 3 bytes

(b) 6 bytes
(c) 12 bytes
(d) 24 bytes

Question No: 12 (Marks: 1) - Please choose one

If there are $2^{(n+1)}$ elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

(a) n elements
(e) (n+1) elements
(b) 2(n+1) elements
(c) $2^{(n+1)}$ elements

Question No: 13 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer?

(a) * operator
(b) -> operator
(c) && operator
(d) & operator

Question No: 14 (Marks: 1) - Please choose one

The_statement interrupts the flow of control.

(a) switch
(b) continue
(c) goto
(e) break

Question No: 15 (Marks: 1) - Please choose one

Analysis is the -------step in designing a program

(a) Last
(b) Middle
(c) Post Design
(d)First

Question No: 16 (Marks: 1) - Please choose one

Paying attention to detail in designing a program is

(a) Time consuming

(b) Redundant

(e) Necessary

(a) Somewhat Good

Question No: 17 (Marks: 1)

Which programming tool is helpful in tracing the logical errors?

Debugger tool is helpful in tracing the logical errors.

Question No: 18 (Marks: 1)

Give the syntax of opening file „myFile.txt" with „app"mode using ofstream variable „out".

ofstream outfile;

outfile.open ("myFile.txt "); // Open the file

Question No: 19 (Marks: 2)

What is the difference between switch statement and if statement.

In switch statement only one variable can be tested on various condition but using if we can tested multi variables in single statement.

Question No: 20 (Marks: 3)

Identify the errors in the following code segment and give the reason of errors. ma

```
in(
){
int
x =
 10
const int *ptr = &x ;
*ptr = 5 ;
}

main()
{
int x = 10;
const int *ptr

=&x ; cout

<<ptr;

}
```

Question No: 21 (Marks: 5) If int array[10]; is an integer array then write the

statements which will store

values at Fifth and Ninth location of this array,

```
cout <<"Enter fifth
postion "; cin >>
array[4];
cout <<"Enter Ninth
postion "; cin >>
array[8];
```

Question No: 22 (Marks: 10)

Write a function BatsmanAvg which calculate the average of a player (Batsman), Call this function in main program (Function). Take the input of Total Runs made and Total number of matches played from the user in main function

Q1
When the if statement consists more than one statement then enclosing these statement in curly braces is,

(a) Not required
(b) Good programming
(c) Relevant
(d)Must

Q2
The while loop becomes infinite,

(a) When the condition is always false
(b) . When the condition is less than zero
(e) When the condition is always true
(c) When the condition contains a logical operator

Q3
Which of the following function(s) is/are included in **stdlib.h** header file?

(a) double atof(const char *nptr)
(b) int atoi(const char *nptr)
(c) char *strcpy (char *s1, const char *s2)

1 and 2 only

Q4
If we want to store a string “abc” in an array str then the size of this array must be at least,

2

(a) 3
(b) 4
(c) 5

Q5
No executable code will be generated if error is found during translation of the program using interpreter.

(a)True
(b) False

Q6
Word processor is

(a) Operating system
(c) **Application software**
(b) Device driver
(c) Utility software

Q7
Which of the following is the correct syntax to print multiple values or variables in a single command using cout?
(a) cout << "Hello" + x + "\n";

(b) **cout << "H" << x << "\n";**
(c) cout << "H", x, "\n";
(d) cout << ("H" & x & "\n");

Q8
Which of the following is correct way to initialize a variable x of int type with value 10?

(a) int x ; x = 10 ;
(b)int x = 10 ;
(c) int x, x = 10;

(d) x = 10 ;

Q9

If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block? (a) parentheses ( )

(d)braces { }

(b) brackets [ ]

(c) arrows < >

Q10

Name of an array is a constant pointer.

True

(a) False

Q11

How many bytes will the pointer ***intPtr*** of type **int** move in the following statement?

intPtr += 3 ;

(a) 3 bytes

(b) 6 bytes

(c) 12 bytes

(d) 24 bytes

Q12

What will be the value of 'a' and 'b' after executing the following statements?

```
a = 3;
b = a++;
```

(a) **3, 4**

(b) 4, 4

(c) 3, 3

(d) 4, 3

Q13

Loader loads the executable code from hard disk to main memory. **(a)True**

(b) False

Q14

Which of the following is used with bit manipulation?

(a) Signed integer
(b) Un-signed integer
(c) Signed double
(c) Un-signed double

Q15
Which of the follwoing values C++ use to represent true and false? **(d)1 and 0**
(a) 1 and -1
(b) 11 and 00
(c) Any numerical value

Q16
The argument of the isdigit() function is
(a) **a character**,
(b) a C-string,
(c) a C++ string class variable
(d) None of the given options.

Q17
Which data type should be used to store the value 50.7 ?

Float

Q18
Why should goto statement be avoided in C/C++?

When structured programming was started, it was urged not to use the *goto* statement. Though *goto* is there in C language but we will not use it in our programs. It will adopt the structured approach. All of our programs will consist of sequences, decisions and loop. Because loop provide best platform to manipulate the data.

Q19
What operator do you use to assign a pointer the address of another variable or constant? Marks: 2

& sige
i.e.

```
int i;

int * ptri;
ptri = &i;
```

Q20

If there are 2^n elements in an array then what would be the number of iterations required to search a number using binary search and linear search? Marks: 3

Q21

Convert the following switch statement into if statements. Marks: 5

```
switch
(operator) {
case '+':
 result = op1 + op2;
 break;
case '-':
 result = op1 - op2;
 break;
case 'x':
case '*':
 result = op1 * op2;
 break;
case '/':
 result = operand1
 /
 operand2;  break;

default:
cout <<
"Unknown
operator" ; }
```

```
if(operator==' +')
                {
        result = op1 + op2;
                }
else if(operator==’
-’)
                {
        result = op1 - op2;
                }
else
```

```
if (operator==’ *’)
                {
        result = op1 * op2;
                }

else
if (operator==’ /’)
                {
        result = op1 / op2;
                }
else
{
cout << "Unknown operator" ;

}
```

Q22
Write a recursive function that takes character array and starting subscript as arguments. In each recursive call, the function should display the string from subscript to the end of string. The starting subscript in first call should be 0. In each successive call, the subscript should increse by one and function should print the array from subscript to the end of string. The function should stop processing and return when null character encounters.
Suppose the char string passed to the function is, "SampleString", then the function will print output as follows,
Sample
String
ampleSt
ring
mpleStri
ng
pleStrin
g
so on....

Marks: 10

MIDTERM EXAMINATION

Spring 2009

CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

A precise sequence of steps to solve a problem is called

€ Statement

€ **Program**

€ Utility

€ Routine

Question No: 2 (Marks: 1) - Please choose one

The Compiler of C language is written in

€ JavaLanguage

€ UNIX

€ FORTRONLanguage

€ **C Language**

Question No: 3 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

€ Must

€ Necessary

€ **Good Programming**

€None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

€When the condition is false

€ When it contain arithmetic operators

€When it contain logical operators

€**When the condition is true**

Question No: 5 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in stdlib.h header file?

€double atof(const char *nptr)

€int atoi(const char *nptr)

€ char *strcpy (char *s1, const char *s2)

€ **1 and 2 only**

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method

€ **True**

€ False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

€ Data

€ **Memory Address**

€ Data Type

€ Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before phase takes place.

€ Editing

€Linking

€ **Compiling**

€ Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

€ area

€ _area

€ **10area**

€ area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?

€ for

€ while

€ do-while

€ **all looping processes require that the iterations be known**

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

€new line

€ tab

€ **null**

€ carriage return

Question No: 12 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?
char str[] = “programming”;

€10

€11

€**12**

€13

Question No: 13 (Marks: 1) - Please choose one
Which of the following header file defines the rand() function?

€ iostream.h

€ conio.h

€ **stdlib.h**

€ stdio.h

Question No: 14 (Marks: 1) - Please choose one
Commenting the code

€ **Makes a program easy to understand for others.**

€Make programs heavy, i.e. more space is needed for executable.

€Makes it difficult to compile

€All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop?
for (int k = 2, k <=12, k++)

€ the increment should always be ++k

€ the variable must always be the letter i when using a for loop

€ there should be a semicolon at the end of the statement

€ **the commas should be semicolons**

Question No: 16

(Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

€ int

€ double

€ float

€ **char**

Question No: 17 (Marks: 1)

To Which category of the software "Compiler and Interpreter" belongs?

Question No: 18 (Marks: 1)

What is the result of the expression x = 2 + 3 * 4 – 4 / 2

12

first multiplies 3*4 = 12 then Division 4/2 = 2

2+12-2 = 12

Question No: 19

(Marks: 2)

Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

Question No: 20 (Marks: 3)

Write down the output of the following code?

```
int array[7], sum = 0;
  for(int i=0;i<7;i++)
   {
   array[i] = i;
   sum+= array[i];
}
   cout<< " Sum = " <<sum;
```

ANS

21

Loop will run times starts from zero and add values from 1 to 6 which is equal to 21

What will be the output of the following segment of C++ code?

```
int A[5] = {1 , 2, 3, 4};
int i;
for (i=0; i<5; i++)
{
A[i] = 2*A[i];
cout << A[i] << " ";
}
```

ANS **2 4 6 8 0**

Loops will run 5 times as its starting from zero. It will multiply the value of each item in array as last time is not initialized so it will multiply it with zero to give zero as output

Question No: 22 (Marks: 10)

Write a C++ program that will determine if a departmental store customer has exceeded the credit limit on a charge account.
Program should input the following facts in five variables

1. Account number
2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit

Calculate the new balance
New balance = Beginning balance + charges – credits
Determine if new balance exceeds the allowed credit limit. For those customers whose credit limit is exceeded. The program should display the message “Credit Limit exceeded.”

Q1
In C/C++ the string constant is enclosed

(a) In curly braces
(b) In small braces
(c) In single quotes
(d) In double quotes

Q2
In flow chart, the symbol used for decision making is,

a) Rectangle
b) Circle
c) Arrow
(e) Diamond

Q3
The data type before a function name represents its,

(a)Return Type

(b) Function data

(c) Function arguments

(d) Function name

Q4The operator used to take the address of a variable is,

(a) &&

(b) ++

(c) –

(e) &

Q5

The header file which is used for input and output is

(a) maths.h

(b) string.h

(f) iostream.h

(c) ctype.h

Q6

When we are using command line argument(s), the default argument in C/C++ is/are .

a) argc

b) argd

c) argv

(g) argc and argv

Q7

In C++, Integer calculation occurs in bytes.

a) 1 byte

(h)2 bytes

b) 4 bytes

c) 8 bytes

Q8

In the declaration of two dimensional array,

(a) **First index represents row and second represents column** **(b)** First index represents column and second represents row

(c) Both indexes represent rows

(d) Both indexes represent column

Q9

The address operator (&) can be used with,

a) Statement

b) Expression

(e) Variable

c) Constant

Q10

translates high level language program into machine language code (a) Debugger

(b) Editor

(c) Compiler

(d) Linker

Q11

Which of the following data type(s) can operate on modulus operator „%“? **(e) float, int**

a) float, double

b) int

c) char

Q12

What will be the result of the expression z = x % y, if x = 19 and y = 4? **(f) 3**

a) 4

b) 15

c) 19

Q13

Which character is inserted at the end of string to indicate the end of string? a) new line

b) tab

c) **null**

d) carriage return

Q14

What will be the value of i and j in the following code segment?

```
int i, j ;
int x[5] = {2, 3, 4, 8, 9} ;
int *ptr
=&x[2];
i =
(*ptr)++
;
j = *ptr++ ;
```

a) i = 5, j = 5

b) i = 5, j = 8

c) i = 4, j =8

d) i = 5, j = 9

Q15

Syntax of union is identical to

Structure

a) Class

b) Function
c) None of the given options

Q16

Let suppose

```
Union intorDouble{
 Int ival;
 Double charvar;
};

main(){ intorDouble
VAZ; int size ;
size = sizeof(VAZ);
}
```

What will be the value of variable "size", if int occupies 4 bytes and double occupies 8 bytes?

a) 2
b) 4
c) 8
d) 12

Q17

To Which category of the software “Compiler and Interpreter” belongs? (1)

System software

Q18

Give the general syntax of definition of structure. (1)

ANS

```
struct Name
{
 // body of the structure
};
```

Q19

Write the General syntax for the definition of a user defined function. (2)

ANS

return data type Function Name (**parameter list with data type**)

```
        {
  // definition body
        }
```

Q20

What will be the output of following code segment?

```
(3)  int x[5] = {2, 4, 5, 7, 1} ;
int *ptr =&x[2];
cout << (*ptr)++
<<" " ; cout <<
*ptr++ ;
```

ANS

5 6

Q21

Detect and correct compile time error(s) in the following code.

Hints: The following code pass a value to a function by Reference and print the value before and after pass. (5)

ANS

```
        int test (int &x)
        {
*x = *x + 200;
   return x;
        }

        main()
        {
   int x = 100;

   cout <<" x = " <<x;
            test (*x); // //invalid type of argument uniary

        cout<<endl<< " x = " <<x;

   getch();
   return 0;
        }
```

ANS

The following function pass a reference to the function but in the main body the call mechanism is wrong. The * sign is not used with it . **X = 100 after the function completion x = 300;**

Q22

Write a C/C++ program which calculates the aggregate of a student. The aggregate can be calculated by the formula: (10)

Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24

If the aggregate of a student is less than 150 then the program should display message **"You can not be admitted to VU"** otherwise display

the message "Congratulation! You admitted in

VU "

ANS

```
#include<iostream.h>
#include<conio.h>
main()
{
   int m,f;
   float a;
   m=254;
   f=340;
   a = ((m*2) + (f*4))/24;
   if(a < 150)
   {
      cout <<"You can not be admitted to VU";
   }
   else
   {
```

```
        cout <<"Congratulation! You admitted in VU ";
    }
    //Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24

    getche();
}
```

Q1

What is function of **cout** ?

(a) To send data to printer

(b) To read data from keyboard

(c) To display message

(d)To display output on the screen

Q2

In Flow chart process is represented by

Rectangle

(a) Arrow symbol

(b) Oval

(c) Circle

Q3

&& is ---------- operator.

(a) An arithmetic

(b) **Logical**

(c) Relational

(d) Unary

Q4

An over Flow condition occurs when we try to assign a value to a variable which is,

(a)Less than its maximum size

(b) Greater than its maximum size

(c) With in itsrange

(d) Equal to itssize

Q5

For dereferencing an array element using pointer, we use the operator **(a) &**

(b) *

(c) /

(d) +

Q6

In the declaration of two dimensional array,

(d)First index represents row and second represents column **(a)** First index represents column and second represents row

(b) Both indexes represent rows

(c) Both indexes represent column

Q7

Which of the following data type(s) can operate on modulus operator „%“? **float, int**

(a) float, double

(b) int

(c) char

Q8

Which of the following is the correct way to declare a variable x of integer type? (a) x int ;

(b) integer x ;

(c) int x;

(d) x integer

Q9

Which of the following can not be a variable name?

(a) area

(b) _area

(e) 10area

(c) area2

Q10

Which of the function call is ***call by value*** for the following function prototype? float area (int);

(a) area(&num) ;

(f) area(num) ;

(b) area(int num) ;

(c) area(*num) ;

Q11

Recursive functions are used when there is a repetitive pattern.

(g) **True**

(a) False

Q12

What will be the range of numbers generated by function rand () % 9? (a) 0 to 9

(b) 1 to 9

(c) 0 to 8

(d) 1 to 8

Q13

What will be the correct syntax to declare two-dimensional array of float data type?

(a) float arr{2}{2} ;

(e) float arr[2][2] ;

(b) float arr[2,2] ;

(c) float[2][2] arr ;

Q14

When a function finishes its execution then,

(a) The control return to its Prototype

(b) The control returns to its definition

(f) Control returns to statement following function call

(c) The compiler stop execution of whole program

Q15

Consider the following statements to initialize a two-dimensional array.

i. int arr[2][3] = {4, 8, 9, 2, 1, 6} ;

ii**. int arr[3][2] = {4, 8, 9, 2, 1, 6} ;**

iii. int arr[][2] = {{4,8},{9, 2},{1, 6}} ;

Which of the following option(s) are correct to initialize a two-dimensional array with 3 rows and 2 columns?

(a) (ii) only

(b) (iii) only

(c) (ii) and (iii)

(d) (i) and

Q16

Editors are used to compile the code.

(a) True

(b) False

Q17

What are global variables? (1)

ANS

Global variables are those that are defined outside of main. It can be accessed in entire program.

Q18

Is it possible to evaluate the size of structure, if yes then how? (1)

ANS

YES

```
#include <iostream.h>
#include <stdlib.h>
```

```
struct VehicleParts
{
int wheels;
int seats;
VehicleParts()
{
cout << "\n VehicleParts - default constructor";
}
    VehicleParts(int wheels, int seats)
    {
    this->wheels = wheels; this->seats = seats; cout << "\n
    VehicleParts - parameterized constructor";
    }
```

Q19

Write down the general syntax of switch statement. (22)

ANS

switch (*variable/expression*)

{

case constant1 : statementLlist1 ; case constant2: statementLlist1 ; default: statementLlist1 ; }

Q20

What will be the output of following code segment? (3)

```
int x[5] = {2, 4, 5, 7, 1} ;
int *ptr =&x[2];
cout << (*ptr)++
<<" " ; cout <<
*ptr++ ;
```

ANS

5 6

Q22

What is the difference between compiler and interpreter? (5)

ANS

compiler and interpreter are system software but the difference is that the complier compile the whole program but the interpreter is complied line by line. Compiler are efficient in performance.

Q23 (10)

Write a recursive function that takes three arguments (an integer array, starting subscript ‘s’ and ending subscript ‘e’).

In first recursive call, the function should display the array from subscript ‘s’ (s = 0) to ‘e’ (e = size of array). In each successive call, the function should print the array from index s+1 to e. The function should stop processing and return when starting subscript becomes equal to ending subscript.
For example, if user enters values for array 2, 3, 4, 5, 6 then the recursive

function must display the following output.

2 3 4 5 6

3 4 5 6

4 5 6

5 6

6

ANS

```
#include<iostream.h>
#include<conio.h>

void recursive(int [],int,int);
void main()

{

   int array[5];

   for(int i=0;i<5;i++)

   {

      cout<<"\nEnter the "<<i<<" Index number :";
      cin>>array[i];

   }
```

```
    recursive(array,0,4); //0 is the starting index and 4 is the ending
subscript getche(); }
void recursive(int arr[],int s,int e)
{
    if(s!=e+1)
    {
        for(int i=s;i<=e;i++)
        cout<<arr[i]<<"\t";;


        cout<<endl;
        s++;

        recursive(arr,s,e); //Recursive call
    }
}
```

Q1

What is function of **cout** ?

(a) To send data to printer

(b) To read data from keyboard

(c) To display message

(d)To display output on the screen

Q2

< , <= , > , >= are called ---------- operators.

(a) Logical

(b) Arithmetic

(c) Relational

(d) Conational

Q3

In while loop the loop counter must be initialized,

(a) With in the loop

(e) Before entering the loop

(b) At the end of the loop

(c) None of the given options

Q4

Data Size of the file is always the actual size of the file.

(f) Greater than

(a) Equal to

(b) Less than or equal to

(c) None of the above

Q5

The precedence of * is higher than dot operator (.)operator

(g)True

(a) False

Q6

Let ptr1 and ptr2 are pointer variables that points to integer data type then which one of the following arithmetic is allowed,

(a) ptr1 + ptr2

(b) ptr1 - ptr2

(h)ptr1 * ptr2

(c) ptr1 / ptr2

Q7

Word processor is

(a) Operating system

(i) Application software

(b) Device driver

(c) Utility software

Q8

What will be the range of numbers generated by function rand () % 9? (a) 0 to 9

(b) 1 to 9

(j) 0 to 8

(c) 1 to 8

Q9

How many bytes will the pointer ***intPtr*** of type **int** move in the following statement?

```
intPtr += 3 ;
```

(a) 3 bytes

(b) 6 bytes

12 bytes

(c) 24 bytes

Q10

What will be the correct syntax to assign an array named ***arr*** of 5 elements to a pointer ***ptr***?

(a) *ptr = arr ;

(b) ptr = arr ;

(c) *ptr = arr[5] ;

(d) ptr = arr[5] ;

Q11

What will be the output of the following code segment?

```
char *x = ”programming” ;
cout << *(x+2) << *(x+3) << *(x+5) << *(x+8) ;
```

(a) prgm
(b) rorm
(e) ogai
(c) ramg

Q12

There is a pointer variable named ***ptr*** of type int then address of which type of variable the ***ptr*** will store in it?

(a) variable of type char
(b) variable of type short
(f) variable of type int
(c) variable of type double

Q13

Flow charts explain the working of a program in pictorial format.

(g)True
(a) False

Q14

The object may be used both for file input and file output (a) fstream,
(h)ifstream,
(b) ofstream,
(c) none of the given options.

Q15

Most efficient method of dealing with structure variables is to define the structure globally

(i) True
(a) False

Q16

If a variable is passed by value to a function and the function makes some changes to that variable then it

(j) does not affect the original variable
(a) affects the original variable
(b) causes syntax error
(c) None of the given options

Q17
How does elements of two-dimensional array store into memory? (1) ANS
Two dimensional arrays are also stored in liner order. As like one dimensional array.

Q18
What is a structure? (1)

ANS

In structure, we introduce a new data type. "A structure is a collection of variables under a single name. These variables can different types, and each has a name that is used to select it from the structure"

Q19 (2)
When a pointer is incremented then how many bytes will it move to change its address?

ANS

If an integer occupies four bytes in the memory, then the *yptr++; will* increment its value by four.

Q20
What happens when we increment a pointer? (3)
ANS

.

Q
2
1
What are the advantages of random access file over sequential access file? (5)

Q22
Write a C/C++ program which calculates the aggregate of a student. The aggregate can be calculated by the formula: (10)

Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24

If the aggregate of a student is less than 150 then the program should display message
"You can not be admitted to VU" otherwise display the message

"Congratulation! You admitted in VU "

ANS

```
#include<iostream.h>
#include<conio.h>
```

```
main()
{
    int m,f;
    float a;
    m=254;
    f=340;
    a = ((m*2) + (f*4))/24;
    if(a < 150)
    {
        cout <<"You can not be admitted to VU";
    }
    else
    {
        cout <<"Congratulation! You admitted in VU ";
    }
    //Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24

   getche();
}
```

Q1

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

(a) cplext.h

(b) ctype.h

(c) stdio.h

(d) delay.h

Q2

The header file which is used for input and output is

(a) maths.h

(b) string.h

(c) iostream.h

(d) ctype.h

Q3

Suppose **int multi[5][10];** when we are using **multi , it means,

(a) Single dereferencing

(b) Single referencing

(c) Double referencing

(d) Double dereferencing

Q4

To access the data members of structure is used.

(e) dot operator (.)

(a) * operator

(b) €operator

(c) None of given.

Q5

The precedence of * is higher than dot operator (.)operator

(f) True

(a) False

Q6

Which of the following is the starting index of an array in C++?

(g) 0

(a) 1

(b) -1

(c) any number

Q7

When a call to function statement is encountered,

(h)The control transfers to its Prototype

(a) The control transfers to its definition

(b) Control returns to statement following function call

(c) The compiler stops execution of whole program

Q8

A function must always return value.

(a) True

(i) False

Q9

If an array has 100 elements, what is allowable range of subscripts? (a) 0 – 99

(b) 1 – 99

(c) 0 – 100

(d) 1 – 100

Q10

If a pointer appears on left hand side of an assignment operator then right side of that assignment operator must be,

(a) Variable name

(b)Address of variable

(c) Variable value

(d) Constant

Q11

Editors are used to compile the code.

(a) True

(b)False

Q12

Which bitwise operator returns false if both bits are 1?

(a) AND

(b) XOR

(c) NOT

(c) OR

Q13

What does !(7) evaluate to in decimal where ! is a NOT operator?

(d)7

(a) 8

(b) 9

(c) 10

Q14

Structures cannot be passed as Function Parameters

(a) True

(b) **False**

Q15

When break statement is encountered in a loop body it,

(a)Transfers the control outside from current loop

(b) Transfers the control outside from current program

(c) Enforces the next iteration of loop

(d) Generates compile time error.

Q16

A union is a user-defined data type that contains only from its list of members at a time.

(a) One object

(b)Two objects

(c) Three objects

(d) None of the given options

Q17

Why programming is important? Describe in ONE line. (1)

“A program is a precise sequence of steps to solve a particular problem.”

Q18
Which bitwise operator returns true if both bits are different and returns false if both bits are same? (1)
ANS
1. !=
2. ==
Q19
Why we close a file after use? (2)

ANS

To save our data stored on file. Also this process makes our program fast and reliable.

Q20
Can you use an assignment operator to assign the value of one C-string to another? (3)

ANS

Yes we can assign value c-string to another
i.e char a={„I Love Pakistan“};
char b={„I Love Pakistan“};

Q21
The statement int Name [2][2]; define a 2x2 array, Write the code which read data from keyboard for this array. (5)

ANS

```
for(int i=o; i<2; i++)
{
 for (w=0; w<2; w++)
        {
                cin >>Name[i][w];
        }
  cout <<endl;
}
for(int i=o; i<2; i++)
{
 for (w=0; w<2; w++)
        {
                cout<<Name[i][w]<<” ”;
        }
  cout <<endl;
```

}

Q22
Write a program which reads a text file "**PlayersInfo.txt**" residing in the current directory. Open the file **PlayersInfo.txt** in read mode and assign these values to the struct **Player;** assume order of the data in the file to be exactly the same as the
order of struct attributes. The struct **Player** has following attributes

i) Name
ii) Height
iii) Age
iv) Score
v) Game

After reading the file and assigning values to the struct, in the end close the file

PlayersInfo.txt. (10)

Q1
The size of int data type is
(a) 1 bytes
(e) 2 bytes
(b) 3 bytes
(c) 4 bytes

Q2
When the logical operator AND (&&) combine two expressions exp1 and exp2 then the result will be true only,
(a)When both exp1 and exp2 are true
(b) When both exp1 and exp2 are false
(c) When exp1 is true and exp2 isfalse
(d) When exp1 is false and exp2 istrue

Q3
The correct syntax of do-while loop is,
(a) (condition) while; do { statements; };
(b) { statements; } do-while ();
(c) while(condition); do { statements; };
(e) do { statements; } while (condition);

Q4
provide communication channels between files and program.
(a) Streams
(b) Language like C++
(f) Function seekg()
(c) None of the above

Q5

All elements of an array must be of,

(a) different data type

(b) float data only

(c) character data only

(g)same data type

Q6

Function seekg() takes parameter(s).

(a) 0

1

(b) 2

(c) 3

Q7

Structures help to define program-specific_.

functions

(a) datatypes

(b) Arithmetic operations

(c) None of the given options.

Q8

In the declaration of two dimensional array,

(a)First index represents row and second represents column **(b)** First index represents column and second represents row

(c) Both indexes represent rows

(d) Both indexes represent column

Q9

What will be the result of arithmetic expression 6+27/3*3?

(e) 33

(a) 45

(b) 9

(c) 30

Q10

Which of the function call is ***call by value*** for the following function prototype?

float area (int);

(a) area(&num) ;

(f) area(num) ;

(b) area(int num) ;

(c) area(*num) ;

Q11

How many bytes are occupied by declaring following array of characters? char str*+ = “programming”;

(a) 10

(b) 11

(c) 12

(d) 13

Q12

What will be the correct syntax to assign an array named ***arr*** of 5 elements to a pointer ***ptr***?

(a) *ptr = arr ;

(b) ptr = arr ;

(e) *ptr = arr[5] ;

(c) ptr = arr[5] ;

Q13

Let ptr1 and ptr2 are pointer variables then which of the following arithmetic operation is allowed on pointers?

(a) Addition

(b) Subtraction

(c) Multiplication

(f) All of the above

Q14

The variables having a name, type and size are just like empty boxes.

(g) True

(a) False

Q15

When break statement is encountered in a loop body it,

(a)Transfers the control outside from current loop

(b) Transfers the control outside from current program

(c) Enforces the next iteration of loop

(d) Generates compile time error.

Q16

If two programs **a** and **b** are trying to open a file **xyz.txt** at approximately same time then

(e) Both programs will generate error

(a) One of them will succeed in opening that file and other will fail **(b)** Both programs will open the file

(c) One of the program will re-start

Q17

What is meant by array manipulation? (1)

Q18

What will be the value of x after the execution of the following code segment? (1)

```
int x =10;
int y =30;
```

int *xptr = &x; x
= *xptr + 10;

Q19 (2)

What is the output of the code given below? void main()

```
{
 int a=10,b=20;
 char x=1,y=0;
 if(a,b,x,y)
 {
   cout << "EXAM";
 }
 }
```

Q
2
0
What is Overflow condition? (3)

ANS

When we try to store larger information in a variable, than a data type can store, overflow condition occurs.

Q21
Write code which read a string not greater than 20 characters fromkeyboard stored it in an array Name and display it on the screen. (5)

ANS

```
char string[19];
cout<<"Enter a
string"; cin >>
string;
```

Q22 (10)
Write a C++ program which contains a user-define function named ***convertHeight*** which takes height of person in centimeter as an argument. This function converts the height in centimeter into feet and inches and displays them on the screen.

Program should prompt the user to enter height in centimeter and pass it to function ***convertHeight*** as an argument which displays height in feet and inches.

Hint:

1 foot = 12 inches
1 inch = 2.5 cm

ANS

```
#include<iostrea
m.h>
#include<conio.h
>

void convertHeight
(int); main()
{
 int hight;
 cout <<"Enter the High of the Person = "; cin
 >> hight;
 convertHeight(hight);

 getche();
}

void convertHeight (int f)
{
 //1 foot = 12 inches
 //1 inch = 2.5 cm

int i,c;
i = f*12;
c = i*2.5;
cout <<"high in Feet = "<<f<<endl; cout
<<"high in inches = "<<i<<endl; cout
<<"high in CM = "<<c<<endl;

}
```

Q1

The data type of size one byte is

(a) char
(b) int
(c) long
(d) double

Q2

If Num is an integer variable then Num*= 4; means,

(a) Multiply Num 4 times
(b) Multiply 4 with Num and display

(f) Multiply 4 with Num and assign the result to Num (c) Add 4 with Num

Q3

Member function tellg() returns the current location of the pointer.

(a)tellptr()

(b) write()

(c) seekg()

(d) get()

Q4

If we want to store a string "abc" in an array str then the size of this array must be at least,

(e) 2

(a) 3

(b) 4

(c) 5

Q5

Pointer is a variable which store,

(a) Values

(b) Data

(f) Memory Address

(c) Data Type

Q6

C is widely known as development language of operating system. (a) Linux

(g)Windows

(b) Unix

(c) Mac OS

Q7

C++ is a case-sensitive language

(h) **True**

(a) False

Q8What is the output of the following code?

```
for (int a = 1; a <= 1; a++) cout << a++; cout << a;
```

(a) 22

(b)12

(c) 23

(d) 13

Q9

A continue statement causes execution to skip to (a)the return 0; statement

(b) the first statement after the loop

(c) the statements following the continue statement

(d) the next iteration of the loop

Q10

If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block? (a) parentheses ( )

(b) **braces { }**

(c) brackets [ ]

(d) arrows < >

Q11

What will be the correct syntax for the following function call?

float square (int &);

(a) square (int num);

(e)square (&num);

(b) square (num);

(c) square (*num);

Q12

Which of the following is the correct way to assign an integer value 5 to element of a matrix say „m“ at second row and third column?

(f) (a) m[2][3] = 5 ;

(b) m[3][2] = 5 ;

(c) m[1][2] = 5 ;

(d) m[2][3] = „5“;

Q13

How many dimensions does n-dimensional array has?

(g) n dimensions

(a) 2n dimensions

(b) (n+1) dimensions

(c) (n-1) dimensions

Q14

Consider the following code segment. What will be the output of following code?

```
int addValue
(int *a){ int b =
(*a) + 2; return
b ;
ma
in
()
{
int
x
```

```
=6
;
cout << x << "," ;
cout << addValue(&x)
<< "," ; cout << x ;
}
```

(a) 6,8,6

(b) 6,6,8

(c) 6,8,8

(d) 6,6,6

Q15

If most significant bit of un-signed number is 1 then it represents a positive number.

(a) True

(b) False

Q16

When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,

(a) Contiguous memory location

(c) Matrix

(b) Columns

(c) Rows

Q17

What is the functionality of the function:**char *strncat (char *s1, const char *s2, size_t n) (1)**

ANS

Q18

Write a piece of code that outputs three values of type int, long and float to a stream. (1)

ANS

```
main()
{
int a;
long b;
float c;
a = 10;
b= 124568979;
c = 6.57;
cout <<a<<"\t"<<b<<"\t"<<c;

getche();
```

Q19

Which bit of the number is used as a sign bit? (2)

ANS

The most significant bit is used as a sign bit.

Q20

What is difference between single-dimensional and multi-dimensional array?

ANS

Single dimentional array used to stored lists and muli dimestional arrays used to stored value as tabler formate i.e matrix.

Q21

Write down the C++ program that calculates the Zakat on the amount entered by the user

Note: Zakat is 2.5% of the given amount (5)

ANS

```
main()
{
int amount;
float zakat;
cout <<"Enter the Amount = “;
cin >>amount;
zakat = (amount*2.5)/100;
cout <<"Amount = "<<amount<<endl; cout
<<"Amount = "<<zakat<<endl; getche();
}
```

Q22

What is meant by scope of identifiers? Differentiate between different scope of identifiers and explain them with examples? (10)

Now this variable „i“ can be used in any statement inside the function func1(). But consider this variable being used in a different function like: void func2()

```
{

int k = i + 4; //Compilation error
}
```

The variable „i“ belongs to func1() and is not visible outside that. In other words, „is local to func1().

Q1

What is function of **cout** ?

(a) To send data to printer

(b) To read data from keyboard

(c) To display message

(d) **To display output on the screen**

Q2

For one byte there are combinations of values that can be stored in computer.

(A) 2^6

(B) 2^7

(C) 2^8

(D) 2^4

Q3

provide communication channels between files and program.

(a) Streams

(b) Language like C++

(c) Function seekg()

(d) None of the above

Q4

The data type before a function name represents its,

(e) Return Type

(a) Function data

(b) Function arguments

(c) Function name

Q5

In C/C++ language when an array is passed to a function then by default its passing mechanism is,

(a) Call by value

(f) Call by Reference

(b) It depends on type of array

(c) It depends on the return type of function.

Q6

Array is a data structure which store

(a) Memory addresses

(g)Variables

(b) Data Type

(c) Data

Q7

If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block?

(a) parentheses ( )

(b)braces { }

(c) brackets [ ]

(d) arrows < >

Q8

Array is passed by value to a function by default.

(a) True

(e) False

Q9

Which of the following is the correct function call having array named *student* of 10 elements as a parameter.

(a) addRecord(student[]) ;

(b) addRecord(student) ;

(f) addRecord(student[10]) ;

(c) addRecord(*student) ;

Q10

What will be the correct syntax for initialization of pointer ***ptr*** of type int with variable ***x***?

(a) int ptr = &x ;

(b) int ptr = x ;

(g)int *ptr = &x ;

(c) int ptr* = &x ;

Q11

What will be the correct syntax for initialization of pointer ***ptr*** with string "programming"?

(a) char ptr = 'programming' ;

(b)char *ptr = "programming" ;

(c) char *ptr = 'programming' ;

(d) *ptr = "programming" ;

Q12

The condition in while loop may contain logical expression but not relational expression.

(e) True

(a) False

Q13

We want to access array in random order which approach is better?

(f) Pointers

(a) Array index

(b) Both pointers and array index are better

(c) None of the given options.

Q14

Single line comments explaining code would be preceded like in the following example.

(a) /*

(g)//

(b) /

Q15

Function write() takes as parameter(s). (a) String of pointer type

(b) String and no. of bytes to be written

(c) Pointer array of characters and delimiter

String of variable lengths, no. of bytes to be read and flags

Q16

Structure is a collection of under a single name.

(a)Only Functions

(b) Only Variables

(c) Both Functions and Variables

(d) None of the given options

Q17

What will be the correct syntax to initialize a pointer „**ptr**" with two-dimensional array „**m**"? (1)

ANS

```
int m[2][2];
int * ptr;
ptr = *m;
```

Q18

Which one of the loop (while or do-while) must be used if it is necessary to execute a loop at least once? (1)

ANS

do-while loop

Q19

Identify each of the following function as string conversion function or string manipulation function. (2)

double atof(const char *nptr)

char *strcpy (char *s1, const char *s2) int

atoi(const char *nptr)

ANS

1. **double atof(const char *nptr)** ---€Converts the string nPtr to double. 2. **char *strcpy (char *s1, const char *s2)** -€ Copies string **s2** into character array **s1**. The value of is returned.
3. **int atoi(const char *nptr)**--€ Converts the string **nPtr** to **int**.

Q20

What is difference between single-dimensional and multi-dimensional array? (3)

ANS

Single dimentional array used to stored lists and muli dimestional arrays used to stored value as tabler formate i.e matrix.

Q21

What will be the output of following code segment?(5)

```
int num[10] = {2, 3, 5, 8, 9, 10, 12, 15, 19, 20} ;
int *ptr = num ;
for (int i=0; i<10; i+=2){
cout << *(ptr+i) << “, ”;
}
```

ANS

2, 5, 9, 12, 19,

Q22

Write a C++ program which contains a user-define function named ***convertHeight*** which takes height of person in centimeter as an argument. This function converts the height in centimeter into feet and inches and displaysthem on the screen.(10)

Program should prompt the user to enter height in centimeter and pass it to function ***convertHeight*** as an argument which displays height in feet and inches.

Hint:

1 foot = 12 inches
1 inch = 2.5 cm

ANS

```
#include<iostrea
m.h>
#include<conio.h>

void convertHeight
(int); main()
{
int hight;
cout <<"Enter the High of the Person = "; cin
>> hight;
convertHeight(hight);

getche();
}
```

```
void convertHeight (int f)
{
//1 foot = 12 inches
//1 inch = 2.5 cm

int i,c;
i = f*12;
c = i*2.5;
cout <<"high in Feet = "<<f<<endl; cout
<<"high in inches = "<<i<<endl; cout
<<"high in CM = "<<c<<endl;

}
```

Q1

Compiler is a

(a) System software

(b) Application Software

(c) Driver

(d) Editor

Q2

In while loop the loop counter must be initialized,

(a) With in the loop

(e) Before entering the loop

(b) At the end of the loop

(c) None of the given options

Q3

If Num is an integer variable then Num*= 4; means,

(a) Multiply Num 4 times

(b) Multiply 4 with Num and display

(f) Multiply 4 with Num and assign the result to Num (c) Add 4 with Num

Q4

In C/C++ ,the arguments are passed by to a function by default . (a) reference

(g) value

(b) data

(c) type

Q5

Disks is divided into with power of_. (a) **Chunks, 2n**

(b) Blocks, n^2

(c) Blocks, 2^n

(d) Chunks, n^2

Q6

C is widely known as development language of operating system. (a) Linux

(h)Windows

(b) Unix

(c) Mac OS

Q7

Assignment operator „=“ is a

(a) Unary operator

(b)Binary operator

(c) Ternary operator

(d) None of the given options

Q8

Consider the following code segment. What will be the output of the following program?

```
int func(int) ;
int num = 10 ;

int main(){
int num ;
num = 5 ;

cout << num ;

cout << func(num) ;

}

int func(int x){
return num ;

}
```

(a) 5, 5

(b) 10, 5

(c) 5, 10

(d) 10, 10

Q9

Name of an array is a constant pointer.

(a) **True**

(b) False

Q10

What will be the correct syntax to assign an array named ***arr*** of 5 elements to a pointer ***ptr***?

(a) *ptr = arr ;

(b) ptr = arr ;

(c) *ptr = arr[5] ;

(d) ptr = arr[5] ;

Q11

If there are $2^{(n+1)}$ elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

(a) n elements

(b) (n+1) elements

(c) 2(n+1) elements

(d) $2^{(n+1)}$ elements

Q12

In C/C++, null character is represented as

(e) \n

(a) \0

(b) \t

(c) \

r Q13

How many nested loop would be required to manipulate n-dimensional array? (a) 2n

(b)n

(c) n +1

(d) n -1

Q14

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

ptr[3]

(a) (ptr+3)

(b) *(ptr+3)

(c) Both 1and 3

Q15

Single line comments explaining code would be preceded like in the following example.

(a) /*//

(b) /

(c) //

Q16

If a variable is passed by value to a function and the function makes some changes to that variable then it

does not affect the original variable

(a) affects the original variable

(b) causes syntax error

(c) None of the given options

Q17

What is meant by *num and &num? [1]

ANS

* num is a pointer and &num is a reference to that pointer. Q18

Suppose there is a pointer to structure ***sPtr**. How can we access the data member „**name**" with **sPtr**? [1]

ANS

Structure data members using pointers Using the * operator; (*sptr).name

Q19

Why we close a file after use? [2]

ANS

To save our data stored on file. Also this process makes our program fast and reliable

Q20

Define Flow chart. [3] ANS

Flow Chart

A flow chart is a pictorial representation of a program. There are labeled geometrical symbols, together with the arrows connecting one symbol with other. A flow chart helps in correctly designing the program by visually showing the sequence of instructions to be executed.

Q21

Write down the function definition if we want to pass the arguments to a functionby reference without changing the values stored at that addresses. [5]

Q22

From writing to execution of the program following software are used explain for what purpose each is used. [10]

Editor
Compiler/Interpreter
Linker
Loader

ANS

Editors *is* a tool for writing the code of a program. For this purpose we used Editors in which we write our code. We can use word processor too for this, but word processors have many other features like bold the text, italic, coloring the text etc, so when we save a file written in a word processor, lot of other information including the text is saved on the disk. For programming purposes we don"t need these things we only need simple text. Text editors are such editors which save only the text which we type. So for programming we will be using a text editor

Compiler and Interpreter

Compilers translate the English like language (Code written in C) into a language (Machine language) which computers can understand. The Compiler read the whole program and translates it into machine language completely. The difference between interpreter and compiler is that compiler will stop translating if it finds an error and there will be no executable code generated whereas Interpreter will execute all the lines before
error and will stop at the line which contains the error. So Compiler needs syntactically correct program to produce an executable code. We will be using compiler in our course As we write the code in English and we know that computers can understand only 0s and 1s. So we need a translator which translates the code of our program

into machine language. There are two kinds of translators which are known as Interpreter and Compilers. These translators translate our program which is written in C-Language into Machine language. Interpreters translates the program line by line meaning it reads one line of program and translates it, thenit reads second line, translate it and so on. The benefit of it is that we get the errors as we go along and it is very easy to correct the errors. The drawback of the interpreter is that the program executes slowly as the interpreter translates the program line by line. Another drawback is that as interpreters are reading the program line by line so they cannot get the overall picture of the program hence cannot optimize the program making it efficient.

·**Linker** Most of the time our program is using different routines and functions that are located in different files, hence it needs the executable code of those routines/functions. Linker is a tool which performs this job, it checks our program and includes all those routines or functions which we are using in our program to make a standalone executable code and this process is called Linking

Loader after a executable program is linked and saved on the disk and it is ready for execution. We need another process

which loads the program into memory and then instruct the processor to start the execution of the program from the first instruction (the starting point of every C program is from the main function). This processor is known as loader. Linker and loaders are the part of development environment. These are part of system software.

Q1

There are mainly ----------types of software

(a) Two

(b) Three

(c) Four

(d) Five

Q2

< , <= , > , >= are called ---------- operators.

(a) Logical

(b) Arithmetic

(e) Relational

(c) Conational

Q3

In order to get 256 from the number 2568 we divide this number by 10 and take, (a) Its remainder

(b) The number

Its quotient

(c) Its divisor

Q4

If int x = 10; then the value of x/= 3; will be,

(a) 10**3**

(b) 13

(c) 1

Q5

How many parameter(s) function getline() takes?

(a) 0

(b) 1

(c) 2**3**

Q6

Suppose **int multi[5][10];** when we are using **multi , it means,

(a) Single dereferencing

(b) Single referencing

(c) Double referencing

(d) Double dereferencing

Q7

To access the data members of structure is used.

dot operator (.)

(a) * operator

(b) €operator

(c) None of given.

Q8

There is NO difference between **bitwise AND operator (&)** and **Logical AND (&&) operator.**

True

(a) False

Q9

Which of the following data type(s) can operate on modulus operator „%“? **float, int**

(a) float, double

(b) int

(c) char

Q10

What's wrong with this while loop?

while((i < 10) && (i > 24))

(a) the logical operator && cannot be used in a test condition

(b) the while loop is an exit-condition loop

the while loop is an exit-condition loop

(c) the test condition is always true

Q11

The switch structure is a construct

(a) single-selection

(b) bi-selection

multiple-selection

(c) unconditional

Q12

Keyword „array“ must be used to declare an array.

(a)True

(b) False

Q13

What will be the correct syntax to declare two-dimensional array of float data type?

(a) float arr{2}{2} ;

float arr[2][2] ;

(b) float arr[2,2] ;

(c) float[2][2] arr ;

Q14

When an array element is passed to a function then this array element is passed to the function,

By reference

(a) By data type

(b) By value

(c) By data

Q15

Which of the following operator is used to access the value of variable pointed to by a pointer?

(a) * operator

(b) -> operator

(c) && operator

& operator

Q16

Paying attention to detail in designing a program is

(a) Time consuming

(b) Redundant

Necessary

(c) Somewhat Good

Q17

How does elements of two-dimensional array store into memory?

(1) Two dimensional arrays are also stored in liner order. As like one dimensional array.

Q18

Which strategy is used by binary search algorithm to search a number? (1)

ANS

„divide and conquer" strategy is applied.

Q19

Write down the general syntax of switch statement. (2)

ANS

switch (*variable/expression*)

{

case *constant1 : statementLlist1* ; case *constant2: statementLlist1* ; *default: statementLlist1* ; **}**

Q20

What is a Linker? (3)

Linker Most of the time our program is using different routines and functions that are located in different files, hence it needs the

executable code of those routines/functions. Linker is a tool which performs this job, it checks our program and includes all those routines or functions which we are using in our program to make a standalone executable code and this process is called Linking

Q21
What are similarities and differences between Structures and Unions? (5)

Structure

In structures, the data members are public by default. It means that these are visible to all and anyone can change them. Is there any disadvantage of this? Think about the date.
syntax
struct student
{
char
name[60];
char
address[100];
float GPA;
};
Unions We have another construct named union. The concept of union in C/C++ is: if we have something in the memory, is there only one way to access that memory location or there are other ways to access it. We have been using int and char interchangeably in our programs. We have already developed a program that prints the ACSII codes. In this program, we have stored a char inside an integer. Is it possible to have a memory location and use it as int or char interchangeably? For such purposes, the construct union is used.
The syntax of union is: union intOrChar
{
i
n
t
i
;
c
h
a
r
c
;
};

Q22
Differentiate between C and c++. (10)

1. C was the C++ predecessor. As it's name implies, alot of C remains in C++. Although not actually being more powerful than C.
2. C++ allows the programmer to more easily manage and operate with Objects, using an OOP (Object Oriented Programming) concept
3. C++ allows the programmer to create classes, which are somewhat similar to C structures. However, to a class can be assigned methods, functions associated to it, of various prototypes, which can access and operate within the class, somewhat like C functions often operate on a supplied handler pointer.
4. Although it is possible to implement anything which C++ could implement in C, C++ aids to standardize a way in which objects are created and managed, whereas the C programmer who implements the same system has a lot of liberty on how to actually implement the internals, and style among programmers will vary a lot on the design choices made
5. In C, some will prefer the handler-type, where a main function initializes a handler, and that handler can be supplied to other functions of the library as an object to operate on/through. Others will even want to have that handler link all the related function pointers within it which then must be called using a convention closer to C++.
6. C++ applications are generally slower at runtime, and are much slower to compile than C programs. The low-level infrastructure for C++ binary execution is also larger. For these reasons C is always commonly used even if C++ has alot of popularity, and will probably continue to be used in projects where size and speed are primary concerns, and portable code still required (assembly would be unsuitable then).

Q1

The remainder (%) operator is

(a) A logical operator

An arithmetic operator

(b) A relational operator

(c) A division operator

Q2

If int sum = 10; then the value of the statement sum = sum + 3 ; is , (a) 7

(b) Illegal statement

(c) Garbage value

13

Q3

Which of the following function(s) is/are included in **ctype.h** header file? (a) isdigit(int c)

(b) isxdigit(int c)

(c) tolower(int c)

All of the above

Q4

In C/C++ which of the following header file is used for string manipulation? **stdlib.h**

(a) string.h

(b) strings.h

(c) stype.h

Q5

provide communication channels between files and program.

(a) Streams

(b) Language like C++

Function seekg()

(c) None of the above

Q6

translates high level language program into machine language code (a) Debugger

(b) Editor

Compiler

(c) Linker

Q7

Which of the following data type(s) can operate on modulus operator „%“? **float, int**

(a) float, double

(b) int

(c) char

Q8

C++ is a case-sensitive language

True

(a) False

Q9

To include code from the library in the program, such as iostream, a directive would be called up using this command.

(a) #include “iostream.h”

(b) include <iostream.h>

(c) include <iostream.h>

#include <iostream.h>

Q10

What will be the range of numbers generated by function rand () % 9? (a) 0 to 9

(b) 1 to 9

0 to 8

(c) 1 to 8

Q11

An array stores the numbers into consecutive memory locations.

True

(a) False

Q12

Which of the following is the correct statement for the following declaration? const int *ptr.

(a) ptr is a constant pointer

ptr is constant integer pointer

(b) ptr is a constant pointer to int

(c) ptr is a constant pointer to int

Q13

Which of the following header file defines the **rand()** function?

(a) iostream.h

(b) conio.h

stdlib.h

(c) stdio.h

Q14

Consider the following code segment. What will be the output of following code?

```
int addValue
(int *a){ int b =
(*a) + 2; return
b ;
}
ma
in
()
{
int
x
=6
;
cout << x << “,” ;
cout << addValue(&x)
<< “,” ; cout << x ;
}
```

(a) 6,8,6

(b) 6,6,8

(c) 6,8,8

(d)

6,6,

Q15

Identifier is a name that can be given to variables, labels and functions.

True

(a) Fals

Q16

For which array, the size of the array should be one more than the number of elements in an array?

(a) Int

(b) Char

(c) Double

float

Q17

Give a precise definition of f**unction** . (1)

ANS

Functions In C/C++, functions are a way of modularizing the code. A bigger problem is broken down into smaller and more manageable parts. There is no rule of thumb for the length of each part but normally one function‟s length is not more than one screen.

Q18

What will be the size of array if we initialize an array with declaration: **int arr[] = {0, 0, 0, 0};**? (1)

ANS

int
arr
[3]
;
Q1
9
What is the difference between **switch** statement and **if** statement. (2) ANS
In switch statement only one variable can be tested on various condition but using if we can tested multi variables in single statement

Q20

Evaluate the following arithmetic expressions. (3)

a) X = 2 + 6 * 4– 4 * 20 / 5 +3 * 2
b) Y = (6 * 7) - (2 + 3) * (3 – 1) + 5 * (3 +1)

ANS

a) X = 2 + (6 * 4)–((4 * 20) / 5) + (3 * 2)
b) Y =((6 * 7) - (2 + 3) * (3 – 1) +(5 * (3 +1)))

a) 16

b) 52

Q21

What is the difference between = in C as compared to = used in algebra. (5)

ANS

In C = sign is used to assigned the value in algebra = sign is show that the both side are equal.

In C there must be a variable on the = sign and the right side of the = sign must be a arithmetic expression, variable or a value.

In algebra both side of the equation may or may not be expression. Q22

Write a program which consists of three variables Area, Per, Base, this program should find the area of triangle using the formula, (10)

Area = (Base * Per)/2

```
#include<iostream.h>
#include<conio.h>
main()
{
   float Area, Per, Base;
    // Area = (Base * Per)/2
    Per = 5.0;
    Base = 2.5;
    Area = (Base * Per)/2; cout
  <<"Area = "<<Area;
  getche();
       }
```

Q1

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

(d) cplext.h

ctype.h

(e) stdio.h

(f) delay.h

Q2

The header file which is used for input and output is

(e) maths.h

(f) string.h

iostream.h

(g) ctype.h

Q3

Suppose **int multi[5][10];** when we are using **multi , it means,

(e) Single dereferencing
(f) Single referencing
Double referencing
(g) Double dereferencing

Q4
To access the data members of structure is used.
dot operator (.)
(e) * operator
(f) €operator
(g) None of given.

Q5
The precedence of * is higher than dot operator (.)operator
True
(c) False

Q6
Which of the following is the starting index of an array in C++?
0
(d) 1
(e) -1
(f) any number

Q7
When a call to function statement is encountered,
The control transfers to its Prototype
(e) The control transfers to its definition
(f) Control returns to statement following function call
(g) The compiler stops execution of whole program

Q8
A function must always return value.
(c) True
False

Q9
If an Array has 100 elements, what is allowable range of subscripts? (e) 0 – 99
1 – 99
0 – 100
1 – 100

Q10
If a pointer appears on left hand side of an assignment operator then right side of that assignment operator must be,
(d) Variable name

Address of variable

(e) Variable value

(f) Constant

Q11

Editors are used to compile the code.

(c) True

False

Q12

Which bitwise operator returns false if both bits are 1?

(d) AND

(e) XOR

(f) NOT

OR

Q13

What does !(7) evaluate to in decimal where ! is a NOT operator?

7

(e) 8

(f) 9

(g) 10

Q14

Structures cannot be passed as Function Parameters

(c) True

False

Q15

When break statement is encountered in a loop body it,

Transfers the control outside from current loop

(d) Transfers the control outside from current program

(e) Enforces the next iteration of loop

(f) Generates compile time error.

Q16

A union is a user-defined data type that contains only from its list of members at a time.

(e) One object

Two objects

(f) Three objects

(g) None of the given options

Q17

Why programming is important? Describe in ONE line. (1)

Q18

Which bitwise operator returns true if both bits are different and returns falseif both bits are same? (1)

Q19

Why we close a file after use? (2)

Q20

Can you use an assignment operator to assign the value of one C-string to another? (3)

Q21

The statement int Name [2][2]; define a 2x2 array, Write the code which read data from keyboard for this array. (5)

Q22

Write a program which reads a text file "**PlayersInfo.txt**" residing in the current directory. Open the file **PlayersInfo.txt** in read mode and assign these values to the struct **Player;** assume order of the data in the file to be exactly the same as the order of struct attributes. The struct **Player** has following attributes

i) Name
ii) Height
iii) Age
iv) Score
v) Game

After reading the file and assigning values to the struct, in the end close the file PlayersInfo.txt. (10)

Q23
Q24

Write a program to convert upper case letter to lower case letter. (5)
Write a program to convert lower case letter to upper case letter. (5

Q2

Write a program to convert upper case letter to lower case letter.

(5) Ans:

```
#include <iostream>
```

```
using std::cout;

using std::cin;

using std::endl;
#include <stdlib.h>



int main()


{


    char inputString[100];

    char lowerCase[100];


     cout<<"Please enter a string (maximum 100 characters): ";

    gets(inputString);


     int i=0;


    for(i=0; i<strlen(inputString); i++)


    {


        lowerCase[i] = tolower(inputString[i]);


    }


    lowerCase[i]='\0';

    puts(lowerCase);

    system("PAUSE");

    return 0;


}
```

Write a program to convert lower case letter to upper case letter. (5) Ans:

```
#include <iostream>
```

```
using
std::cout;
using
std::cin;
using
std::endl;
#include
<stdlib.h>
int main()
{
    char
    inputString[
    100]; char
    upperCase[1
    00];
     cout<<"Please enter a string
    (maximum 100  characters): ";
    gets(inputString);
     int i=0;
    for(i=0; i<strlen(inputString); i++)
    {
        upperCase[i] =
    toupper(inputString[i]); }
    upperCase[i]
    ='\0';
    puts(upperC
```

```
    ase);
    system("PA
    USE");
    return 0;
}
```

CS201

GRAND QUIZ FILE
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1--- isusedforinputfileorforreadingfromthefile.

Tellg()

2. Followingisthedeclarationa----------

array.Intarr[2][2][2] 3-demensional

3. ! (x < 3) meansin c++ that

X is greater than 3

4. Which of the following option is correct to compare the declaration of thefunction?

(parameter1,paramet

er2) {

// code to be executed

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MIDTERM EXAMINATION
Spring 2010

Question No: 1 (Marks: 1) - Please choose one
In order to get 256 from the number 2568 we divide this number by 10 and take,
► Its remainder
► The number
► **Its quotient**
► Its divisor

Question No: 2 (Marks: 1) - Please choose one
The correct syntax of do-while loop is,
► (condition) while; do { statements; };
► { statements; } do-while ();
► while(condition); do { statements; };
► **do { statements; } while (condition);**

Question No: 3 (Marks: 1) - Please choose one
Which of the following function(s) is/are included in **stdlib.h** header file?

► double atof(const char *nptr)
► int atoi(const char *nptr)
► char *strcpy (char *s1, const char *s2)
► **1 and 2 only (Pg 191)**

Question No: 4 (Marks: 1) - Please choose one
If the break statement is missed in switch statement then,
► The compiler will give error
► **This may cause a logical error (Pg 76)**
► No effect on program
► Program stops its execution

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Question No: 5 (Marks: 1) - Please choose one
The data type before a function name represents its,
► **Return Type (Pg 499)**

► Function data
► Function arguments
► Function name

Question No: 6 (Marks: 1) - Please choose one
Member function tellg() returns the current location of the _____ pointer. ► tellptr()
► write()
► seekg()
► get() (Pg 215)

Question No: 7 (Marks: 1) - Please choose one
What does 5 | 6 , evaluate to in decimal where '|' is bitwise OR operator?

► 3
► 4
► 5
► 7

5 | 6 =
0 1 0 1
0 1 1 0
----
0 1 1 1 = 7

Question No: 8 (Marks: 1) - Please choose one
C is widely known as development language of _____ operating system.
► Linux
► Windows
► Unix (Pg 12)
► Mac OS

Question No: 9 (Marks: 1) - Please choose one
What will be the result of arithmetic expression 6+27/3*3?
► 33
► 45
► 9

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► 30

Question No: 10 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?
char str[] = "programming";

► 10
► 11
► **12**
► 13

Question No: 11 (Marks: 1) - Please choose one

What will be the correct syntax for initialization of pointer ***ptr*** with string "programming"?
► char ptr = 'programming' ;
► **char *ptr = "programming" ;**
► char *ptr = 'programming' ;
► *ptr = "programming" ;

pg 166
array element in each array initialized with a single character enclosed in single quote. pg 21
While assigning a character value to a char type variable single quotes are used around the character as 'a'.

Question No: 12 (Marks: 1) - Please choose one
What will be the result of expression **x%= 2**, if **x = 7**?
► **x = 1**
► x = 3
► x = 7
► x = 2

Question No: 13 (Marks: 1) - Please choose one
UNIX has been developed in _____ language.
► JAVA
► B
► **C (pg 12)**
► FORTRAN

Question No: 14 (Marks: 1) - Please choose one
Declaring structures does not mean that memory is allocated.

► **True (Pg 229)**
► False

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http://www.exforsys.com/tutorials/c-plus-plus/c-structures.html

Question No: 15 (Marks: 1) - Please choose one
What will be the value of i and j in the following code segment?

```
int i, j ;
int x[5] = {2, 3, 4, 8, 9} ;
int *ptr =&x[2];
i = (*ptr)++ ;
j = *ptr++ ;
```

► i = 5, j = 5
► i = 5, j = 8
► **i = 4, j = 8**
► i = 5, j = 9

Question No: 16 (Marks: 1) - Please choose one
When an array element is passed to a function, it is passed by ----------.

► **reference (Pg 266)**
► data type
► value
► data
When we pass ordinary variables to functions, they are passed by value because of the default behavior. But when an array is passed to a function, the default behavior changes and array is passed by reference

MIDTERM EXAMINATION 2010

Question No: 1 (Marks: 1) - Please choose one
What is the output of the following statement?
int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);
(a) 510
(b) 5
(c) 48

(d) error

Question No: 2 (Marks: 1) - Please choose one
What does !(7) evaluate to in decimal where ! is a NOT operator?
(a) 7
(b) 8
(c) 9
(d) 10

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Question No: 3 (Marks: 1) - Please choose one
The condition in while loop may contain logical expression but not relational expression. (a) True
(b) False

Question No: 4 (Marks: 1) - Please choose one
Searching is easier when an array is already sorted
(a) True
(b) False

Question No: 5 (Marks: 1) - Please choose one
If an array has 100 elements, what is allowable range of subscripts?
(a) 0 - 99
(b) 1 - 99
(c) 0 - 100
(d) 1 - 100

Question No: 6 (Marks: 1) - Please choose one
What will be the value of 'a' and 'b' after executing the following statements? a = 3;
b = a++;

(a) 3, 4
(b) 4, 4
(c) 3, 3
(d) 4, 3

Question No: 7 (Marks: 1) - Please choose one
What will be the correct syntax to initialize all elements of two-dimensional array to value 0? (a) int arr[2][3] = {0,0} ;
(b) int arr[2][3] = {{0},{0}} ;
(c) int arr[2][3] = {0},{0} ;

(d) int arr[2][3] = {0} ;

Question No: 8 (Marks: 1) - Please choose one
Which of the following functionreturns the size of a string variable?

(a) strlength()
(b) stringlen()
(c) **strlen()**
(d) strLength()

When applied to a character array, the strlen function returns the length of the string stored there,

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not its allocated size.
http://www.gnu.org/s/hello/manual/libc/String-Length.html

Question No: 9 (Marks: 1) - Please choose one What will be the range of numbers generated by function rand () % 9? (a) 0 to 9
(b) 1 to 9
(c) 0 to 8
(d) 1 to 8

Question No: 11 (Marks: 1) - Please choose one Computer can understand only machine language code.
(c) True
(d) False

Question No: 13 (Marks: 1) - Please choose one
What does 5 ^ 6 , evaluate to in decimal where '^' is Exclusive OR operator? (a) True
(b) False
Detail:-
It mean
5 = 0101
6 = 0110
5 ^ 6 = 0011
If both input is same then the output is 0 and if different then output is 1

Question No: 14 (Marks: 1) - Please choose one
If the file is not properly closed in the program, the program _____.

(a) Terminate normally
(b) Indicate Runtime error
(c) Indicate Compile time error
(d) Crashes

Eventually run out of file handles and/or memory space and crash.) http://www.codingunit.com/c-tutorial-file-io-using-text-files

Question No: 15 (Marks: 1) - Please choose one Which of the following header file include string conversion functions?

(a) **string.h**
(b) stdlib.h (Pg 190)
(c) ctype.h
(d) sconvert.h

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MIDTERM EXAMINATION
2009

Question No: 1 (Marks: 1) - Please choose one
A precise sequence of steps to solve a problem is called

- Statement
- **Program**
- Utility
- Routine

Question No: 2 (Marks: 1) - Please choose one
The Compiler of C language is written in

- Java Language
- UNIX
- FORTRON Language
- **C Language**

Question No: 3 (Marks: 1) - Please choose one
Initialization of variable at the time of definition is,

- Must

- Necessary
- **Good Programming**
- None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

- When the condition is false
- When it contain arithmetic operators
- When it contain logical operators
- **When the condition is true**

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method ➢ **True**

- False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

- Data
- **Memory Address**
- Data Type
- Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before _____ phase takes place. ➢ Editing

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- Linking
- **Compiling**
- Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

- area
- _area
- **10area**
- area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known? ➢ **for**

- **while**

- do-while
- all looping processes require that the iterations be known

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

- new line
- tab
- **null**
- carriage return

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the **rand()** function?

- iostream.h
- conio.h
- **stdlib.h**
- stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code _____

- **Makes a program easy to understand for others.**
- Make programs heavy, i.e. more space is needed for executable.
- Makes it difficult to compile
- All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop?
for (int k = 2, k <=12, k++)

- the increment should always be ++k
- the variable must always be the letter i when using a for loop
- there should be a semicolon at the end of the statement
- **the commas should be semicolons**

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Question No: 16 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

- int
- double
- float
- **char**

MIDTERM EXAMINATION
2009

Question No: 1 (Marks: 1) - Please choose one
The function of cin is
► To display message
► **To read data from keyboard**
► To display output on the screen
► To send data to printer

Question No: 2 (Marks: 1) - Please choose one
In C/C++ language the header file which is used to perform useful task and manipulation of character data is
► cplext.h
► **ctype.h (Pg 188)**
► stdio.h
► delay.h

Question No: 3 (Marks: 1) - Please choose one
How many parameter(s) function getline() takes?
► 0
► 1
► 2
► 3
The member function getline() also takes three parameters: the buffer to fill, one more than the maximum number of characters to get, and the termination character. getline()functions exactly like get() does with these parameters, except getline() throws away the terminating character. http://newdata.box.sk/bx/c/htm/ch16.htm
.

Question No: 4 (Marks: 1) - Please choose one
Word processor is
► Operating system
► **Application software**
► Device driver

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► Utility software

Question No: 5 (Marks: 1) - Please choose one
For which values of the integer _value will the following code becomes an infinite loop? int number=1;

```
while (true) {
cout << number;
if (number == 3) break;
number += integer_value; }
```

► any number other than 1 or 2
► **only 0**
► only 1
► only 2

Rational:
number += integer_value ……..above line decide the fate of loop so any thing other then zero leads to value of 3 which will quite the loop. Only zero is the value which keeps the loop infinite.

Question No: 6 (Marks: 1) - Please choose one
Each pass through a loop is called a/an
► enumeration
► **Iteration**
► culmination
► pass through

Question No: 7 (Marks: 1) - Please choose one
A continue statement causes execution to skip to
► the return 0; statement
► the first statement after the loop
► the statements following the continue statement
► **the next iteration of the loop**
Continue statement is used, when at a certain stage, you don't want to execute the remaining statements inside your loop and want to go to the start of the loop.

Question No: 8 (Marks: 1) - Please choose one
What is the correct syntax to declare an array of size 10 of int data type?
► int [10] name ;
► name[10] int ;
► **int name[10] ;**
► int name[] ;

Question No: 9 (Marks: 1) - Please choose one
Consider the following code segment. What will the following code segment display? **int main(){**
int age[10] = {0};
cout << age ;

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}

► Values of all elements of array
► **Value of first element of array**
► Starting address of array
► Address of last array element

Question No: 11 (Marks: 1) - Please choose one

How many bytes will the pointer ***intPtr*** of type **int** move in the following statement? **intPtr += 3 ;**

► 3 bytes
► 6 bytes
► **12 bytes**
► 24 bytes

one int is 4 bytes so 4*3 = 12 bytes movement.

Question No: 12 (Marks: 1) - Please choose one

If there are 2(n+1) elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

► n elements
► **(n+1) elements**
► 2(n+1) elements
► 2(n+1) elements

Question No: 13 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer? ► *** operator**

► -> operator
► && operator
► & operator

Question No: 14 (Marks: 1) - Please choose one

The _____ statement interrupts the flow of control.

► switch
► continue
► goto
► **break**

Question No: 15 (Marks: 1) - Please choose one

Analysis is the ---------- step in designing a program

► Last
► Middle
► Post Design
► **First**

Analysis will be always followed by design and then code.

Question No: 16 (Marks: 1) - Please choose one

Paying attention to detail in designing a program is _____

► Time consuming

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► Redundant
► **Necessary**
► Somewhat Good

In programming, the details matter. This is a very important skill. A good programmer always analyzes the problem statement very carefully and in detail. You should pay attention to all the aspects of the problem.

MIDTERM EXAMINATION
Spring 2009

Question No: 1 (Marks: 1) - Please choose one_____
There are mainly---------- types of software
►**Two**
►Three
►Four
►Five
Software is categorized into two main categories
- **System Software**
- **Application Software**

Question No: 2 (Marks: 1) - Please choose one____
In C/C++ the #include is called,
►Header file
►**Preprocessor Directive (Pg 15)**
►Statement
►Function

Question No: 3 (Marks: 1) - Please choose one_____
&& is---------- operator.
►An arithmetic
►**Logical**
►Relational
►Unary
we use logical operators (&& and ||) for AND and OR respectively with relational operators.

Question No: 4 (Marks: 1) - Please choose one_____
In flow chart, the symbol used for decision making is,
►Rectangle
►Circle
►Arrow
►**Diamond (Pg 51)**
http://www.ehow.com/about_5081911_symbols-used-flowchart.html

Question No: 6 (Marks: 1) - Please choose one_____
C++ views each file as a sequential stream of_____ .
►**Bytes**

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►Bits
►0's or 1's
►Words

Question No: 7 (Marks: 1) - Please choose one_____ If the elements of an array are already sorted then the useful search algorithm is, ►Linear search
►**Binary search (Pg 188)**
►Quick search
►Random search
In binary search algorithm, the 'divide and conquer' strategy is applied. This plies only to sorted arrays in ascending or descending order.

Question No: 8 (Marks: 1) - Please choose one_____ The address operator (&) can be used with,
►Statement
►Expression
►**Variable**
►Constant

Question No: 9 (Marks: 1) - Please choose one_____ When a pointer is incremented, it actually jumps the number of memory addresses ►**According to data type (Pg 160)**
►1 byte exactly
►1 bit exactly
►A pointer variable can not be incremented

Question No: 11 (Marks: 1) - Please choose one_____ Call by reference mechanism should be used in a program when there is **i.** large amount of data to be passed
ii. small amount of data to be passed
iii. need to change the passed data
iv. no need to change the passed data
Choose the appropriate option for the above case.

► (i) and (ii) only
►**(i) and (iii) only**
►(ii) and (iii) only
►(ii) and (iv) only

Question No: 12 (Marks: 1) - Please choose one_____
Which of the following is the starting index of an array in C++? ►**0**
►1
►-1
►any number

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Question No: 13 (Marks: 1) - Please choose one_____
The return type of a function that do not return any value must be _____
►int
►**void**
►double
►float

Question No: 14 (Marks: 1) - Please choose one_____
Which of the following is an extension of header file?
►.exe
►.txt
►**.h**
►.c

Question No: 15 (Marks: 1) - Please choose one_____
We want to access array in random order which approach is better?
►**Pointers**
►**Array index (Pg 176)**
►Both pointers and array index are better
►None of the given options.

Question No: 16 (Marks: 1) - Please choose one_____
When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,
►Columns
►Rows
►**Contiguous memory location (Pg 174)**
►Matrix

MIDTERM EXAMINATION 2009

Question No: 1 (Marks: 1) - Please choose one

In C/C++ the string constant is enclosed
► In curly braces
► In small braces
► In single quotes
► **In double quotes** http://www.lugaru.com/man/String.Constants.html

Question No: 2 (Marks: 1) - Please choose one
The size of int data type is

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► 1 bytes
► 2 bytes
► 3 bytes
► **4 bytes (Pg 257)**

Question No: 3 (Marks: 1) - Please choose one
In Flow chart process is represented by
► **Rectangle (Pg 51)**
► Arrow symbol
► Oval
► Circle

Question No: 5 (Marks: 1) - Please choose one
When we are using const keyword with a variable x then initializing it at the time of declaration is, ► **Must**
► Optional
► Not necessary
► A syntax error

Question No: 6 (Marks: 1) - Please choose one
Which of the following is the correct way to assign an integer value 5 to element of a matrix say 'm' at second row and third column?

► **m[2][3] = 5 ;**
► m[3][2] = 5 ;
► m[1][2] = 5 ;
► m[2][3] = '5';

Question No: 7 (Marks: 1) - Please choose one
How many total elements must be in two-dimensional array of 3 rows and 2 columns? ► 4
► 5
► **6 (3*2=6)**
► 7

Question No: 8 (Marks: 1) - Please choose one

Which of the following is the correct statement for the following declaration?

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const int *ptr.

- ➢ ptr is a constant pointer
- ➢ ptr is constant integer pointer
- ➢ ptr is a constant pointer to int
- ➢ **ptr is a pointer to const int** http://www.allinterview.com/showanswers/65662.html

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will be the output of this code segment? int arr[6] = {2, 3, 7, 4, 5, 6} ;
int *ptr1 =&arr[1] ;
int *ptr2 = &arr[4] ;
cout << (ptr2-ptr1) ;

► 3
► 9
► 12
► **2**

Question No: 10 (Marks: 1) - Please choose one
What will be the correct syntax to assign an array named arr of 5 elements to a pointer ptr? ► *ptr = arr ;
►ptr = arr ;
►*ptr = arr[5] ;
►ptr = arr[5] ;

Question No: 11 (Marks: 1) - Please choose one
C is a/an _____ language
►low level
►object based
► object oriented
►**function oriented (Pg 77)**

Question No: 13 (Marks: 1) - Please choose one
The variables having a name, type and size are just like empty boxes. ► False
► **True**

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Question No: 15 (Marks: 1) - Please choose one
Most efficient method of dealing with structure variables is to define the structure globally

► True http://mathbits.com/mathbits/compsci/Structures/Define.htm
► False

Question No: 16 (Marks: 1) - Please choose one
Syntax of union is identical to _____
► **Structure (pg 242)**
► Class
► Function
► None of the given options

MIDTERM EXAMINATION

2008

Question No: 16 (Marks: 1) - Please choose one

In Program commenting the code liberally is

► Useful.
► Time consuming
► Not necessary

Question :If we want to store a string "abc" in an array str then the size of this array must be at least, **(a) 2**

(b) 3
(c) 4
(d) 5

Question :How many bytes will the pointer ***intPtr*** of type **int** move in the following statement? **intPtr += 3 ;**

(a) 3 bytes
(b) 6 bytes
(c) 12 bytes
(d) 24 bytes

MIDTERM EXAMINATION

2007

Question :The remainder (%) operator is,

►**An arithmetic operator (Pg 258)**
►A logical operator
►A relational operator
►A division operator

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Question :When a call to function statement is encountered,

►The control is transfer to its Prototype
►**The control is transfer to its definition**
►The compiler stop execution of whole program
►The program hangs

MIDTERM EXAMINATION

2006

Question :The value of 2*15/3*7+3*2 is

- 146
- 76
- 8
- 70

Question: Carefully analyze the following lines of code and chose the correct option. ch1="a";
ch2='a';

- ch1 and ch2 are strings
- **ch1 is string and ch2 is character**
- ch2 is string and ch1 is character
- ch1 and ch2 are characters

Question :The size of a double variable is

- 2 bytes
- 4 bytes
- **8 bytes**
- 10 bytes

The size of an int is: 4 bytes.
The size of a short int is: 2 bytes.
The size of a long int is: 4 bytes.
The size of a char is: 1 bytes.
The size of a float is: 4 bytes.
The size of a double is: 8 bytes.

Question :An array is also called

- an array variable
- array declaration
- struct
- **constant pointer**

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MIDTERM EXAMINATION
2011
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

► Must

► Necessary

► Good Programming

► None of the given options

Question No: 2 (Marks: 1) - Please choose one

Preprocessor program perform its function before _____ phase takes place.

► Editing

► Linking

► Compiling

► Loading

Question No: 3 (Marks: 1) - Please choose one

If there are 2(n+1) elements in an array then what would be the number of iterations required to
search a number using binary search algorithm?
► n elements
► (n+1) elements
► 2(n+1) elements
► 2(n+1) elements

Question No: 4 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer?
► * operator
► -> operator
► && operator
► & operator

Question No: 5 (Marks: 1) - Please choose one

Analysis is the ---------- step in designing a program
► Last
► Middle
► Post Design
► First

Question No: 6 (Marks: 1) - Please choose one_____

When a pointer is incremented, it actually jumps the number of memory addresses
►According to data type (Pg 160)
►1 byte exactly
►1 bit exactly
►A pointer variable can not be incremented

Question No: 7 (Marks: 1) - Please choose one_____

Call by reference mechanism should be used in a program when there is
i. large amount of data to be passed
ii. small amount of data to be passed
iii. need to change the passed data
iv. no need to change the passed data
Choose the appropriate option for the above case.
► (i) and (ii) only
►(i) and (iii) only
►(ii) and (iii) only
►(ii) and (iv) only

Question No: 8 (Marks: 1) - Please choose one_____

If an array has 100 elements, what is allowable range of subscripts?
(a) 0 - 99
(b) 1 - 99
(c) 0 - 100
(d) 1 - 100

Question No: 9 (Marks: 1) - Please choose one_____

Initialization of variable at the time of definition is,
Must
Necessary
Good Programming
None of the given options

Question No: (Marks: 2)

A two-dimensional array has 3 rows and 4 columns. Write down the syntax to initialize first element of all three rows of two-dimensional array with value 2.

Ans:

```
int matrix[0][0]=2
int matrix[1][0]=2
int matrix[2][0]=2
```

Question No: (Marks: 2) - Please choose one

Explain smart pointer

Question No: (Marks: 2)

which standard library we use in programming to read , write files

Question No: (Marks: 3)

Identify the errors in the following code segment and give the reason of errors.

```
main(){
int x = 10
const int *ptr = &x ;
*ptr = 5 ;
}
```

Ans:

Int x=10….No ending semicolon.

*ptr=5 .. Declaring a pointer to constant integer.You can not use this pointer to change the value being pointed to.

Question No: (Marks: 3)

Can you use an assignment operator to assign the value of one C-string to another?

Ans:Yes,we use assignment operator,whenever we use objects that allocate memory it is important that assignment operator should be defined for it,otherwise default operator will copy the value of addressed and pointers.

MIDTERM EXAMINATION
2011
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

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- ► Necessary
- ► Good Programming
- ► None of the given options

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► (n+1) elements
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► * operator
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► && operator
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Question No: 5 (Marks: 1) - Please choose one

Analysis is the ---------- step in designing a program

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►According to data type (Pg 160)
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►(ii) and (iv) only

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(d) 1 - 100

Question No: 9 (Marks: 1) - Please choose one_____

Initialization of variable at the time of definition is,

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- Necessary
- Good Programming
- None of the given options

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A two-dimensional array has 3 rows and 4 columns. Write down the syntax to initialize first element of all three rows of two-dimensional array with value 2.

Ans:

```
int matrix[0][0]=2
int matrix[1][0]=2
int matrix[2][0]=2
```

Question No: (Marks: 2) - Please choose one_____

Explain smart pointer

Question No: (Marks: 2)

---

which standard library we use in programming to read , write files

Question No: (Marks: 3)

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```
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int x = 10
const int *ptr = &x ;
*ptr = 5 ;
}
```

Ans:

Int x=10….No ending semicolon.

*ptr=5 .. Declaring a pointer to constant integer.You can not use this pointer to change the value being pointed to.

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Ans:Yes,we use assignment operator,whenever we use objects that allocate memory it is important that assignment operator should be defined for it,otherwise default operator will copy the value of addressed and pointers.

MIDTERM EXAMINATION
Spring 2010
CS201- Introduction to Programming (Session - 2)

Question No: 1 (Marks: 1) - Please choose one

In order to get 256 from the number 2568 we divide this number by 10 and take,

- ► Its remainder
- ► The number
- ► Its quotient
- ► Its divisor

Question No: 2 (Marks: 1) - Please choose one

The correct syntax of do-while loop is,

- ► (condition) while; do { statements; };
- ► { statements; } do-while ();
- ► while(condition); do { statements; };
- ► do { statements; } while (condition);

Question No: 3 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in **stdlib.h** header file?

- ► double atof(const char *nptr)
- ► int atoi(const char *nptr)
- ► char *strcpy (char *s1, const char *s2)
- ► 1 and 2 only

Question No: 4 (Marks: 1) - Please choose one

If the break statement is missed in switch statement then,

- ► The compiler will give error
- ► This may cause a logical error
- ► No effect on program
- ► Program stops its execution

Question No: 5 (Marks: 1) - Please choose one
The data type before a function name represents its,

► Return Type
► Function data
► Function arguments
► Function name

Question No: 6 (Marks: 1) - Please choose one
Member function tellg() returns the current location of the _____ pointer.

► tellptr()

► write()

► seekg()

► get()

Question No: 7 (Marks: 1) - Please choose one
What does 5 | 6 , evaluate to in decimal where '|' is bitwise OR operator?

3 ►
4 ►
5 ►
7 ►

Question No: 8 (Marks: 1) - Please choose one
C is widely known as development language of _____ operating system.

► Linux
► Windows
► Unix
► Mac OS

Question No: 9 (Marks: 1) - Please choose one
What will be the result of arithmetic expression 6+27/3*3?

► 33
► 45
► 9
► 30

Question No: 10 (Marks: 1) - Please choose one
How many bytes are occupied by declaring following array of characters?
char str[] = "programming";

► 10

► 11
► 12
► 13

Question No: 11 (Marks: 1) - Please choose one
What will be the correct syntax for initialization of pointer ***ptr*** with string "programming"?

► char ptr = ’programming’ ;

► char *ptr = “programming” ;

► char *ptr = ‘programming’ ;

► *ptr = “programming” ;

Question No: 12 (Marks: 1) - Please choose one
What will be the result of expression **x%= 2**, if **x = 7**?
x = 1 ►
x = 3 ►
x = 7 ►
x = 2 ►

Question No: 13 (Marks: 1) - Please choose one
UNIX has been developed in _____ language.
JAVA ►
B ►
C ►
FORTRAN ►

Question No: 14 (Marks: 1) - Please choose one
Declaring structures does not mean that memory is allocated.
True ►
False ►

Question No: 15 (Marks: 1) - Please choose one
What will be the value of i and j in the following code segment?

```
int i, j ;
int x[5] = {2, 3, 4, 8, 9} ;
int *ptr =&x[2];
i = (*ptr)++ ;
j = *ptr++ ;
```

i = 5, j = 5 ►
i = 5, j = 8 ►

i = 4, j = 8 ►
i = 5, j = 9 ►

Question No: 16 (Marks: 1) - Please choose one
When an array element is passed to a function, it is passed by ----------.

reference ►
data type ►
value ►
data ►

Question No: 17 (Marks: 2)
What is the difference between **switch** statement and **if** statement.
Ans:The "switch" statement is use to slect among multiple alternatives.It uses many if statements to execute a particular case,while "if" statement is use to slect among two alternatives.

Question No: 18 (Marks: 2)
Why we close a file after use?
Ans:To execute the .exe file properly with latest changes.

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Ans:
int matrix[0][0]=2
int matrix[1][0]=2
int matrix[2][0]=2

Question No: 20 (Marks: 3)
Identify the errors in the following code segment and give the reason of errors.

```
main(){
int x = 10
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*ptr = 5 ;
}
```

Ans:
Int x=10….No ending semicolon.
*ptr=5 .. Declaring a pointer to constant integer.You can not use this pointer to change the value being pointed to.

Question No: 21 (Marks: 3)
Can you use an assignment operator to assign the value of one C-string to another?

Ans:Yes,we use assignment operator,whenever we use objects that allocate memory it is important that assignment operator should be defined for it,otherwise default operator will copy the value of addressed and pointers.

Question No: 22 (Marks: 5)

Why binary search algorithm is more efficient than the linear search algorithm?

Ans:Binary search algorithm is more efficient than liner algorithem because the arrays are sorted in asending or desending order and we use “devide and conqrer” technique.In binery search each iteration reduces the search by the factor of two but in the linear we have the same number of searches as we have the number of elements.e.g,if we have array of 1000 elements the linear search will take 1000 iterations however binery search will take max 10.

Question No: 23 (Marks: 5)

Write down the output of the code given below :

Hint:

Size of char is 1 byte
Size of int is 2 byte
Size of float is 4 byte

```
#include <iostream.h>

union mytypes_t {
  char c;
  int i;
  float f;
  } mytypes;

int main(){

    mytypes.c = 'H';
    mytypes.i = 15;

    cout << sizeof(mytypes)<<endl;

    mytypes.i = 15;
    mytypes.c = 'H';

    cout << sizeof(mytypes)<<endl;

    system("PAUSE");
    return 0;
}
```

MIDTERM EXAMINATION
Spring 2010
CS201- Introduction to Programming (Session - 2)

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```
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int *ptr =&x[2];
i = (*ptr)++ ;
j = *ptr++ ;
```

i = 5, j = 5 ►
i = 5, j = 8 ►
i = 4, j = 8 ►
i = 5, j = 9 ►

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int matrix[0][0]=2
int matrix[1][0]=2
int matrix[2][0]=2
```

Question No: 20 (Marks: 3)

Identify the errors in the following code segment and give the reason of errors.

```
main(){
int x = 10
const int *ptr = &x ;
*ptr = 5 ;
}
```

Ans:

Int x=10….No ending semicolon.

*ptr=5 .. Declaring a pointer to constant integer.You can not use this pointer to change the value being pointed to.

Question No: 21 (Marks: 3)

Can you use an assignment operator to assign the value of one C-string to another?

Ans:Yes,we use assignment operator,whenever we use objects that allocate memory it is important that assignment operator should be defined for it,otherwise default operator will copy the value of addressed and pointers.

Question No: 22 (Marks: 5)

Why binary search algorithm is more efficient than the linear search algorithm?

Ans:Binary search algorithm is more efficient than liner algorithem because the arrays are sorted in asending or desending order and we use “devide and conqrer” technique.In binery search each iteration reduces the search by the factor of two but in the linear we have the same number of searches as we have the number of elements.e.g,if we have array of 1000 elements the linear search will take 1000 iterations however binery search will take max 10.

Question No: 23 (Marks: 5)
Write down the output of the code given below :
Hint:
Size of char is 1 byte
Size of int is 2 byte
Size of float is 4 byte

```
#include <iostream.h>

union mytypes_t {
  char c;
  int i;
  float f;
  } mytypes;

int main(){

    mytypes.c = 'H';
    mytypes.i = 15;

    cout << sizeof(mytypes)<<endl;

    mytypes.i = 15;
    mytypes.c = 'H';

    cout << sizeof(mytypes)<<endl;

    system("PAUSE");
    return 0;
}
```

MIDTERM EXAMINATION
Spring 2010
CS201- Introduction to Programming (Session - 2)

Question No: 1 (Marks: 1) - Please choose one
In order to get 256 from the number 2568 we divide this number by 10 and take,
- ► Its remainder
- ► The number

► Its quotient
► Its divisor

Question No: 2 (Marks: 1) - Please choose one
The correct syntax of do-while loop is,
► (condition) while; do { statements; };
► { statements; } do-while ();
► while(condition); do { statements; };
► do { statements; } while (condition);

Question No: 3 (Marks: 1) - Please choose one
Which of the following function(s) is/are included in **stdlib.h** header file?

► double atof(const char *nptr)
► int atoi(const char *nptr)
► char *strcpy (char *s1, const char *s2)
► 1 and 2 only

Question No: 4 (Marks: 1) - Please choose one
If the break statement is missed in switch statement then,
► The compiler will give error
► This may cause a logical error
► No effect on program
► Program stops its execution

Question No: 5 (Marks: 1) - Please choose one
The data type before a function name represents its,
► Return Type
► Function data
► Function arguments
► Function name

Question No: 6 (Marks: 1) - Please choose one
Member function tellg() returns the current location of the _____ pointer.
► tellptr()

► write()

► seekg()

► get()

Question No: 7 (Marks: 1) - Please choose one
What does 5 | 6 , evaluate to in decimal where '|' is bitwise OR operator?

3 ►
4 ►
5 ►
7 ►

Question No: 8 (Marks: 1) - Please choose one

C is widely known as development language of _____ operating system.

► Linux
► Windows
► Unix
► Mac OS

Question No: 9 (Marks: 1) - Please choose one

What will be the result of arithmetic expression 6+27/3*3?

► 33
► 45
► 9
► 30

Question No: 10 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?
char str[] = "programming";

► 10
► 11
► 12
► 13

Question No: 11 (Marks: 1) - Please choose one

What will be the correct syntax for initialization of pointer ***ptr*** with string "programming"?

► char ptr = 'programming' ;

► char *ptr = "programming" ;

► char *ptr = 'programming' ;

► *ptr = "programming" ;

Question No: 12 (Marks: 1) - Please choose one

What will be the result of expression **x%= 2**, if **x = 7**?

x = 1 ►
x = 3 ►
x = 7 ►
x = 2 ►

Question No: 13 (Marks: 1) - Please choose one
UNIX has been developed in _____ language.
JAVA ►
B ►
C ►
FORTRAN ►

Question No: 14 (Marks: 1) - Please choose one
Declaring structures does not mean that memory is allocated.
True ►
False ►

Question No: 15 (Marks: 1) - Please choose one
What will be the value of i and j in the following code segment?

```
int i, j ;
int x[5] = {2, 3, 4, 8, 9} ;
int *ptr =&x[2];
i = (*ptr)++ ;
j = *ptr++ ;
```

i = 5, j = 5 ►
i = 5, j = 8 ►
i = 4, j = 8 ►
i = 5, j = 9 ►

Question No: 16 (Marks: 1) - Please choose one
When an array element is passed to a function, it is passed by ----------.

reference ►
data type ►
value ►
data ►

Question No: 17 (Marks: 2)
What is the difference between **switch** statement and **if** statement.
Ans:The “switch” statement is use to slect among multiple alternatives.It uses many if statements to execute a particular case,while “if” statement is use to slect among two alternatives.

Question No: 18 (Marks: 2)
Why we close a file after use?
Ans:To execute the .exe file properly with latest changes.

Question No: 19 (Marks: 2)

A two-dimensional array has 3 rows and 4 columns. Write down the syntax to initialize first element of all three rows of two-dimensional array with value 2.

Ans:

```
int matrix[0][0]=2
int matrix[1][0]=2
int matrix[2][0]=2
```

Question No: 20 (Marks: 3)

Identify the errors in the following code segment and give the reason of errors.

```
main(){
int x = 10
const int *ptr = &x ;
*ptr = 5 ;
}
```

Ans:

Int x=10….No ending semicolon.

*ptr=5 .. Declaring a pointer to constant integer.You can not use this pointer to change the value being pointed to.

Question No: 21 (Marks: 3)

Can you use an assignment operator to assign the value of one C-string to another?

Ans:Yes,we use assignment operator,whenever we use objects that allocate memory it is important that assignment operator should be defined for it,otherwise default operator will copy the value of addressed and pointers.

Question No: 22 (Marks: 5)

Why binary search algorithm is more efficient than the linear search algorithm?

Ans:Binary search algorithm is more efficient than liner algorithem because the arrays are sorted in asending or desending order and we use “devide and conqrer” technique.In binery search each iteration reduces the search by the factor of two but in the linear we have the same number of searches as we have the number of elements.e.g,if we have array of 1000 elements the linear search will take 1000 iterations however binery search will take max 10.

Question No: 23 (Marks: 5)

Write down the output of the code given below :

Hint:

Size of char is 1 byte
Size of int is 2 byte
Size of float is 4 byte

```
#include <iostream.h>

union mytypes_t {
```

```
  char c;
  int i;
  float f;
  } mytypes;

int main(){

    mytypes.c = 'H';
    mytypes.i = 15;

    cout << sizeof(mytypes)<<endl;

    mytypes.i = 15;
    mytypes.c = 'H';

    cout << sizeof(mytypes)<<endl;

    system("PAUSE");
    return 0;
}
```

CS201 - Midterm Solved Paper

Question No: 1 (Marks: 1) - Please choose one
What is the output of the following statement?
int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);
(a) 510
(b) 5
(c) 48
(d) error

Question No: 2 (Marks: 1) - Please choose one
What does !(7) evaluate to in decimal where ! is a NOT operator?
(a) 7
(b) 8
(c) 9
(d) 10

Question No: 3 (Marks: 1) - Please choose one
The condition in while loop may contain logical expression but not relational expression.
(a) True
(b) False

Question No: 4 (Marks: 1) - Please choose one
Searching is easier when an array is already sorted
(a) True
(b) False

Question No: 5 (Marks: 1) - Please choose one
If an array has 100 elements, what is allowable range of subscripts?
(a) 0 - 99
(b) 1 - 99
(c) 0 - 100
(d) 1 - 100
Question No: 6 (Marks: 1) - Please choose one
What will be the value of 'a' and 'b' after executing the following statements?
a = 3;
b = a++;
(a) 3, 4
(b) 4, 4
(c) 3, 3
(d) 4, 3
Question No: 7 (Marks: 1) - Please choose one
What will be the correct syntax to initialize all elements of two-dimensional array to value 0?
(a) int arr[2][3] = {0,0} ;
(b) int arr[2][3] = {{0},{0}} ;
(c) int arr[2][3] = {0},{0} ;
(d) int arr[2][3] = {0} ;
Question No: 8 (Marks: 1) - Please choose one
Which of the following functionreturns the size of a string variable?
(a) strlength()
(b) stringlen()
(c) **strlen()**
(d) strLength()
Question No: 9 (Marks: 1) - Please choose one
What will be the range of numbers generated by function rand () % 9?
(a) 0 to 9
(b) 1 to 9
(c) 0 to 8
(d) 1 to 8
Question No: 11 (Marks: 1) - Please choose one
Computer can understand only machine language code.
(c) True
(d) False
Question No: 13 (Marks: 1) - Please choose one
What does 5 ^ 6 , evaluate to in decimal where '^' is Exclusive OR operator?
(a) True
(b) False
Question No: 14 (Marks: 1) - Please choose one
If the file is not properly closed in the program, the program _____.
(a) Terminate normally
(b) Indicate Runtime error
(c) Indicate Compile time error
(d) Crashes
Question No: 15 (Marks: 1) - Please choose one
Which of the following header file include string conversion functions?
(a) string.h
(b) stdlib.h
(c) ctype.h
(d) sconvert.h
Question No: 17 (M - 1)
Which header file must be included while handling files?

Question No: 18 (M - 1)

What is meant by C++ statement: const int *ptr = &x;

Question No: 19 (M - 2)
What is a truth Table?

Question No: 20 (M - 3)
(i) An array day is declared as: int day[] = {1, 2, 3, 4, 5, 6, 7};
How many elements does array 'day' has?
(ii) If the declaration is changed as: int day[7] = {1, 2, 3, 4, 5, 6, 7};
How many elements does array 'day' has?

Question No: 21 (M - 5)
What are similarities and differences between Structures and Unions?

Question No: 22 (M - 10)
Write a void function( ); that takes integer numbers from the user and then displays the sum of odd and even numbers entered by the user. Your program should terminate if user enters a negative number?

MIDTERM EXAMINATION
Spring 2009
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one
A precise sequence of steps to solve a problem is called
► Statement
► **Program**
► Utility
► Routine

Question No: 2 (Marks: 1) - Please choose one
The Compiler of C language is written in
► Java Language
► UNIX
► FORTRON Language
► **C Language**

The C language is so powerful that the compiler of C and other various operating systems are written in C.

Question No: 3 (Marks: 1) - Please choose one
Initialization of variable at the time of definition is,
► Must
► Necessary

► **Good Programming**
► None of the given options

Question No: 4 (Marks: 1) - Please choose one
In if structure the block of statements is executed only,
► When the condition is false
► When it contain arithmetic operators
► When it contain logical operators
► **When the condition is true**

Question No: 5 (Marks: 1) - Please choose one
Which of the following function(s) is/are included in **stdlib.h** header file?
► double atof(const char *nptr)
► int atoi(const char *nptr)
► char *strcpy (char *s1, const char *s2)
► **1 and 2 only**

Question No: 6 (Marks: 1) - Please choose one
Dealing with structures and functions passing by reference is the most economical method
► **True**
► False

Question No: 7 (Marks: 1) - Please choose one
Pointer is a variable which store,
► Data
► **Memory Address**
► Data Type
► Values

Question No: 8 (Marks: 1) - Please choose one
Preprocessor program perform its function before _____ phase takes place.
► Editing
► Linking
► **Compiling**
► Loading

The C preprocessor modifies a source code file before handing it over to the compiler. You're most likely used to using the preprocessor to include files directly into other files,
Question No: 9 (Marks: 1) - Please choose one
Which of the following can not be a variable name?
► area
► _area
► **10area**
► area2

Question No: 10 (Marks: 1) - Please choose one
Which looping process is best, when the number of iterations is known?
► for
► **while**
► do-while
► all looping processes require that the iterations be known

Question No: 11 (Marks: 1) - Please choose one
Which character is inserted at the end of string to indicate the end of string?
► new line
► tab
► **null**
► carriage return
null character inserted at the end of the string by C automatically

Question No: 12 (Marks: 1) - Please choose one
How many bytes are occupied by declaring following array of characters?
char str[] = "programming";
► 10
► 11
► **12**
► 13
11 plus one for null char (11+1= 12)

Question No: 13 (Marks: 1) - Please choose one
Which of the following header file defines the **rand()** function?
► iostream.h
► conio.h
► **stdlib.h**
► stdio.h

The function is *rand()* and is in the standard library. To access this function, we need to include <stdlib.h> library in our program. This function will return a random number. The number can be between 0 and 32767.

Question No: 14 (Marks: 1) - Please choose one
Commenting the code _____
► **Makes a program easy to understand for others.**
► Make programs heavy, i.e. more space is needed for executable.
► Makes it difficult to compile
► All of the given options.

Question No: 15 (Marks: 1) - Please choose one
What's wrong with this for loop?
for (int k = 2, k <=12, k++)
► the increment should always be ++k

► the variable must always be the letter i when using a for loop
► there should be a semicolon at the end of the statement
► **the commas should be semicolons**

Question No: 16 (Marks: 1) - Please choose one
For which array, the size of the array should be one more than the number of elements in an array?
► int
► double
► float
► **char**

Question No: 17 (Marks: 1)
To Which category of the software “Compiler and Interpreter” belongs?
They belong to system software.
There are two type of system software
1. Operating system
2. Language translators.

These are part of language translators
Question No: 18 (Marks: 1)
What is the result of the expression x = 2 + 3 * 4 – 4 / 2
12
first multiplies 3*4 = 12 then Division 4/2 = 2
2+12-2 = 12
Question No: 19 (Marks: 2)
Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.
float tmp [10] = {1.0,2.0,3.0,4.0};
Question No: 20 (Marks: 3)
Write down the output of the following code?

```
int array[7], sum = 0;
for(int i=0;i<7;i++)
{
array[i] = i;
sum+= array[i];
}
cout<< “ Sum = “ <<sum;
```

answer: 21
Loop will run times starts from zero and add values from 1 to 6 which is equal to 21

What will be the output of the following segment of C++ code?

```
int A[5] = {1 , 2, 3, 4};
int i;
for (i=0; i<5; i++)
```

```
{
A[i] = 2*A[i];
cout << A[i] << "  ";
}
```

2 4 6 8 0

Loops will run 5 times as its starting from zero. It will multiply the value of each item in array as last time is not initialized so it will multiply it with zero to give zero as output

Question No: 22 (Marks: 10)

Write a C++ program that will determine if a departmental store customer has exceeded the credit limit on a charge account.

Program should input the following facts in five variables

1. Account number
2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit

Calculate the new balance

New balance = Beginning balance + charges – credits

Determine if **new balance** exceeds the **allowed credit limit**. For those customers whose credit limit is exceeded. The program should display the message “Credit Limit exceeded.”

CS201- Introduction to Programming Complete Solved Paper

MIDTERM EXAMINATION

Spring 2009

CS201- Introduction to Programming (Session - 1)

Question No: 1 (Marks: 1) - Please choose one

In C/C++ the #include is called,

Header file

Preprocessor Directive

Statement

Function

Question No: 2 (Marks: 1) - Please choose one

To access the element of two dimensional array we use,
Single referencing

Single dereferencing
Double **dereferencing**

Double referencing
Question No: 3 (Marks: 1) - Please choose one

Data Size of the file is always _____ the actual size of the file.
Greater than

Equal to
Less than or equal to

None of the above
Question No: 4 (Marks: 1) - Please choose one

When an identifier is declared with keyword const then,
Its value can be changed during execution.

Its value can not be changed
Its value can be changed with arithmetic operator

Its value can be overwritten
Question No: 5 (Marks: 1) - Please choose one

In C/C++ if we define an array of size eight (8) i.e. int Arr [8]; then the last element of this array will be stored at,

Arr[0]
Arr[8]

Arr[7]
Arr[-1]

Question No: 6 (Marks: 1) - Please choose one
If it is required to copy an array to another array then,

Both arrays must be of the same size and data type
Both arrays may be of different size

Both arrays may be of different data type
Both arrays may be of different size and type

Question No: 7 (Marks: 1) - Please choose one
In C/C++ all character strings are terminated with,

Null character
String

Zero
Full stop

Question No: 8 (Marks: 1) - Please choose one
Let suppose

```
struct intorDouble{
Int ival;

Double charvar;
};

main(){
intorDouble  VAZ;

int size ;
size = sizeof(VAZ);

}
```

What will be the value of variable size, if int occupies 4 bytes and double occupies 8

bytes?
2

4

8

12

Question No: 9 (Marks: 1) - Please choose one

When a pointer is incremented, it actually jumps the number of memory addresses

According to data type

1 byte exactly

1 bit exactly

A pointer variable can not be incremented

Question No: 10 (Marks: 1) - Please choose one

Do-while loop executes at least,

Zero Time

One Time

Two Times

N Times

Question No: 11 (Marks: 1) - Please choose one

+= , *= , /= , etc are called,

Assignment operators

Logical operator

Compound assignment operator

Unary operator

Question No: 12 (Marks: 1) - Please choose one

Computer can understand only machine language code.

T**rue**

False

Question No: 13 (Marks: 1) - Please choose one

Which of the following is the correct syntax to print multiple values or variables in

a single command using cout?
cout << "Hello" + x + "\n";

cout << "H" << x << "\n";
cout << "H", x, "\n";

cout << ("H" & x & "\n");
Question No: 14 (Marks: 1) - Please choose one

The compilers and interpreters also belong to the System Software category.
True

False
Question No: 15 (Marks: 1) - Please choose one

Editors are used to compile the code.
True

False
Question No: 16 (Marks: 1) - Please choose one

The variables having a name, type and size are just like empty boxes.
True

False
Question No: 17 (Marks: 1)

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What will be the result of the statement?

rand ( ) % 50
Question No: 18 (Marks: 1)

What is the ASCII code of null character and how is it represented?
Question No: 19 (Marks: 2)

What is a truth Table?

Question No: 20 (Marks: 3)

How learning to design programs is like learning to play soccer?

Question No: 21 (Marks: 5)

What is the purpose of the default statement in the switch statement?

Question No: 22 (Marks: 10)

Write a program which contains a user defined function named
ConvertInSeconds

that
takes 3 integer arguments hours, minutes and seconds, this function converts the time into

seconds and returns the number of seconds.
Input variables hours , minutes and seconds in main program and call the function

ConvertInSeconds
and display the number of seconds returned by function.

Hint:
1 hour =60 minutes
1 minute =60 seconds

MIDTERM EXAMINATION

Spring 2009

CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one
A precise sequence of steps to solve a problem is called

- Statement
- **Program**
- Utility
- Routine

Question No: 2 (Marks: 1) - Please choose one
The Compiler of C language is written in

- Java Language
- UNIX

- FORTRON Language
- **C Language**

Question No: 3 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

- Must
- Necessary
- **Good Programming**
- None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

- When the condition is false
- When it contain arithmetic operators
- When it contain logical operators
- **When the condition is true**

Question No: 5 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in **stdlib.h** header file?

- double atof(const char *nptr)
- int atoi(const char *nptr)
- char *strcpy (char *s1, const char *s2)
- **1 and 2 only**

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method

- **True**
- False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

- Data
- **Memory Address**
- Data Type
- Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before _____ phase takes place.

- Editing
- Linking
- **Compiling**
- Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

- area
- _area
- **10area**
- area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?

- for
- **while**

- do-while
- all looping processes require that the iterations be known

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

- new line
- tab
- **null**
- carriage return

Question No: 12 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?

char str[] = "programming";

- 10
- 11
- **12**
- 13

11 plus one for null char (11+1= 12)

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the **rand()** function?

- iostream.h
- conio.h
- **stdlib.h**
- stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code _____

- **Makes a program easy to understand for others.**
- Make programs heavy, i.e. more space is needed for executable.
- Makes it difficult to compile
- All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop?

for (int k = 2, k <=12, k++)

- the increment should always be ++k
- the variable must always be the letter i when using a for loop
- there should be a semicolon at the end of the statement
- **the commas should be semicolons**

Question No: 16 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

- int
- double
- float
- **char**

Question No: 17 (Marks: 1)

To Which category of the software "Compiler and Interpreter" belongs?

Solution:

They belong to system software.

Question No: 18 (Marks: 1)
What is the result of the expression x = 2 + 3 * 4 – 4 / 2

Solution:

12

Question No: 19 (Marks: 2)
Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

Solution:

float tmp [10] = {1.0,2.0,3.0,4.0};

Question No: 20 (Marks: 3)
Write down the output of the following code?

```
int array[7], sum = 0;
for(int i=0;i<7;i++)
{
array[i] = i;
sum+= array[i];
}
cout<< " Sum = " <<sum;
```

Solution:

21

Question No: 21 what will be the output of the following segment of C++ code?

```
int A[5] = {1 , 2, 3, 4};
int i;
for (i=0; i<5; i++)
{
A[i] = 2*A[i];
cout << A[i] << " ";
}
```

Solution:

2 4 6 8 0

Question No: 22 (Marks: 10)
Write a C++ program that will determine if a departmental store customer has exceeded the credit limit on a charge account.
Program should input the following facts in five variables
1. Account number
2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit
Calculate the new balance
New balance = Beginning balance + charges – credits
Determine if **new balance** exceeds the **allowed credit limit**. For those customers whose credit limit is exceeded. The program should display the message "Credit Limit exceeded."

CS201 MID-Term BY Attiq Kundi

Q 1; The ASCll code of null character is ----------.

(000) correct answer

Q2; Which step is not not performed during a proper program design? **(Write details about the performance of program) correct answer**

Q3; How many elements are stored in the following ? int matrix [4][5]; **(20) correct answer**

Q4; Which of the following is not a valid variable name in c++?

(@studentName) correct answer

Q5; If an array has 50 elements.What is allowable range of subscripts? **(0-49) correct answer**

Q6; <. <=.> .>= are called ----------operators.

(Relational) correct answer

Q7; Why we use “cin “?

(To read data from keyboard) correct answer

Q8; !(x<3)means in c++ that

(x is greater than 3) correct answer

Q9; The data in the memory is ---------

(volatile) correct answer

Q10; Each array declaration must provide the information about all these things except ----- ----

The location of the first element to be stored

Q11; What will be the output of the program if x=10?

If (x!=0&&x<=10)

{

Cout <<"condation 1 is true";

}

If(x>=10 && x<=20)

{

Condation 1 is true condation 2 is true

Q12; C is widely known developpment language of ____ operating system. **Windows**

Q13; A repetition statement specifies that an action is to be continued while some_____remains true.

Condation

Q14; _____is a substitute of multiple if statement.

If—elseif statement

Q15; If a _____finds an error. It stops translating without generating any executable code. **Compiler**

Q16; Function prototype is wrriten .

Before call of that function

Q17; The____ is an unconditional branch of execution .

Goto statement

Q18; What will be the output of the following code snippet?

String str1 = "Hello beautiful";

String str2 = "yes we can";

String str3 = strcpy(str1,str2);

Cout<<str3<<endI;

Hello beautiful Yes we can

Q20; In two dimensional array .We use _____ „for oop(s)"to populate the array. **2**

Q21; eof is used to check for the _____ of file when a file is being read.

End

Q22; How many times the following loop will execute?

```
Int j = 3;
While(j>0)
{
Cout << "statements" << endI;
J=2;
}
```

2

Q23; Null character is used to indicate the____ of string.

End

Q24; There is a pointer named ptr of type float. Which type of variable address can be stored by ptr?

Float

Q25; How many bytes an integer type pointer intPtr will jump in memory if the statement below is executed?

```
intPtr +=2;
```

4

Q26; We must include the header file ____to convert the value of one type into another type using built-infunctions.

iostream.h

Q27; Use of word processor for writing the code of a program is not good because. **It has no compiler**

Q28; _____Loop executes atleast one times.

Do while

Q29; The data . contained in the structure. is defined in the___

Curly braces

Q30; What is the use of ios::trunk mode?

To truncate an existing file to zero

CS201 Solved Quiz No-1 December 13, 2015

1. We use _____ to open a file or stream for extraction
   in

2. Null character is represented by _____ in C++.
   /0

3. An object of _____ class can be created for saving the current position of any opened file before reading from the file.
   Streampos

   pg215

4. _____ Returns true if c is a digit or a letter and false otherwise. **int isalnum(int c)**

5. We use _____ to open a file or stream for insertion.
   out

6. Base address is the memory address of _____ element of an array. **1st**

7. _____ allow us to have a memory location and use it as int or char interchangeably
   union

8. To read command-line arguments, the main() function itself must be given _____ arguments.
   2

9. Individual characters in a string stored in an array can be accessed directly using array _____.
   Subscript

10. To manipulate n-dimensional array _____ nested loops are required. **n-1**

11. A character is stored in the memory in _____

    String

12. What will be the size of following array?
    int arr[29];
    29

13. An object of _____ class can be created for saving the current position of any opened file before reading from the file.
    Streampos
    pg215

14. We use _____ to open a file or stream for extraction.
    In

15. We use _____ to open a file or stream for insertion.
    Out

16. _____are conventional names of the command line parameters of the „main()“ function.
    _argc‘ and _argv‘

17. In_____, we have different data members and all of these have their own memory space.
    Structures

18. How we declare an array of integer data whose size is 20 with array name “count”. **int count[20];**

19. A _____is an array of characters that can store number of character specified. **String**

20. File. seekg (-10L, ios:cur)
    backword direction

21. What will be the output of the following while loop? int counter = 0 ; while(counter < 15) cout << counter << “ ”; counter++;
    1 2 3 4
    1 2 3 4 5
    Compile time error
    Infinite loop

22. We can access a global variable _____

From the functions only

From the loops only

From the main() function only

From anywhere in the program

23. A repetition statement specifies that an action is to be continued while some_____ remains true.

Condition

Control

Asignment

Operator

24. Loops are _____ Structure.

Decision

Sequential

Repetition

None of the given options

25. _____ operator is used to pass the address of a variable in call by reference method.

%

+

@

&

26. How many times the following do-while loop will execute? int k = 10; do { cout << "Statements" << endl; k -= 2; } while(k>0);

4

5

6

7

27.What is the output of the following code if the 3rd case is true switch (var) { case „a“: cout<<”apple”<<endl; case „b“: cout<<”banana”<<endl; case „m“: cout<<”mango”<<endl; default: cout<<”any fruit”<<endl; }

mango

mango any fruit

Apple

CS201 SOLVED QUIZ NO 1 DECEMBER 09, 2019 Q1; The ASCll code of null character is____

010

Q2; Each array declaration must provide the information about all these things except_____

The location of the first element to be stored

Q3; Arecord is agroup of related_____

Data

Q4; Pointers store the____

Value of the variable

Q5; We can say that a pointer is a variable that hold the ___adress. **Source code**

Q6; afile.seekg(-10-ios::cur

Backward direction

Q7; Deferencing operator is represented by____

***,+,- non of the given**

Question No: 1 (Marks: 1) - Please choose one

A precise sequence of steps to solve a problem is called

- Statement
- **Program**
- Utility
- Routine

Question No: 2 (Marks: 1) - Please choose one

The Compiler of C language is written in

- Java Language
- UNIX
- FORTRON Language

C Language

Question No: 3 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

- Must
- Necessary

Good Programming

- None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

- When the condition is false
- When it contain arithmetic operators
- When it contain logical operators

When the condition is true

Question No: 5 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in **stdlib.h** header file? ➢ double atof(const char *nptr)

- int atoi(const char *nptr)
- char *strcpy (char *s1, const char *s2)

1 and 2 only

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method **True**

- False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

- Data

Memory Address

- Data Type
- Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before phase takes place. ➢ Editing

- Linking

Compiling

- Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

- area
- _area
- **10area**
- area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?

- for
- **while**
- do-while
- all looping processes require that the iterations be known

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

- new line
- tab
- **null**
- carriage return

Question No: 12 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?

char str[] = —programming‖;

- 10
- 11
- **12**
- 13

11 plus one for null char (11+1= 12)

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the **rand()** function?

- iostream.h
- conio.h
- **stdlib.h**
- stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code

- **Makes a program easy to understand for others.**
- Make programs heavy, i.e. more space is needed for executable.
- Makes it difficult to compile
- All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop? for (int k = 2, k <=12, k++)

- the increment should always be ++k
- the variable must always be the letter i when using a for loop
- there should be a semicolon at the end of the statement
- **the commas should be semicolons** **Question No: 16**

(Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array? ➢ int

- double
- float

char

Question No: 17 (Marks: 1)

To Which category of the software "Compiler and Interpreter" belongs?

Solution:

They belong to system software.

Question No: 18 (Marks: 1)

What is the result of the expression x = 2 + 3 * 4 – 4 / 2

12

Solution:

Question No: 19 (Marks: 2)

Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

Solution:

float tmp [10] = {1.0,2.0,3.0,4.0};

Question No: 20 (Marks: 3)

Write down the output of the following code? int array[7], sum
= 0;

```
for(int i=0;i<7;i++)
{
array[i] = i; sum+= array[i];
}
cout<< " Sum = " <<sum;
```

Solution:

21

Question No: 21 what will be the output of the following segment of C++ code?

```
int A[5] = {1 , 2, 3, 4};
int i;
```

```
for (i=0; i<5; i++)
{
A[i] = 2*A[i];
cout << A[i] << " ";
}
```

Solution:

2 4 6 8 0

Question No: 22 (Marks: 10)

Write a C++ program that will determine if a departmental store customer has exceeded the credit limit on a charge account.

Program should input the following facts in five variables

1. Account number
2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit Calculate the new balance

New balance = Beginning balance + charges – credits

Determine if **new balance** exceeds the **allowed credit limit**. For those customers whose credit limit is exceeded. The program should display the message "Credit Limit exceeded."

MIDTERM EXAMINATION

Fall 2008

Programming (Session - 2) Time: 60 min

Marks: 38

Question No: 1 (Marks: 1) - Please choose one

What is the output of the following statement?

```
int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);
```

(a) 510

(b) 5

(c) 48

(d) error

Question No: 2 (Marks: 1) - Please choose one

What does !(7) evaluate to in decimal where ! is a NOT operator?

(a) 7

(b) 8

(c) 9

(d) 10

Question No: 3 (Marks: 1) - Please choose one

The condition in while loop may contain logical expression but not relational expression. (a) True

(b) False

Question No: 4 (Marks: 1) - Please choose one

Searching is easier when an array is already sorted

(a) True

(b) False

Question No: 5 (Marks: 1) - Please choose one

If an array has 100 elements, what is allowable range of subscripts? (a) **- 99**

(b) 1 - 99

(c) 0 - 100

(d) 1 - 100

Question No: 6 (Marks: 1) - Please choose one

What will be the value of „a" and „b" after executing the following statements? a = 3;

b = a++;

(a) 3, 4

(b) 4, 4

(c) 3, 3

(d) 4, 3

Question No: 7 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to value 0?

(a) int arr[2][3] = {0,0} ;

(b) int arr[2][3] = {{0},{0}} ;

(c) int arr[2][3] = {0},{0} ;

(d) int arr[2][3] = {0} ;

Question No: 8 (Marks: 1) - Please choose one

Which of the following function returns the size of a string variable?

(a) strlength()

(b)stringlen()
(c) **s trlen()**
(d) strLength()

Question No: 9 (Marks: 1) - Please choose one

What will be the range of numbers generated by function
rand () % 9? (a) 0 to 9
(b)1 to 9
(c)0 to 8
(d)1 to 8

Question No: 11 (Marks: 1) - Please choose one

Computer can understand only machine language code.
(e) True
(c) False

Question No: 13 (Marks: 1) - Please choose one

What does 5 ^ 6 , evaluate to in decimal where „^" is Exclusive OR operator?

(a) True
Fals

It mean
5 = 0101
6 = 0110
5 ^ 6 = 0011
If both input is same then the output is 0 and if different then output is 1

Question No: 14 (Marks: 1) - Please choose one

If the file is not properly closed in the program, the program .
(a)Terminate normally
(b) Indicate Runtime error
(c)Indicate Compile time error
(d)Crashes

Question No: 15 (Marks: 1) - Please choose one

Which of the following header file include string conversion functions?

(a) **string.h**
(b) stdlib.h
(c)ctype.h
(d)sconvert.h

Question No: 16 (Marks: 1) - Please choose one

In Program commenting the code liberally is

Solution:-

It need to be self-contained and understandable. Comments should be placed liberally. The comments should explain the logic, not the mechanics. Try to avoid fancy programming.

Question No: 17 (Marks: 1)

Which header file must be included while handling files?

Solution:-

<fstream.h>

Question No: 18 (Marks: 1)

What is meant by C++ statement: const int *ptr = &x;

Solution:-

ptr is a pointer to data of type const int type. And to assign the address of x to pointer ptr

Question No: 19 (Marks: 2)

What is a truth Table?

Solution:-

We know the concept of truth table. The truth tables are very important. These are still a tool available for analyzing logical expressions. We will read logic design in future, which is actually to do with chips and gate. We find it difficult to evaluate a complicated logical expression. Sometimes the logic becomes extremely complicated so that even writing it as a simple syntax statement in any language.

Question No: 20 (Marks: 3)

(1) An array day is declared as: int day[] = {1, 2, 3, 4, 5, 6, 7};

How many elements does array 'day' has?

Solution:-

7 elements

(2) If the declaration is changed as: int day[7] = {1, 2, 3, 4, 5, 6, 7};

How many elements does array 'day' has?

Solution:-

7 elements

Question No: 21 (Marks: 5)

What are similarities and differences between Structures and Unions?

In structures, we have different data members and all of these have their own memory space. In union, the memory location is same while the first data member is one name for that memory location. However, the 2nd data member is another name for the same location and so on. Consider the above union (i.e. intOrChar) that contains an integer and a character as data members. What will be the size of this union? The answer is the very simple. The union will be allocated the memory equal to that of the largest size data member. If the int occupies four bytes on our system and char occupies one byte, the union *intOrChar* will occupy four bytes

Question No: 22 (Marks: 10)

Write a **void function( );** that takes integer numbers from the user and then displays the sum of odd and even numbers entered by the user. Your program should terminate if user enters a negative number

Solution:-

```
#include<iostrea
m.h>
#include<conio.h
> void
function(void);
main()
{
function();

getche();
}
void function(void)
{
int n[5];
for(int i=0; i<=5; i++)
{
   cout <<"Enter Element = ";
   cin >>n[i];
}
cout <<"\nODD Inputs are = \n";
for(int i=0; i<=5; i++)
{

   if(n[i]%2==0)
   {
      cout <<n[i]<<endl;
   }
```

```
    }
cout <<"\nEVEN Inputs are = \n";
for(int i=0; i<=5; i++)
    {
      if(n[i]%2==1)
       {
          cout <<n[i]<<endl;
       }

    }
    }
```

MIDTERM EXAMINATION
Spring 2009
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

The function of cin is

(a) To display message

To read data from keyboard

(b) To display output on the screen

(c) To send data to printer

Question No: 2

(Marks: 1) - Please choose one

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

(a) cplext.h

(b) ctype.h

(c) stdio.h

(d) delay.h

Question No: 3 (Marks: 1) - Please choose one

How many parameter(s) function getline() takes?

(a) 0

(b) 1

(c) 2

(d) 3

(e) Question No: 4 (Marks: 1) - Please choose one

Word processor is

(a) Operating system

(e) Application software

(b) Device driver

(c) Utility software

Question No: 5 (Marks: 1) - Please choose one

For which values of the integer _value will the following code becomes an infinite loop?

```
int
number
=1;
while
(true) {
  cout << number;
  if (number == 3) break;
  number += integer_value; }
```

(a) any number other than 1 or 2

(b) only 0

(c) only 1

(d) only 2

Question No: 6 (Marks: 1) - Please choose one

Each pass through a loop is called a/an

(a) enumeration

(f) Iteration

(b) culmination

(c) pass through

Question No: 7 (Marks: 1) - Please choose one

A continue statement causes execution to skip to

(a) the return 0; statement

(b) the first statement after the loop

(c) the statements following the continue statement

(d) the next iteration of the loop

Question No: 8 (Marks: 1) - Please choose one

What is the correct syntax to declare an array of size 10 of int data type? (a) int [10] name ;
(b) name[10] int ;
(g) int name[10] ;
(c) int name[] ;

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will the following code segment display? int main(){
int age[10]
= {0}; cout
<< age ;
}

(a) Values of all elements of array
(b) **Value of first element of array**
(c) Starting address of array
(d) Address of last array element

Question No: 10 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to value 0?
(a) int arr[2][3] = {0,0} ;
(b) int arr[2][3] = {{0},{0}} ;
(c) int arr[2][3] = {0},{0} ;
(d) int arr[2][3] = {0} ;

Question No: 11 (Marks: 1)- Please choose one

How many bytes will the pointer *intPtr* of type int move in the following statement? intPtr += 3 ;

(a) 3 bytes
(b) 6 bytes
(c) 12 bytes
(d) 24 bytes

Question No: 12 (Marks: 1) - Please choose one

If there are $2^{(n+1)}$ elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

(a) n elements
(e) (n+1) elements
(b) 2(n+1) elements
(c) $2^{(n+1)}$ elements

Question No: 13 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer?

(a) * operator
(b) -> operator
(c) && operator
(d) & operator

Question No: 14 (Marks: 1) - Please choose one

The statement interrupts the flow of control.

(a) switch
(b) continue
(c) goto
(e) break

Question No: 15 (Marks: 1) - Please choose one

Analysis is the -------step in designing a program

(a) Last
(b) Middle
(c) Post Design
(d)First

Question No: 16 (Marks: 1) - Please choose one

Paying attention to detail in designing a program is
(a) Time consuming
(b) Redundant
(e) Necessary
(a) Somewhat Good

Question No: 17 (Marks: 1)

Which programming tool is helpful in tracing the logical errors?

Debugger tool is helpful in tracing the logical errors.

Question No: 18 (Marks: 1)

Give the syntax of opening file „myFile.txt“ with „app“mode using ofstream variable „out“.

```
ofstream outfile;
outfile.open ("myFile.txt "); // Open the file
```

Question No: 19 (Marks: 2)

What is the difference between switch statement and if statement.

In switch statement only one variable can be tested on various condition but using if we can tested multi variables in single statement.

Question No: 20 (Marks: 3)

Identify the errors in the following code segment and give the reason of errors. ma

```
in(
){
int
x =
 10
const int *ptr = &x ;
*ptr = 5 ;
}

main()
{
int x = 10;
const int *ptr

=&x ; cout

<<ptr;

}
```

Question No: 21 (Marks: 5) If int array[10]; is an integer array then write the

statements which will store

values at Fifth and Ninth location of this array,

```
cout <<"Enter fifth
postion "; cin >>
array[4];
cout <<"Enter Ninth
postion "; cin >>
array[8];
```

Question No: 22 (Marks: 10)

Write a function BatsmanAvg which calculate the average of a player (Batsman), Call this function in main program (Function). Take the input of Total Runs made and Total number of matches played from the user in main function

Q1
When the if statement consists more than one statement then enclosing these statement in curly braces is,

(a) Not required
(b) Good programming
(c) Relevant
(d)Must

Q2
The while loop becomes infinite,

(a) When the condition is always false
(b) . When the condition is less than zero
(e) When the condition is always true
(c) When the condition contains a logical operator

Q3
Which of the following function(s) is/are included in **stdlib.h** header file?

(a) double atof(const char *nptr)
(b) int atoi(const char *nptr)
(c) char *strcpy (char *s1, const char *s2)
1 and 2 only

Q4
If we want to store a string "abc" in an array str then the size of this array must be at least,

2

(a) 3
(b) 4
(c) 5

Q5
No executable code will be generated if error is found during translation of the program using interpreter.

(a)True
(b) False

Q6
Word processor is

(a) Operating system
(c) **Application software**
(b) Device driver
(c) Utility software

Q7
Which of the following is the correct syntax to print multiple values or variables in a single command using cout?
(a) cout << "Hello" + x + "\n";

(b) **cout << "H" << x << "\n";**
(c) cout << "H", x, "\n";
(d) cout << ("H" & x & "\n");

Q8
Which of the following is correct way to initialize a variable x of int type with value 10?

(a) int x ; x = 10 ;
(b)int x = 10 ;
(c) int x, x = 10;
(d) x = 10 ;

Q9
If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block? (a) parentheses ( )
(d)braces { }
(b) brackets [ ]
(c) arrows < >

Q10

Name of an array is a constant pointer.

True

(a) False

Q11

How many bytes will the pointer ***intPtr*** of type **int** move in the following statement?

intPtr += 3 ;

(a) 3 bytes

(b) 6 bytes

(c) 12 bytes

(d) 24 bytes

Q12

What will be the value of 'a' and 'b' after executing the following statements?

a = 3;

b = a++;

(a) **3, 4**

(b) 4, 4

(c) 3, 3

(d) 4, 3

Q13

Loader loads the executable code from hard disk to main memory. **(a)True**

(b) False

Q14

Which of the following is used with bit manipulation?

(a) Signed integer

(b) Un-signed integer

(c) Signed double

(c) Un-signed double

Q15

Which of the follwoing values C++ use to represent true and false? **(d)1 and 0**

(a) 1 and -1
(b) 11 and 00
(c) Any numerical value

Q16
The argument of the isdigit() function is
(a) **a character**,
(b) a C-string,
(c) a C++ string class variable
(d) None of the given options.

Q17
Which data type should be used to store the value 50.7 ?

Float

Q18
Why should goto statement be avoided in C/C++?

When structured programming was started, it was urged not to use the *goto* statement. Though *goto* is there in C language but we will not use it in our programs. It will adopt the structured approach. All of our programs will consist of sequences, decisions and loop. Because loop provide best platform to manipulate the data.

Q19
What operator do you use to assign a pointer the address of another variable or constant? Marks: 2

& sige
i.e.

```
int i;

int * ptri;
ptri = &i;
```

Q20
If there are 2^n elements in an array then what would be the number of iterations required to search a number using binary search and linear search? Marks: 3

Q21

Convert the following switch statement into if statements. Marks: 5

```
switch
(operator) {
case '+':
 result = op1 + op2;
 break;
case '-':
 result = op1 - op2;
 break;
case 'x':
case '*':
 result = op1 * op2;
 break;
case '/':
 result = operand1
 /
 operand2;  break;

default:
cout <<
"Unknown
operator" ; }
```

```
if(operator==' +')
                {
        result = op1 + op2;
                 }
else if(operator==’
-’)
                {
        result = op1 - op2;
                 }
else
if (operator==' *')
                {
        result = op1 * op2;
```

```
                }

else

if (operator==' /')

                {

        result = op1 / op2;

                }

else

{
cout << "Unknown operator" ;


}
```

Q22
Write a recursive function that takes character array and starting subscript as arguments. In each recursive call, the function should display the string from subscript to the end of string. The starting subscript in first call should be 0. In each successive call, the subscript should increse by one and function should print the array from subscript to the end of string. The function should stop processing and return when null character encounters.
Suppose the char string passed to the function is, "SampleString", then the function will print output as follows,
Sample
String
ampleSt
ring
mpleStri
ng
pleStrin
g
so on....

Marks: 10

Question No: 1 (Marks: 1) - Please choose one

A precise sequence of steps to solve a problem is called

€ Statement

€ **Program**

€ Utility

€ Routine

Question No: 2 (Marks: 1) - Please choose one

The Compiler of C language is written in

€ JavaLanguage

€ UNIX

€ FORTRONLanguage

€ **C Language**

Question No: 3 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

€ Must

€ Necessary

€ **Good Programming**

€None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

€When the condition is false

€ When it contain arithmetic operators

€When it contain logical operators

€**When the condition is true**

Question No: 5 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in stdlib.h header file?

€double atof(const char *nptr)

€int atoi(const char *nptr)

€ char *strcpy (char *s1, const char *s2)

€**1 and 2 only**

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method

€ **True**

€ False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

€ Data

€ **Memory Address**

€ Data Type

€ Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before phase takes place.

€ Editing

€Linking

€ **Compiling**

€ Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

€ area

€ _area

€ **10area**

€ area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?

€ for

€ while

€ do-while

€ **all looping processes require that the iterations be known**

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

€new line

€ tab

€ **null**

€ carriage return

Question No: 12 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?
char str[] = “programming”;

€10

€11

€**12**

€13

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the rand() function?

€ iostream.h

€ conio.h

€ **stdlib.h**

€ stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code

€ **Makes a program easy to understand for others.**

€Make programs heavy, i.e. more space is needed for executable.

€Makes it difficult to compile

€All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop?
for (int k = 2, k <=12, k++)

€ the increment should always be ++k

€ the variable must always be the letter i when using a for loop

€ there should be a semicolon at the end of the statement

€ **the commas should be semicolons**

Question No: 16
(Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

€ int

€ double

€ float

€ **char**

Question No: 17 (Marks: 1)

To Which category of the software "Compiler and Interpreter" belongs?

Question No: 18 (Marks: 1)

What is the result of the expression x = 2 + 3 * 4 – 4 / 2

12

first multiplies 3*4 = 12 then Division 4/2 = 2

2+12-2 = 12

Question No: 19

(Marks: 2)

Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

Question No: 20 (Marks: 3)

Write down the output of the following code?

```
int array[7], sum = 0;
  for(int i=0;i<7;i++)
   {
   array[i] = i;
   sum+= array[i];
}
   cout<< " Sum = " <<sum;
```

ANS

21

Loop will run times starts from zero and add values from 1 to 6 which is equal to 21

What will be the output of the following segment of C++ code?

```
int A[5] = {1 , 2, 3, 4};
int i;
for (i=0; i<5; i++)
{
A[i] = 2*A[i];
cout << A[i] << " ";
}
```

ANS **2 4 6 8 0**

Loops will run 5 times as its starting from zero. It will multiply the value of each item in array as last time is not initialized so it will multiply it with zero to give zero as outputQuestion No: 22 (Marks: 10)

Write a C++ program that will determine if a departmental store customer has exceeded the credit limit on a charge account.
Program should input the following facts in five variables

1. Account number
2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit

Calculate the new balance
New balance = Beginning balance + charges – credits
Determine if new balance exceeds the allowed credit limit. For those customers whose credit limit is exceeded. The program should display the message "Credit Limit exceeded."

Q1
In C/C++ the string constant is enclosed

(a) In curly braces
(b) In small braces
(c)In single quotes
(d) In double quotes

Q2
In flow chart, the symbol used for decision making is,

a) Rectangle
b) Circle
c) Arrow
(e) Diamond

Q3
The data type before a function name represents its,

(a)Return Type
(b) Function data
(c) Function arguments
(d) Function name

Q4The operator used to take the address of a variable is,

(a) &&
(b) ++
(c) –

(e) &

Q5

The header file which is used for input and output is

(a) maths.h

(b) string.h

(f) iostream.h

(c) ctype.h

Q6

When we are using command line argument(s), the default argument in C/C++ is/are .

a) argc

b) argd

c) argv

(g) argc and argv

Q7

In C++, Integer calculation occurs in bytes.

a) 1 byte

(h)2 bytes

b) 4 bytes

c) 8 bytes

Q8

In the declaration of two dimensional array,

(a) **First index represents row and second represents column** **(b)** First index represents column and second represents row

(c) Both indexes represent rows

(d) Both indexes represent column

Q9

The address operator (&) can be used with,

a) Statement

b) Expression

(e) Variable

c) Constant

Q10

translates high level language program into machine language code (a) Debugger

(b) Editor

(c) Compiler

(d) Linker

Q11

Which of the following data type(s) can operate on modulus operator „%“? **(e) float, int**

a) float, double

b) int

c) char

Q12

What will be the result of the expression z = x % y, if x = 19 and y = 4? **(f) 3**

a) 4

b) 15

c) 19

Q13

Which character is inserted at the end of string to indicate the end of string? a) new line

b) tab

c) **null**

d) carriage return

Q14

What will be the value of i and j in the following code segment?

```
int i, j ;
int x[5] = {2, 3, 4, 8, 9} ;
int *ptr
=&x[2];
i =
(*ptr)++
;
j = *ptr++ ;
```

a) i = 5, j = 5

b) i = 5, j = 8

c) i = 4, j =8

d) i = 5, j = 9

Q15

Syntax of union is identical to

Structure

a) Class

b) Function

c) None of the given options

Q16

Let suppose

```
Union intorDouble{
 Int ival;
 Double charvar;
```

```
};

main(){ intorDouble
VAZ; int size ;

size = sizeof(VAZ);

}
```

What will be the value of variable "size", if int occupies 4 bytes and double occupies 8 bytes?

a) 2
b) 4
c) 8
d) 12

Q17

To Which category of the software “Compiler and Interpreter” belongs? (1)

System software

Q18

Give the general syntax of definition of structure. (1)

ANS

```
struct Name
{

 // body of the structure

};
```

Q19

Write the General syntax for the definition of a user defined function. (2)

ANS

return data type Function Name (**parameter list with data type**)

```
        {
  // definition body
        }
```

Q20

What will be the output of following code segment?

```
(3)  int x[5] = {2, 4, 5, 7, 1} ;
int *ptr =&x[2];
cout << (*ptr)++
<<" " ; cout <<
*ptr++ ;
```

ANS

5 6

Q21

Detect and correct compile time error(s) in the following code.

Hints: The following code pass a value to a function by Reference and print the value before and after pass. (5)

ANS

```
        int test (int &x)
        {
*x = *x + 200;
   return x;
        }

        main()
        {
   int x = 100;

   cout <<" x = " <<x;
            test (*x); // //invalid type of argument uniary

        cout<<endl<< " x = " <<x;

   getch();
   return 0;
        }
```

ANS

The following function pass a reference to the function but in the main body the call mechanism is wrong. The * sign is not used with it . **X = 100 after the function completion x = 300;**

Q22

Write a C/C++ program which calculates the aggregate of a student. The aggregate can be calculated by the formula: (10)

Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24

If the aggregate of a student is less than 150 then the program should display message **"You can not be admitted to VU"** otherwise display the message "Congratulation! You admitted in VU "

ANS

```
#include<iostream.h>
#include<conio.h>
main()
{
   int m,f;
   float a;
   m=254;
   f=340;
   a = ((m*2) + (f*4))/24;
   if(a < 150)
   {
      cout <<"You can not be admitted to VU";
   }
   else
   {
      cout <<"Congratulation! You admitted in VU ";
   }
   //Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24
```

```
    getche();
}
```

Q1

What is function of **cout** ?

(a) To send data to printer

(b) To read data from keyboard

(c) To display message

(d)To display output on the screen

Q2

In Flow chart process is represented by

Rectangle

(a) Arrow symbol

(b) Oval

(c) Circle

Q3

&& is ---------- operator.

(a) An arithmetic

(b) **Logical**

(c) Relational

(d) Unary

Q4

An over Flow condition occurs when we try to assign a value to a variable which is,

(a)Less than its maximum size

(b) Greater than its maximum size

(c) With in itsrange

(d) Equal to itssize

Q5

For dereferencing an array element using pointer, we use the operator **(a) &**

(b) *

(c) /

(d) +

Q6

In the declaration of two dimensional array,

(d)First index represents row and second represents column **(a)** First index represents column and second represents row

(b) Both indexes represent rows

(c) Both indexes represent column

Q7

Which of the following data type(s) can operate on modulus operator „%“? **float, int**

(a) float, double

(b) int

(c) char

Q8

Which of the following is the correct way to declare a variable x of integer type? (a) x int ;

(b) integer x ;

(c) int x;

(d) x integer

Q9

Which of the following can not be a variable name?

(a) area

(b) _area

(e) 10area

(c) area2

Q10

Which of the function call is ***call by value*** for the following function prototype? float area (int);

(a) area(&num) ;

(f) area(num) ;

(b) area(int num) ;

(c) area(*num) ;

Q11

Recursive functions are used when there is a repetitive pattern.

(g) **True**

(a) False

Q12

What will be the range of numbers generated by function rand () % 9? (a) 0 to 9

(b) 1 to 9

(c) 0 to 8

(d) 1 to 8

Q13

What will be the correct syntax to declare two-dimensional array of float data type?

(a) float arr{2}{2} ;

(e) float arr[2][2] ;

(b) float arr[2,2] ;

(c) float[2][2] arr ;

Q14

When a function finishes its execution then,

(a) The control return to its Prototype

(b) The control returns to its definition

(f) Control returns to statement following function call

(c) The compiler stop execution of whole program

Q15

Consider the following statements to initialize a two-dimensional array.

i. int arr[2][3] = {4, 8, 9, 2, 1, 6} ;

ii**. int arr[3][2] = {4, 8, 9, 2, 1, 6} ;**

iii. int arr[][2] = {{4,8},{9, 2},{1, 6}} ;

Which of the following option(s) are correct to initialize a two-dimensional array with 3 rows and 2 columns?

(a) (ii) only

(b) (iii) only

(c) (ii) and (iii)

(d) (i) and

Q16

Editors are used to compile the code.

(a) True

(b) False

Q17

What are global variables? (1)

ANS

Global variables are those that are defined outside of main. It can be accessed in entire program.

Q18

Is it possible to evaluate the size of structure, if yes then how? (1)

ANS

YES

```
#include <iostream.h>
#include <stdlib.h>
struct VehicleParts
{
int wheels;
int seats;
```

```
VehicleParts()
{
cout << "\n VehicleParts - default constructor";
}
    VehicleParts(int wheels, int seats)
    {
    this->wheels = wheels; this->seats = seats; cout << "\n
    VehicleParts - parameterized constructor";
    }
```

Q19

Write down the general syntax of switch statement. (22)

ANS

switch (*variable/expression*)

{

case constant1 : statementLlist1 ; case constant2: statementLlist1 ; default: statementLlist1 ; }

Q20

What will be the output of following code segment? (3)

```
int x[5] = {2, 4, 5, 7, 1} ;
int *ptr =&x[2];
cout << (*ptr)++
<<" " ; cout <<
*ptr++ ;
```

ANS

5 6

Q22

What is the difference between compiler and interpreter? (5)

ANS

compiler and interpreter are system software but the difference is that the complier compile the whole program but the interpreter is complied line by line. Compiler are efficient in performance.

Q23 (10)

Write a recursive function that takes three arguments (an integer array, starting subscript ‘s’ and ending subscript ‘e’).

In first recursive call, the function should display the array from subscript ‘s’ (s = 0) to ‘e’ (e = size of array). In each successive call, the function should print the array from index s+1 to e. The function should stop processing and return when starting subscript becomes equal to ending subscript.
For example, if user enters values for array 2, 3, 4, 5, 6 then the recursive

function must display the following output.

2 3 4 5 6

3 4 5 6

4 5 6

5 6

6

ANS

```
#include<iostream.h>
#include<conio.h>

void recursive(int [],int,int);
void main()

{

   int array[5];

   for(int i=0;i<5;i++)

   {

      cout<<"\nEnter the "<<i<<" Index number :";
      cin>>array[i];

   }

   recursive(array,0,4); //0 is the starting index and 4 is the ending

subscript getche(); }

void recursive(int arr[],int s,int e)

{

   if(s!=e+1)
```

```
    {
        for(int i=s;i<=e;i++)
        cout<<arr[i]<<"\t";;


        cout<<endl;
        s++;

        recursive(arr,s,e); //Recursive call
    }
}
```

Q1

What is function of **cout** ?

(a) To send data to printer

(b) To read data from keyboard

(c) To display message

(d)To display output on the screen

Q2

< , <= , > , >= are called ---------- operators.

(a) Logical

(b) Arithmetic

(c) Relational

(d) Conational

Q3

In while loop the loop counter must be initialized,

(a) With in the loop

(e) Before entering the loop

(b) At the end of the loop

(c) None of the given options

Q4

Data Size of the file is always the actual size of the file.

(f) Greater than

(a) Equal to

(b) Less than or equal to

(c) None of the above

Q5

The precedence of * is higher than dot operator (.)operator

(g)True

(a) False

Q6

Let ptr1 and ptr2 are pointer variables that points to integer data type then which one of the following arithmetic is allowed,

(a) ptr1 + ptr2

(b) ptr1 - ptr2

(h)ptr1 * ptr2

(c) ptr1 / ptr2

Q7

Word processor is

(a) Operating system

(i) Application software

(b) Device driver

(c) Utility software

Q8

What will be the range of numbers generated by function rand () % 9? (a) 0 to 9

(b) 1 to 9

(j) 0 to 8

(c) 1 to 8

Q9

How many bytes will the pointer ***intPtr*** of type **int** move in the following statement?

```
intPtr += 3 ;
```

(a) 3 bytes

(b) 6 bytes

12 bytes

(c) 24 bytes

Q10

What will be the correct syntax to assign an array named ***arr*** of 5 elements to a pointer ***ptr***?

(a) *ptr = arr ;

(b) ptr = arr ;

(c) *ptr = arr[5] ;

(d) ptr = arr[5] ;

Q11

What will be the output of the following code segment?

```
char *x = "programming" ;
cout << *(x+2) << *(x+3) << *(x+5) << *(x+8) ;
```

(a) prgm

(b) rorm

(e) ogai

(c) ramg

Q12

There is a pointer variable named ***ptr*** of type int then address of which type of variable the ***ptr*** will store in it?

(a) variable of type char

(b) variable of type short

(f) variable of type int

(c) variable of type double

Q13

Flow charts explain the working of a program in pictorial format.

(g)True

(a) False

Q14

The object may be used both for file input and file output (a) fstream,

(h)ifstream,

(b) ofstream,

(c) none of the given options.

Q15

Most efficient method of dealing with structure variables is to define the structure globally

(i) True

(a) False

Q16

If a variable is passed by value to a function and the function makes some changes to that variable then it

(j) does not affect the original variable

(a) affects the original variable

(b) causes syntax error

(c) None of the given options

Q17

How does elements of two-dimensional array store into memory? (1) ANS

Two dimensional arrays are also stored in liner order. As like one dimensional array.

Q18

What is a structure? (1)

ANS

In structure, we introduce a new data type. "A structure is a collection of variables under a single name. These variables can different types, and each has a name that is used to select it from the structure"

Q19 (2)
When a pointer is incremented then how many bytes will it move to change its address?

ANS

If an integer occupies four bytes in the memory, then the *yptr++; will* increment its value by four.

Q20
What happens when we increment a pointer? (3)
ANS

.

Q
2
1
What are the advantages of random access file over sequential access file? (5)

Q22
Write a C/C++ program which calculates the aggregate of a student. The aggregate can be calculated by the formula: (10)

Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24

If the aggregate of a student is less than 150 then the program should display message
"You can not be admitted to VU" otherwise display the message

"Congratulation! You admitted in VU "

ANS

```
#include<iostream.h>
#include<conio.h>

main()

{
```

```
int m,f;
float a;
m=254;
f=340;

a = ((m*2) + (f*4))/24;
if(a < 150)

{

    cout <<"You can not be admitted to VU";

}
else

{

    cout <<"Congratulation! You admitted in VU ";

}

//Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24


getche();

}
```

Q1

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

(a) cplext.h

(b) ctype.h

(c) stdio.h

(d) delay.h

Q2

The header file which is used for input and output is

(a) maths.h

(b) string.h

(c) iostream.h

(d) ctype.h

Q3

Suppose **int multi[5][10];** when we are using **multi , it means,

(a) Single dereferencing

(b) Single referencing

(c) Double referencing

(d) Double dereferencing

Q4

To access the data members of structure is used.

(e) dot operator (.)

(a) * operator

(b) €operator

(c) None of given.

Q5

The precedence of * is higher than dot operator (.)operator

(f) True

(a) False

Q6

Which of the following is the starting index of an array in C++?

(g) 0

(a) 1

(b) -1

(c) any number

Q7

When a call to function statement is encountered,

(h)The control transfers to its Prototype

(a) The control transfers to its definition

(b) Control returns to statement following function call

(c) The compiler stops execution of whole program

Q8

A function must always return value.

(a) True

(i) False

Q9

If an array has 100 elements, what is allowable range of subscripts? (a) 0 – 99

(b) 1 – 99

(c) 0 – 100

(d) 1 – 100

Q10

If a pointer appears on left hand side of an assignment operator then right side of that assignment operator must be,

(a) Variable name

(b)Address of variable

(c) Variable value

(d) Constant

Q11

Editors are used to compile the code.

(a) True

(b)False

Q12

Which bitwise operator returns false if both bits are 1?

(a) AND

(b) XOR

(c) NOT

(c) OR

Q13

What does !(7) evaluate to in decimal where ! is a NOT operator?

(d)7

(a) 8

(b) 9

(c) 10

Q14

Structures cannot be passed as Function Parameters

(a) True

(b) **False**

Q15

When break statement is encountered in a loop body it,

(a)Transfers the control outside from current loop

(b) Transfers the control outside from current program

(c) Enforces the next iteration of loop

(d) Generates compile time error.

Q16

A union is a user-defined data type that contains only from its list of members at a time.

(a) One object

(b)Two objects

(c) Three objects

(d) None of the given options

Q17

Why programming is important? Describe in ONE line. (1)

"A program is a precise sequence of steps to solve a particular problem."

Q18

Which bitwise operator returns true if both bits are different and returns false if both bits are same? (1)

ANS

1. !=
2. ==

Q19

Why we close a file after use? (2)

ANS

To save our data stored on file. Also this process makes our program fast and reliable.

Q20

Can you use an assignment operator to assign the value of one C-string to another? (3)

ANS

Yes we can assign value c-string to another
i.e char a={„I Love Pakistan“};
char b={„I Love Pakistan“};

Q21

The statement int Name [2][2]; define a 2x2 array, Write the code which read data from keyboard for this array. (5)

ANS

```
for(int i=o; i<2; i++)
{
 for (w=0; w<2; w++)
        {
                cin >>Name[i][w];
        }
  cout <<endl;
}
for(int i=o; i<2; i++)
{
 for (w=0; w<2; w++)
        {
                cout<<Name[i][w]<<” ”;
        }
  cout <<endl;
}
```

Q22

Write a program which reads a text file "**PlayersInfo.txt**" residing in the current directory. Open the file **PlayersInfo.txt** in read mode and assign these values to the struct **Player;** assume order of the data in the file to be exactly the same as the
order of struct attributes. The struct **Player** has following attributes

i) Name
ii) Height
iii) Age
iv) Score
v) Game

After reading the file and assigning values to the struct, in the end close the file

PlayersInfo.txt. (10)

Q1
The size of int data type is
(a) 1 bytes
(e) 2 bytes
(b) 3 bytes
(c) 4 bytes

Q2
When the logical operator AND (&&) combine two expressions exp1 and exp2 then the result will be true only,
(a)When both exp1 and exp2 are true
(b) When both exp1 and exp2 are false
(c) When exp1 is true and exp2 isfalse
(d) When exp1 is false and exp2 istrue

Q3
The correct syntax of do-while loop is,
(a) (condition) while; do { statements; };
(b) { statements; } do-while ();
(c) while(condition); do { statements; };
(e) do { statements; } while (condition);

Q4
provide communication channels between files and program.
(a) Streams
(b) Language like C++
(f) Function seekg()
(c) None of the above

Q5
All elements of an array must be of,
(a) different data type
(b) float data only

(c) character data only

(g)same data type

Q6

Function seekg() takes parameter(s).

(a) 0

1

(b) 2

(c) 3

Q7

Structures help to define program-specific_.

functions

(a) datatypes

(b) Arithmetic operations

(c) None of the given options.

Q8

In the declaration of two dimensional array,

(a)First index represents row and second represents column **(b)** First index represents column and second represents row

(c) Both indexes represent rows

(d) Both indexes represent column

Q9

What will be the result of arithmetic expression 6+27/3*3?

(e) 33

(a) 45

(b) 9

(c) 30

Q10

Which of the function call is ***call by value*** for the following function prototype?

```
float area (int);
```

(a) area(&num) ;

(f) area(num) ;

(b) area(int num) ;

(c) area(*num) ;

Q11

How many bytes are occupied by declaring following array of characters? char str*+ = “programming”;

(a) 10

(b) 11

(c) 12

(d) 13

Q12

What will be the correct syntax to assign an array named ***arr*** of 5 elements to a pointer ***ptr***?

(a) *ptr = arr ;

(b) ptr = arr ;

(e) *ptr = arr[5] ;

(c) ptr = arr[5] ;

Q13

Let ptr1 and ptr2 are pointer variables then which of the following arithmetic operation is allowed on pointers?

(a) Addition

(b) Subtraction

(c) Multiplication

(f) All of the above

Q14

The variables having a name, type and size are just like empty boxes.

(g) True

(a) False

Q15

When break statement is encountered in a loop body it,

(a)Transfers the control outside from current loop

(b) Transfers the control outside from current program

(c) Enforces the next iteration of loop

(d) Generates compile time error.

Q16

If two programs **a** and **b** are trying to open a file **xyz.txt** at approximately same time then

(e) Both programs will generate error

(a) One of them will succeed in opening that file and other will fail **(b)** Both programs will open the file

(c) One of the program will re-start

Q17

What is meant by array manipulation? (1)

Q18

What will be the value of x after the execution of the following code segment? (1)

```
int x =10;
int y =30;

int *xptr = &x; x
= *xptr + 10;
```

Q19 (2)

What is the output of the code given below? void main()

```
{
 int a=10,b=20;
 char x=1,y=0;
 if(a,b,x,y)
 {
   cout << "EXAM";
 }
 }
```

Q
2
0
What is Overflow condition? (3)

ANS

When we try to store larger information in a variable, than a data type can store, overflow condition occurs.

Q21

Write code which read a string not greater than 20 characters fromkeyboard stored it in an array Name and display it on the screen. (5)

ANS

```
char string[19];
cout<<"Enter a
string"; cin >>
string;
```

Q22 (10)

Write a C++ program which contains a user-define function named ***convertHeight*** which takes height of person in centimeter as an argument. This function converts the height in centimeter into feet and inches and displays them on the screen.

Program should prompt the user to enter height in centimeter and pass it to function ***convertHeight*** as an argument which displays height in feet and inches.

Hint:

1 foot = 12 inches

1 inch = 2.5 cm

ANS

```
#include<iostrea
m.h>
#include<conio.h
>

void convertHeight
(int); main()
{
 int hight;
 cout <<"Enter the High of the Person = "; cin
 >> hight;
 convertHeight(hight);

 getche();
}

void convertHeight (int f)
{
 //1 foot = 12 inches
 //1 inch = 2.5 cm

int i,c;
i = f*12;
c = i*2.5;
cout <<"high in Feet = "<<f<<endl; cout
<<"high in inches = "<<i<<endl; cout
<<"high in CM = "<<c<<endl;

}
```

Q1

The data type of size one byte is

(a) char
(b) int
(c) long
(d) double

Q2

If Num is an integer variable then Num*= 4; means,

(a) Multiply Num 4 times
(b) Multiply 4 with Num and display
(f) Multiply 4 with Num and assign the result to Num (c) Add 4 with Num

Q3

Member function tellg() returns the current location of the pointer.

(a)tellptr()

(b) write()

(c) seekg()

(d) get()

Q4

If we want to store a string "abc" in an array str then the size of this array must be at least,

(e) 2

(a) 3

(b) 4

(c) 5

Q5

Pointer is a variable which store,

(a) Values

(b) Data

(f) Memory Address

(c) Data Type

Q6

C is widely known as development language of operating system. (a) Linux

(g)Windows

(b) Unix

(c) Mac OS

Q7

C++ is a case-sensitive language

(h) **True**

(a) False

Q8What is the output of the following code?

for (int a = 1; a <= 1; a++) cout << a++; cout << a;

(a) 22

(b)12

(c) 23

(d) 13

Q9

A continue statement causes execution to skip to (a)the return 0; statement

(b) the first statement after the loop

(c) the statements following the continue statement

(d**) the next iteration of the loop**

Q10

If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block? (a) parentheses ( )

(b) **braces { }**

(c) brackets [ ]

(d) arrows < >

Q11

What will be the correct syntax for the following function call?

float square (int &);

(a) square (int num);

(e)square (&num);

(b) square (num);

(c) square (*num);

Q12

Which of the following is the correct way to assign an integer value 5 to element of a matrix say „m" at second row and third column?

(f) (a) m[2][3] = 5 ;

(b) m[3][2] = 5 ;

(c) m[1][2] = 5 ;

(d) m[2][3] = „5";

Q13

How many dimensions does n-dimensional array has?

(g) n dimensions

(a) 2n dimensions

(b) (n+1) dimensions

(c) (n-1) dimensions

Q14

Consider the following code segment. What will be the output of following code?

```
int addValue
(int *a){ int b =
(*a) + 2; return
b ;
ma
in
()
{
int
x
=6
;
cout << x << "," ;
```

```
cout << addValue(&x)
<< "," ; cout << x ;
}
```

(a) 6,8,6

(b) 6,6,8

(c) 6,8,8

(d) 6,6,6

Q15

If most significant bit of un-signed number is 1 then it represents a positive number.

(a) True

(b) False

Q16

When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,

(a) Contiguous memory location

(c) Matrix

(b) Columns

(c) Rows

Q17

What is the functionality of the function:**char *strncat (char *s1, const char *s2, size_t n) (1)**

ANS

Q18

Write a piece of code that outputs three values of type int, long and float to a stream. (1)

ANS

```
main()
{
int a;
long b;
float c;
a = 10;
b= 124568979;
c = 6.57;
cout <<a<<"\t"<<b<<"\t"<<c;

getche();
```

Q19

Which bit of the number is used as a sign bit? (2)

ANS

The most significant bit is used as a sign bit.

Q20

What is difference between single-dimensional and multi-dimensional array?

ANS

Single dimentional array used to stored lists and muli dimestional arrays used to stored value as tabler formate i.e matrix.

Q21

Write down the C++ program that calculates the Zakat on the amount entered by the user

Note: Zakat is 2.5% of the given amount (5)

ANS

```
main()
{
int amount;
float zakat;
cout <<"Enter the Amount = “;
cin >>amount;
zakat = (amount*2.5)/100;
cout <<"Amount = "<<amount<<endl; cout
<<"Amount = "<<zakat<<endl; getche();
}
```

Q22

What is meant by scope of identifiers? Differentiate between different scope of identifiers and explain them with examples? (10)

Now this variable „i“ can be used in any statement inside the function func1(). But consider this variable being used in a different function like: void func2()

```
{

int k = i + 4; //Compilation error
}
```

The variable „i“ belongs to func1() and is not visible outside that. In other words, „is local to func1().

Q1

What is function of **cout** ?

(a) To send data to printer

(b) To read data from keyboard

(c) To display message

(d) **To display output on the screen**

Q2

For one byte there are_combinations of values that can be stored in computer.

(A) 2^6

(B) 2^7

(C) 2^8

(D) 2^4

Q3

provide communication channels between files and program.

(a) Streams

(b) Language like C++

(c) Function seekg()

(d) None of the above

Q4

The data type before a function name represents its,

(e) Return Type

(a) Function data

(b) Function arguments

(c) Function name

Q5

In C/C++ language when an array is passed to a function then by default its passing mechanism is,

(a) Call by value

(f) Call by Reference

(b) It depends on type of array

(c) It depends on the return type of function.

Q6

Array is a data structure which store

(a) Memory addresses

(g)Variables

(b) Data Type

(c) Data

Q7

If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block?

(a) parentheses ( )

(b)braces { }

(c) brackets [ ]

(d) arrows < >

Q8

Array is passed by value to a function by default.

(a) True

(e) False

Q9

Which of the following is the correct function call having array named *student* of 10 elements as a parameter.

(a) addRecord(student[]) ;

(b) addRecord(student) ;

(f) addRecord(student[10]) ;

(c) addRecord(*student) ;

Q10

What will be the correct syntax for initialization of pointer ***ptr*** of type int with variable ***x***?

(a) int ptr = &x ;

(b) int ptr = x ;

(g)int *ptr = &x ;

(c) int ptr* = &x ;

Q11

What will be the correct syntax for initialization of pointer ***ptr*** with string "programming"?

(a) char ptr = 'programming' ;

(b)char *ptr = "programming" ;

(c) char *ptr = 'programming' ;

(d) *ptr = "programming" ;

Q12

The condition in while loop may contain logical expression but not relational expression.

(e) True

(a) False

Q13

We want to access array in random order which approach is better?

(f) Pointers

(a) Array index

(b) Both pointers and array index are better

(c) None of the given options.

Q14

Single line comments explaining code would be preceded like in the following example.

(a) /*

(g)//

(b) /

Q15

Function write() takes as parameter(s). (a) String of pointer type

(b) String and no. of bytes to be written

(c) Pointer array of characters and delimiter

String of variable lengths, no. of bytes to be read and flags

Q16

Structure is a collection of under a single name.

(a)Only Functions

(b) Only Variables

(c) Both Functions and Variables

(d) None of the given options

Q17

What will be the correct syntax to initialize a pointer „**ptr**" with two-dimensional array „**m**"? (1)

ANS

```
int m[2][2];
int * ptr;
ptr = *m;
```

Q18

Which one of the loop (while or do-while) must be used if it is necessary to execute a loop at least once? (1)

ANS

do-while loop

Q19

Identify each of the following function as string conversion function or string manipulation function. (2)

double atof(const char *nptr)

char *strcpy (char *s1, const char *s2) int

atoi(const char *nptr)

ANS

1. **double atof(const char *nptr) ---€**Converts the string nPtr to double. 2. **char *strcpy (char *s1, const char *s2) -€** Copies string **s2** into character array **s1**. The value of is returned.

3. **int atoi(const char *nptr)--€** Converts the string **nPtr** to **int**.

Q20

What is difference between single-dimensional and multi-dimensional array? (3)

ANS

Single dimentional array used to stored lists and muli dimestional arrays used to stored value as tabler formate i.e matrix.

Q21

What will be the output of following code segment?(5)

```
int num[10] = {2, 3, 5, 8, 9, 10, 12, 15, 19, 20} ;
int *ptr = num ;
for (int i=0; i<10; i+=2){
cout << *(ptr+i) << “, ”;
}
```

ANS

2, 5, 9, 12, 19,

Q22

Write a C++ program which contains a user-define function named ***convertHeight*** which takes height of person in centimeter as an argument. This function converts the height in centimeter into feet and inches and displaysthem on the screen.(10)

Program should prompt the user to enter height in centimeter and pass it to function ***convertHeight*** as an argument which displays height in feet and inches.

Hint:

1 foot = 12 inches
1 inch = 2.5 cm

ANS

```
#include<iostrea
m.h>
#include<conio.h>

void convertHeight
(int); main()
{
 int hight;
 cout <<"Enter the High of the Person = "; cin
 >> hight;
 convertHeight(hight);

 getche();
}

void convertHeight (int f)
{
 //1 foot = 12 inches
```

```
//1 inch = 2.5 cm

int i,c;
i = f*12;
c = i*2.5;
cout <<"high in Feet = "<<f<<endl; cout
<<"high in inches = "<<i<<endl; cout
<<"high in CM = "<<c<<endl;

    }
```

Q1

Compiler is a

(a) System software

(b) Application Software

(c) Driver

(d) Editor

Q2

In while loop the loop counter must be initialized,

(a) With in the loop

(e) Before entering the loop

(b) At the end of the loop

(c) None of the given options

Q3

If Num is an integer variable then Num*= 4; means,

(a) Multiply Num 4 times

(b) Multiply 4 with Num and display

(f) Multiply 4 with Num and assign the result to Num (c) Add 4 with Num

Q4

In C/C++ ,the arguments are passed by to a function by default . (a) reference

(g) value

(b) data

(c) type

Q5

Disks is divided into with power of_. (a) **Chunks, 2n**

(b) Blocks, n^2

(c) Blocks, 2^n

(d) Chunks, n^2

Q6

C is widely known as development language of operating system. (a) Linux

(h)Windows

(b) Unix

(c) Mac OS

Q7

Assignment operator „=“ is a

(a) Unary operator

(b)Binary operator

(c) Ternary operator

(d) None of the given options

Q8

Consider the following code segment. What will be the output of the following program?

```
int func(int) ;
int num = 10 ;

int main(){
int num ;
num = 5 ;

cout << num ;

cout << func(num) ;

}

int func(int x){
return num ;

}
```

(a) 5, 5

(b) 10, 5

(c) 5, 10

(d) 10, 10

Q9

Name of an array is a constant pointer.

(a) **True**

(b) False

Q10

What will be the correct syntax to assign an array named ***arr*** of 5 elements to a pointer ***ptr***?

(a) *ptr = arr ;

(b) ptr = arr ;

(c) *ptr = arr[5] ;

(d) ptr = arr[5] ;

Q11

If there are $2^{(n+1)}$ elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

(a) n elements

(b) (n+1) elements

(c) 2(n+1) elements

(d) $2^{(n+1)}$ elements

Q12

In C/C++, null character is represented as

(e) \n

(a) \0

(b) \t

(c) \

r Q13

How many nested loop would be required to manipulate n-dimensional array? (a) 2n

(b)n

(c) n +1

(d) n -1

Q14

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

ptr[3]

(a) (ptr+3)

(b) *(ptr+3)

(c) Both 1and 3

Q15

Single line comments explaining code would be preceded like in the following example.

(a) /*//

(b) /

(c) //

Q16

If a variable is passed by value to a function and the function makes some changes to that variable then it

does not affect the original variable

(a) affects the original variable

(b) causes syntax error

(c) None of the given options

Q17

What is meant by *num and &num? [1]

ANS

* num is a pointer and &num is a reference to that pointer. Q18

Suppose there is a pointer to structure ***sPtr**. How can we access the data member „**name**“ with **sPtr**? [1]

ANS

Structure data members using pointers Using the * operator; (*sptr).name

Q19

Why we close a file after use? [2]

ANS

To save our data stored on file. Also this process makes our program fast and reliable

Q20

Define Flow chart. [3] ANS

Flow Chart

A flow chart is a pictorial representation of a program. There are labeled geometrical symbols, together with the arrows connecting one symbol with other. A flow chart helps in correctly designing the program by visually showing the sequence of instructions to be executed.

Q21

Write down the function definition if we want to pass the arguments to a functionby reference without changing the values stored at that addresses. [5]

Q22

From writing to execution of the program following software are used explain for what purpose each is used. [10]

Editor
Compiler/Interpreter
Linker
Loader

ANS

Editors *is* a tool for writing the code of a program. For this purpose we used Editors in which we write our code. We can use word processor too for this, but word processors have many other features like bold the text, italic, coloring the text etc, so when we save a file written in a word processor, lot of other information including the text is saved on the disk. For programming purposes we don‟t need these things we only need simple text. Text editors are such editors which save only the text which we type. So for programming we will be using a text editor

Compiler and Interpreter

Compilers translate the English like language (Code written in C) into a language (Machine language) which computers can understand. The Compiler read the whole program and translates it into machine language completely. The difference between interpreter and compiler is that compiler will stop translating if it finds an error and there will be no executable code generated whereas Interpreter will execute all the lines before
error and will stop at the line which contains the error. So Compiler needs syntactically correct program to produce an executable code. We will be using compiler in our course As we write the code in English and we know that computers can understand only 0s and 1s. So we need a translator which translates the code of our program

into machine language. There are two kinds of translators which are known as Interpreter and Compilers. These translators translate our program which is written in C-Language into Machine language. Interpreters translates the program line by line meaning it reads one line of program and translates it, thenit reads second line, translate it and so on. The benefit of it is that we get the errors as we go along and it is very easy to correct the errors. The drawback of the interpreter is that the program executes slowly as the interpreter translates the program line by line. Another drawback is that as interpreters are reading the program line by line so they cannot get the overall picture of the program hence cannot optimize the program making it efficient.

· **Linker** Most of the time our program is using different routines and functions that are located in different files, hence it needs the executable code of those routines/functions. Linker is a tool which performs this job, it checks our program and includes all those routines or functions which we are using in our program to make a standalone executable code and this process is called Linking

Loader after a executable program is linked and saved on the disk and it is ready for execution. We need another process which loads the program into memory and then instruct the processor to start the execution of the program

from the first instruction (the starting point of every C program is from the main function). This processor is known as loader. Linker and loaders are the part of development environment. These are part of system software.

Q1

There are mainly ----------types of software

(a)Two

(b) Three

(c) Four

(d) Five

Q2

< , <= , > , >= are called ---------- operators.

(a) Logical

(b) Arithmetic

(e) Relational

(c) Conational

Q3

In order to get 256 from the number 2568 we divide this number by 10 and take, (a) Its remainder

(b) The number

Its quotient

(c) Its divisor

Q4

If int x = 10; then the value of x/= 3; will be,

(a) 10**3**

(b) 13

(c) 1

Q5

How many parameter(s) function getline() takes?

(a) 0

(b) 1

(c) 2**3**

Q6

Suppose **int multi[5][10];** when we are using **multi , it means,

(a) Single dereferencing

(b) Single referencing

(c) Double referencing

(d) Double dereferencing

Q7

To access the data members of structure is used.

dot operator (.)

(a) * operator

(b) €operator

(c) None of given.

Q8

There is NO difference between **bitwise AND operator (&)** and **Logical AND (&&) operator.**

True

(a) False

Q9

Which of the following data type(s) can operate on modulus operator „%“? **float, int**

(a) float, double

(b) int

(c) char

Q10

What's wrong with this while loop?

while((i < 10) && (i > 24))

(a) the logical operator && cannot be used in a test condition

(b) the while loop is an exit-condition loop

the while loop is an exit-condition loop

(c) the test condition is always true

Q11

The switch structure is a_construct

(a) single-selection

(b) bi-selection

multiple-selection

(c) unconditional

Q12

Keyword „array“ must be used to declare an array.

(a)True

(b) False

Q13

What will be the correct syntax to declare two-dimensional array of float data type?

(a) float arr{2}{2} ;

float arr[2][2] ;

(b) float arr[2,2] ;

(c) float[2][2] arr ;

Q14

When an array element is passed to a function then this array element is passed to the function,

By reference

(a) By data type

(b) By value

(c) By data

Q15

Which of the following operator is used to access the value of variable pointed to by a pointer?

(a) * operator

(b) -> operator

(c) && operator

& operator

Q16

Paying attention to detail in designing a program is

(a) Time consuming

(b) Redundant

Necessary

(c) Somewhat Good

Q17

How does elements of two-dimensional array store into memory?
(1) Two dimensional arrays are also stored in liner order. As like one dimensional array.

Q18

Which strategy is used by binary search algorithm to search a number? (1)

ANS

„divide and conquer" strategy is applied.

Q19

Write down the general syntax of switch statement. (2)

ANS

switch (*variable/expression*)

{

case *constant1 : statementLlist1* ; case *constant2: statementLlist1* ; *default: statementLlist1* ; **}**

Q20

What is a Linker? (3)

Linker Most of the time our program is using different routines and functions that are located in different files, hence it needs the executable code of those routines/functions. Linker is a tool which performs this job, it checks our program and includes all those

routines or functions which we are using in our program to make a standalone executable code and this process is called Linking

Q21
What are similarities and differences between Structures and Unions? (5)

Structure

In structures, the data members are public by default. It means that these are visible to all and anyone can change them. Is there any disadvantage of this? Think about the date.
syntax
struct student
{
char
name[60];
char
address[100];
float GPA;
};
Unions We have another construct named union. The concept of union in C/C++ is: if we have something in the memory, is there only one way to access that memory location or there are other ways to access it. We have been using int and char interchangeably in our programs. We have already developed a program that prints the ACSII codes. In this program, we have stored a char inside an integer. Is it possible to have a memory location and use it as int or char interchangeably? For such purposes, the construct union is used. The syntax of union is: union intOrChar
{
i
n
t
i
;
c
h
a
r
c
;
};

Q22
Differentiate between C and c++. (10)

1. C was the C++ predecessor. As it's name implies, alot of C remains in C++. Although not actually being more powerful than C.

2. C++ allows the programmer to more easily manage and operate with Objects, using an OOP (Object Oriented Programming) concept
3. C++ allows the programmer to create classes, which are somewhat similar to C structures. However, to a class can be assigned methods, functions associated to it, of various prototypes, which can access and operate within the class, somewhat like C functions often operate on a supplied handler pointer.
4. Although it is possible to implement anything which C++ could implement in C, C++ aids to standardize a way in which objects are created and managed, whereas the C programmer who implements the same system has a lot of liberty on how to actually implement the internals, and style among programmers will vary a lot on the design choices made
5. In C, some will prefer the handler-type, where a main function initializes a handler, and that handler can be supplied to other functions of the library as an object to operate on/through. Others will even want to have that handler link all the related function pointers within it which then must be called using a convention closer to C++.
6. C++ applications are generally slower at runtime, and are much slower to compile than C programs. The low-level infrastructure for C++ binary execution is also larger. For these reasons C is always commonly used even if C++ has alot of popularity, and will probably continue to be used in projects where size and speed are primary concerns, and portable code still required (assembly would be unsuitable then).

Q1

The remainder (%) operator is

(a) A logical operator

An arithmetic operator

(b) A relational operator

(c) A division operator

Q2

If int sum = 10; then the value of the statement sum = sum + 3 ; is , (a) 7

(b) Illegal statement

(c) Garbage value

13

Q3

Which of the following function(s) is/are included in **ctype.h** header file? (a) isdigit(int c)

(b) isxdigit(int c)

(c) tolower(int c)

All of the above

Q4

In C/C++ which of the following header file is used for string manipulation? **stdlib.h**

(a) string.h

(b) strings.h
(c) stype.h

Q5

provide communication channels between files and program.
(a) Streams
(b) Language like C++
Function seekg()
(c) None of the above

Q6

translates high level language program into machine language code (a) Debugger
(b) Editor
Compiler
(c) Linker

Q7

Which of the following data type(s) can operate on modulus operator „%“? **float, int**
(a) float, double
(b) int
(c) char

Q8

C++ is a case-sensitive language
True
(a) False

Q9

To include code from the library in the program, such as iostream, a directive would be called up using this command.
(a) #include “iostream.h”
(b) include <iostream.h>
(c) include <iostream.h>
#include <iostream.h>

Q10

What will be the range of numbers generated by function rand () % 9? (a) 0 to 9
(b) 1 to 9
0 to 8
(c) 1 to 8

Q11

An array stores the numbers into consecutive memory locations.
True
(a) False

Q12

Which of the following is the correct statement for the following

declaration? const int *ptr.

(a) ptr is a constant pointer

ptr is constant integer pointer

(b) ptr is a constant pointer to int

(c) ptr is a constant pointer to int

Q13

Which of the following header file defines the **rand()** function?

(a) iostream.h

(b) conio.h

stdlib.h

(c) stdio.h

Q14

Consider the following code segment. What will be the output of following code?

```
int addValue
(int *a){ int b =
(*a) + 2; return
b ;
}
ma
in
()
{
int
x
=6
;
cout << x << “,” ;
cout << addValue(&x)
<< “,” ; cout << x ;
}
```

(a) 6,8,6

(b) 6,6,8

(c) 6,8,8

(d)

6,6,

Q15

Identifier is a name that can be given to variables, labels and functions.

True

(a) Fals

Q16

For which array, the size of the array should be one more than the number of elements in an array?

(a) Int
(b) Char
(c) Double
float

Q17

Give a precise definition of f**unction** . (1)

ANS

Functions In C/C++, functions are a way of modularizing the code. A bigger problem is broken down into smaller and more manageable parts. There is no rule of thumb for the length of each part but normally one function‟s length is not more than one screen.

Q18

What will be the size of array if we initialize an array with declaration: **int arr[] = {0, 0, 0, 0};**? (1)

ANS

int
arr
[3]
;
Q1
9
What is the difference between **switch** statement and **if** statement. (2) ANS
In switch statement only one variable can be tested on various condition but using if we can tested multi variables in single statement

Q20

Evaluate the following arithmetic expressions. (3)

a) X = 2 + 6 * 4– 4 * 20 / 5 +3 * 2
b) Y = (6 * 7) - (2 + 3) * (3 – 1) + 5 * (3 +1)

ANS

a) X = 2 + (6 * 4)–((4 * 20) / 5) + (3 * 2)
b) Y =((6 * 7) - (2 + 3) * (3 – 1) +(5 * (3 +1)))

a) 16
b) 52

Q21

What is the difference between = in C as compared to = used in algebra. (5)

ANS

In C = sign is used to assigned the value in algebra = sign is show that the both side are equal.
In C there must be a variable on the = sign and the right side of the = sign must be a arithmetic expression, variable or a value.
In algebra both side of the equation may or may not be expression. Q22
Write a program which consists of three variables Area, Per, Base, this program should find the area of triangle using the formula, (10)

Area = (Base * Per)/2

```
#include<iostream.h>
#include<conio.h>
main()
{
   float Area, Per, Base;
    // Area = (Base * Per)/2
    Per = 5.0;
    Base = 2.5;
    Area = (Base * Per)/2; cout
  <<"Area = "<<Area;
  getche();
        }
```

Q1

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

(d) cplext.h

ctype.h

(e) stdio.h

(f) delay.h

Q2

The header file which is used for input and output is

(e) maths.h

(f) string.h

iostream.h

(g) ctype.h

Q3

Suppose **int multi[5][10];** when we are using **multi , it means,

(e) Single dereferencing

(f) Single referencing

Double referencing

(g) Double dereferencing

Q4

To access the data members of structure is used.

dot operator (.)

(e) * operator

(f) €operator

(g) None of given.

Q5

The precedence of * is higher than dot operator (.)operator

True

(c) False

Q6

Which of the following is the starting index of an array in C++?

0

(d) 1

(e) -1

(f) any number

Q7

When a call to function statement is encountered,

The control transfers to its Prototype

(e) The control transfers to its definition

(f) Control returns to statement following function call

(g) The compiler stops execution of whole program

Q8

A function must always return value.

(c) True

False

Q9

If an Array has 100 elements, what is allowable range of subscripts? (e) 0 – 99

1 – 99

0 – 100

1 – 100

Q10

If a pointer appears on left hand side of an assignment operator then right side of that assignment operator must be,

(d) Variable name

Address of variable

(e) Variable value

(f) Constant

Q11

Editors are used to compile the code.

(c) True

False

Q12

Which bitwise operator returns false if both bits are 1?

(d) AND

(e) XOR

(f) NOT

OR

Q13

What does !(7) evaluate to in decimal where ! is a NOT operator?

7

(e) 8

(f) 9

(g) 10

Q14

Structures cannot be passed as Function Parameters

(c) True

False

Q15

When break statement is encountered in a loop body it,

Transfers the control outside from current loop

(d) Transfers the control outside from current program

(e) Enforces the next iteration of loop

(f) Generates compile time error.

Q16

A union is a user-defined data type that contains only from its list of members at a time.

(e) One object

Two objects

(f) Three objects

(g) None of the given options

Q17

Why programming is important? Describe in ONE line. (1)

Q18

Which bitwise operator returns true if both bits are different and returns falseif both bits are same? (1)

Q19

Why we close a file after use? (2)

Q20

Can you use an assignment operator to assign the value of one C-string to another? (3)

Q21

The statement int Name [2][2]; define a 2x2 array, Write the code which read data from keyboard for this array. (5)

Q22

Write a program which reads a text file "**PlayersInfo.txt**" residing in the current directory. Open the file **PlayersInfo.txt** in read mode and assign these values to the struct **Player;** assume order of the data in the file to be exactly the same as the order of struct attributes. The struct **Player** has following attributes

i) Name
ii) Height
iii) Age
iv) Score
v) Game

After reading the file and assigning values to the struct, in the end close the file PlayersInfo.txt. (10)

Q23
Q24

Write a program to convert upper case letter to lower case letter. (5)
Write a program to convert lower case letter to upper case letter. (5

Q2

Write a program to convert upper case letter to lower case letter.

(5) Ans:

```
#include <iostream>


using std::cout;

using std::cin;

using std::endl;
```

```
#include <stdlib.h>


int main()

{

    char inputString[100];

    char lowerCase[100];

     cout<<"Please enter a string (maximum 100 characters): ";

    gets(inputString);

     int i=0;

    for(i=0; i<strlen(inputString); i++)

    {

        lowerCase[i] = tolower(inputString[i]);

    }

    lowerCase[i]='\0';

    puts(lowerCase);

    system("PAUSE");

    return 0;

}
```

Write a program to convert lower case letter to upper case letter. (5) Ans:

```
#include <iostream>


using

std::cout;
```

```
using
std::cin;
using
std::endl;
#include
<stdlib.h>
int main()
{
    char
    inputString[
    100]; char
    upperCase[1
    00];
     cout<<"Please enter a string
    (maximum 100  characters): ";
    gets(inputString);
     int i=0;
    for(i=0; i<strlen(inputString); i++)
    {
        upperCase[i] =
    toupper(inputString[i]); }
    upperCase[i]
    ='\0';
    puts(upperC
    ase);
    system("PA
```

```
    USE");
    return 0;
}
```

CS201

GRAND QUIZ FILE (NEW) ALMOST 800 + MCQS

BY NIMRA KHAN

1--- isusedforinputfileorforreadingfromthefile.

Tellg()

2. Followingisthedeclarationa----------

array.Intarr[2][2][2] 3-demensional

3. ! (x < 3) meansin c++ that

X is greater than 3

4. Which of the following option is correct to compare the declaration of thefunction?

(parameter1,paramet

er2) {

// code to be executed

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MIDTERM EXAMINATION
Spring 2010

Question No: 1 (Marks: 1) - Please choose one
In order to get 256 from the number 2568 we divide this number by 10 and take,
► Its remainder
► The number
► **Its quotient**
► Its divisor

Question No: 2 (Marks: 1) - Please choose one
The correct syntax of do-while loop is,
► (condition) while; do { statements; };
► { statements; } do-while ();
► while(condition); do { statements; };
► **do { statements; } while (condition);**

Question No: 3 (Marks: 1) - Please choose one
Which of the following function(s) is/are included in **stdlib.h** header file?

► double atof(const char *nptr)
► int atoi(const char *nptr)
► char *strcpy (char *s1, const char *s2)
► **1 and 2 only (Pg 191)**

Question No: 4 (Marks: 1) - Please choose one
If the break statement is missed in switch statement then,
► The compiler will give error
► **This may cause a logical error (Pg 76)**
► No effect on program
► Program stops its execution

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Question No: 5 (Marks: 1) - Please choose one
The data type before a function name represents its,
► **Return Type (Pg 499)**

► Function data
► Function arguments
► Function name

Question No: 6 (Marks: 1) - Please choose one
Member function tellg() returns the current location of the _____ pointer. ► tellptr()
► write()
► seekg()
► get() (Pg 215)

Question No: 7 (Marks: 1) - Please choose one
What does 5 | 6 , evaluate to in decimal where '|' is bitwise OR operator?

► 3
► 4
► 5
► 7

5 | 6 =
0 1 0 1
0 1 1 0
----
0 1 1 1 = 7

Question No: 8 (Marks: 1) - Please choose one
C is widely known as development language of _____ operating system.
► Linux
► Windows
► Unix (Pg 12)
► Mac OS

Question No: 9 (Marks: 1) - Please choose one
What will be the result of arithmetic expression 6+27/3*3?
► 33
► 45
► 9

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► 30

Question No: 10 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?
char str[] = "programming";

► 10
► 11
► **12**
► 13

Question No: 11 (Marks: 1) - Please choose one

What will be the correct syntax for initialization of pointer ***ptr*** with string "programming"?
► char ptr = 'programming' ;
► **char *ptr = "programming" ;**
► char *ptr = 'programming' ;
► *ptr = "programming" ;

pg 166
array element in each array initialized with a single character enclosed in single quote. pg 21
While assigning a character value to a char type variable single quotes are used around the character as 'a'.

Question No: 12 (Marks: 1) - Please choose one
What will be the result of expression **x%= 2**, if **x = 7**?
► **x = 1**
► x = 3
► x = 7
► x = 2

Question No: 13 (Marks: 1) - Please choose one
UNIX has been developed in _____ language.
► JAVA
► B
► **C (pg 12)**
► FORTRAN

Question No: 14 (Marks: 1) - Please choose one
Declaring structures does not mean that memory is allocated.

► **True (Pg 229)**
► False

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http://www.exforsys.com/tutorials/c-plus-plus/c-structures.html

Question No: 15 (Marks: 1) - Please choose one
What will be the value of i and j in the following code segment?

```
int i, j ;
int x[5] = {2, 3, 4, 8, 9} ;
int *ptr =&x[2];
i = (*ptr)++ ;
j = *ptr++ ;
```

► i = 5, j = 5
► i = 5, j = 8
► **i = 4, j = 8**
► i = 5, j = 9

Question No: 16 (Marks: 1) - Please choose one
When an array element is passed to a function, it is passed by ----------.

► **reference (Pg 266)**
► data type
► value
► data
When we pass ordinary variables to functions, they are passed by value because of the default behavior. But when an array is passed to a function, the default behavior changes and array is passed by reference

MIDTERM EXAMINATION 2010

Question No: 1 (Marks: 1) - Please choose one
What is the output of the following statement?
int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);
(a) 510
(b) 5
(c) 48

(d) error

Question No: 2 (Marks: 1) - Please choose one
What does !(7) evaluate to in decimal where ! is a NOT operator?
(a) 7
(b) 8
(c) 9
(d) 10

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Question No: 3 (Marks: 1) - Please choose one
The condition in while loop may contain logical expression but not relational expression. (a) True
(b) False

Question No: 4 (Marks: 1) - Please choose one
Searching is easier when an array is already sorted
(a) True
(b) False

Question No: 5 (Marks: 1) - Please choose one
If an array has 100 elements, what is allowable range of subscripts?
(a) 0 - 99
(b) 1 - 99
(c) 0 - 100
(d) 1 - 100

Question No: 6 (Marks: 1) - Please choose one
What will be the value of 'a' and 'b' after executing the following statements? a = 3;
b = a++;

(a) 3, 4
(b) 4, 4
(c) 3, 3
(d) 4, 3

Question No: 7 (Marks: 1) - Please choose one
What will be the correct syntax to initialize all elements of two-dimensional array to value 0? (a) int arr[2][3] = {0,0} ;
(b) int arr[2][3] = {{0},{0}} ;
(c) int arr[2][3] = {0},{0} ;

(d) int arr[2][3] = {0} ;

Question No: 8 (Marks: 1) - Please choose one
Which of the following functionreturns the size of a string variable?

(a) strlength()
(b) stringlen()
(c) **strlen()**
(d) strLength()

When applied to a character array, the strlen function returns the length of the string stored there,

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not its allocated size.
http://www.gnu.org/s/hello/manual/libc/String-Length.html

Question No: 9 (Marks: 1) - Please choose one What will be the range of numbers generated by function rand () % 9? (a) 0 to 9
(b) 1 to 9
(c) 0 to 8
(d) 1 to 8

Question No: 11 (Marks: 1) - Please choose one Computer can understand only machine language code.
(c) True
(d) False

Question No: 13 (Marks: 1) - Please choose one
What does 5 ^ 6 , evaluate to in decimal where '^' is Exclusive OR operator? (a) True
(b) False
Detail:-
It mean
5 = 0101
6 = 0110
5 ^ 6 = 0011
If both input is same then the output is 0 and if different then output is 1

Question No: 14 (Marks: 1) - Please choose one
If the file is not properly closed in the program, the program _____.

(a) Terminate normally
(b) Indicate Runtime error
(c) Indicate Compile time error
(d) Crashes

Eventually run out of file handles and/or memory space and crash.) http://www.codingunit.com/c-tutorial-file-io-using-text-files

Question No: 15 (Marks: 1) - Please choose one Which of the following header file include string conversion functions?

(a) **string.h**
(b) stdlib.h (Pg 190)
(c) ctype.h
(d) sconvert.h

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MIDTERM EXAMINATION
2009

Question No: 1 (Marks: 1) - Please choose one
A precise sequence of steps to solve a problem is called

- Statement
- **Program**
- Utility
- Routine

Question No: 2 (Marks: 1) - Please choose one
The Compiler of C language is written in

- Java Language
- UNIX
- FORTRON Language
- **C Language**

Question No: 3 (Marks: 1) - Please choose one
Initialization of variable at the time of definition is,

- Must

- Necessary
- **Good Programming**
- None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

- When the condition is false
- When it contain arithmetic operators
- When it contain logical operators
- **When the condition is true**

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method ➢ **True**

- False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

- Data
- **Memory Address**
- Data Type
- Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before _____ phase takes place. ➢ Editing

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- Linking
- **Compiling**
- Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

- area
- _area
- **10area**
- area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known? ➢ **for**

- **while**

- do-while
- all looping processes require that the iterations be known

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

- new line
- tab
- **null**
- carriage return

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the **rand()** function?

- iostream.h
- conio.h
- **stdlib.h**
- stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code _____

- **Makes a program easy to understand for others.**
- Make programs heavy, i.e. more space is needed for executable.
- Makes it difficult to compile
- All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop?
for (int k = 2, k <=12, k++)

- the increment should always be ++k
- the variable must always be the letter i when using a for loop
- there should be a semicolon at the end of the statement
- **the commas should be semicolons**

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Question No: 16 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

- int
- double
- float
- **char**

MIDTERM EXAMINATION
2009

Question No: 1 (Marks: 1) - Please choose one
The function of cin is
► To display message
► **To read data from keyboard**
► To display output on the screen
► To send data to printer

Question No: 2 (Marks: 1) - Please choose one
In C/C++ language the header file which is used to perform useful task and manipulation of character data is
► cplext.h
► **ctype.h (Pg 188)**
► stdio.h
► delay.h

Question No: 3 (Marks: 1) - Please choose one
How many parameter(s) function getline() takes?
► 0
► 1
► 2
► 3
The member function getline() also takes three parameters: the buffer to fill, one more than the maximum number of characters to get, and the termination character. getline()functions exactly like get() does with these parameters, except getline() throws away the terminating character. http://newdata.box.sk/bx/c/htm/ch16.htm
.

Question No: 4 (Marks: 1) - Please choose one
Word processor is
► Operating system
► **Application software**
► Device driver

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► Utility software

Question No: 5 (Marks: 1) - Please choose one
For which values of the integer _value will the following code becomes an infinite loop? int number=1;

```
while (true) {
cout << number;
if (number == 3) break;
number += integer_value; }
```

► any number other than 1 or 2
► **only 0**
► only 1
► only 2

Rational:
number += integer_value ……..above line decide the fate of loop so any thing other then zero leads to value of 3 which will quite the loop. Only zero is the value which keeps the loop infinite.

Question No: 6 (Marks: 1) - Please choose one
Each pass through a loop is called a/an
► enumeration
► **Iteration**
► culmination
► pass through

Question No: 7 (Marks: 1) - Please choose one
A continue statement causes execution to skip to
► the return 0; statement
► the first statement after the loop
► the statements following the continue statement
► **the next iteration of the loop**
Continue statement is used, when at a certain stage, you don't want to execute the remaining statements inside your loop and want to go to the start of the loop.

Question No: 8 (Marks: 1) - Please choose one
What is the correct syntax to declare an array of size 10 of int data type?
► int [10] name ;
► name[10] int ;
► **int name[10] ;**
► int name[] ;

Question No: 9 (Marks: 1) - Please choose one
Consider the following code segment. What will the following code segment display? **int main(){**
int age[10] = {0};
cout << age ;

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}

► Values of all elements of array
► **Value of first element of array**
► Starting address of array
► Address of last array element

Question No: 11 (Marks: 1) - Please choose one

How many bytes will the pointer ***intPtr*** of type **int** move in the following statement? **intPtr += 3 ;**

► 3 bytes
► 6 bytes
► **12 bytes**
► 24 bytes

one int is 4 bytes so 4*3 = 12 bytes movement.

Question No: 12 (Marks: 1) - Please choose one

If there are 2(n+1) elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

► n elements
► **(n+1) elements**
► 2(n+1) elements
► 2(n+1) elements

Question No: 13 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer? ► *** operator**

► -> operator
► && operator
► & operator

Question No: 14 (Marks: 1) - Please choose one

The _____ statement interrupts the flow of control.

► switch
► continue
► goto
► **break**

Question No: 15 (Marks: 1) - Please choose one

Analysis is the ---------- step in designing a program

► Last
► Middle
► Post Design
► **First**

Analysis will be always followed by design and then code.

Question No: 16 (Marks: 1) - Please choose one

Paying attention to detail in designing a program is _____

► Time consuming

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► Redundant
► **Necessary**
► Somewhat Good

In programming, the details matter. This is a very important skill. A good programmer always analyzes the problem statement very carefully and in detail. You should pay attention to all the aspects of the problem.

MIDTERM EXAMINATION
Spring 2009

Question No: 1 (Marks: 1) - Please choose one_____
There are mainly---------- types of software
►**Two**
►Three
►Four
►Five
Software is categorized into two main categories
- **System Software**
- **Application Software**

Question No: 2 (Marks: 1) - Please choose one____
In C/C++ the #include is called,
►Header file
►**Preprocessor Directive (Pg 15)**
►Statement
►Function

Question No: 3 (Marks: 1) - Please choose one_____
&& is---------- operator.
►An arithmetic
►**Logical**
►Relational
►Unary
we use logical operators (&& and ||) for AND and OR respectively with relational operators.

Question No: 4 (Marks: 1) - Please choose one_____
In flow chart, the symbol used for decision making is,
►Rectangle
►Circle
►Arrow
►**Diamond (Pg 51)**
http://www.ehow.com/about_5081911_symbols-used-flowchart.html

Question No: 6 (Marks: 1) - Please choose one_____
C++ views each file as a sequential stream of_____ .
►**Bytes**

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►Bits
►0's or 1's
►Words

Question No: 7 (Marks: 1) - Please choose one_____ If the elements of an array are already sorted then the useful search algorithm is, ►Linear search
►**Binary search (Pg 188)**
►Quick search
►Random search
In binary search algorithm, the 'divide and conquer' strategy is applied. This plies only to sorted arrays in ascending or descending order.

Question No: 8 (Marks: 1) - Please choose one_____ The address operator (&) can be used with,
►Statement
►Expression
►**Variable**
►Constant

Question No: 9 (Marks: 1) - Please choose one_____ When a pointer is incremented, it actually jumps the number of memory addresses ►**According to data type (Pg 160)**
►1 byte exactly
►1 bit exactly
►A pointer variable can not be incremented

Question No: 11 (Marks: 1) - Please choose one_____ Call by reference mechanism should be used in a program when there is **i.** large amount of data to be passed
ii. small amount of data to be passed
iii. need to change the passed data
iv. no need to change the passed data
Choose the appropriate option for the above case.

► (i) and (ii) only
►**(i) and (iii) only**
►(ii) and (iii) only
►(ii) and (iv) only

Question No: 12 (Marks: 1) - Please choose one_____
Which of the following is the starting index of an array in C++? ►**0**
►1
►-1
►any number

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Question No: 13 (Marks: 1) - Please choose one_____
The return type of a function that do not return any value must be _____
►int
►**void**
►double
►float

Question No: 14 (Marks: 1) - Please choose one_____
Which of the following is an extension of header file?
►.exe
►.txt
►**.h**
►.c

Question No: 15 (Marks: 1) - Please choose one_____
We want to access array in random order which approach is better?
►**Pointers**
►**Array index (Pg 176)**
►Both pointers and array index are better
►None of the given options.

Question No: 16 (Marks: 1) - Please choose one_____
When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,
►Columns
►Rows
►**Contiguous memory location (Pg 174)**
►Matrix

MIDTERM EXAMINATION 2009

Question No: 1 (Marks: 1) - Please choose one

In C/C++ the string constant is enclosed
► In curly braces
► In small braces
► In single quotes
► **In double quotes** http://www.lugaru.com/man/String.Constants.html

Question No: 2 (Marks: 1) - Please choose one
The size of int data type is

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► 1 bytes
► 2 bytes
► 3 bytes
► **4 bytes (Pg 257)**

Question No: 3 (Marks: 1) - Please choose one
In Flow chart process is represented by
► **Rectangle (Pg 51)**
► Arrow symbol
► Oval
► Circle

Question No: 5 (Marks: 1) - Please choose one
When we are using const keyword with a variable x then initializing it at the time of declaration is, ► **Must**
► Optional
► Not necessary
► A syntax error

Question No: 6 (Marks: 1) - Please choose one
Which of the following is the correct way to assign an integer value 5 to element of a matrix say 'm' at second row and third column?

► **m[2][3] = 5 ;**
► m[3][2] = 5 ;
► m[1][2] = 5 ;
► m[2][3] = '5';

Question No: 7 (Marks: 1) - Please choose one
How many total elements must be in two-dimensional array of 3 rows and 2 columns? ► 4
► 5
► **6 (3*2=6)**
► 7

Question No: 8 (Marks: 1) - Please choose one

Which of the following is the correct statement for the following declaration?

Mc100401285 Bc100400662 **moaaz.pk@gmail.com**
bc100400662asad@gmail.com
const int *ptr.

- ➢ ptr is a constant pointer
- ➢ ptr is constant integer pointer
- ➢ ptr is a constant pointer to int
- ➢ **ptr is a pointer to const int** http://www.allinterview.com/showanswers/65662.html

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will be the output of this code segment? int arr[6] = {2, 3, 7, 4, 5, 6} ;
int *ptr1 =&arr[1] ;
int *ptr2 = &arr[4] ;
cout << (ptr2-ptr1) ;

► 3
► 9
► 12
► **2**

Question No: 10 (Marks: 1) - Please choose one
What will be the correct syntax to assign an array named arr of 5 elements to a pointer ptr? ► *ptr = arr ;
►ptr = arr ;
►*ptr = arr[5] ;
►ptr = arr[5] ;

Question No: 11 (Marks: 1) - Please choose one
C is a/an _____ language
►low level
►object based
► object oriented
►**function oriented (Pg 77)**

Question No: 13 (Marks: 1) - Please choose one
The variables having a name, type and size are just like empty boxes. ► False
► **True**

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Question No: 15 (Marks: 1) - Please choose one
Most efficient method of dealing with structure variables is to define the structure globally

► True http://mathbits.com/mathbits/compsci/Structures/Define.htm
► False

Question No: 16 (Marks: 1) - Please choose one
Syntax of union is identical to _____
► **Structure (pg 242)**
► Class
► Function
► None of the given options

MIDTERM EXAMINATION

2008

Question No: 16 (Marks: 1) - Please choose one

In Program commenting the code liberally is

► Useful.
► Time consuming
► Not necessary

Question :If we want to store a string "abc" in an array str then the size of this array must be at least, **(a) 2**

(b) 3
(c) 4
(d) 5

Question :How many bytes will the pointer ***intPtr*** of type **int** move in the following statement? **intPtr += 3 ;**

(a) 3 bytes
(b) 6 bytes
(c) 12 bytes
(d) 24 bytes

MIDTERM EXAMINATION

2007

Question :The remainder (%) operator is,

►**An arithmetic operator (Pg 258)**
►A logical operator
►A relational operator
►A division operator

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bc100400662asad@gmail.com

Question :When a call to function statement is encountered,

►The control is transfer to its Prototype
►**The control is transfer to its definition**
►The compiler stop execution of whole program
►The program hangs

MIDTERM EXAMINATION

2006

Question :The value of 2*15/3*7+3*2 is

- 146
- 76
- 8
- 70

Question: Carefully analyze the following lines of code and chose the correct option. ch1="a";
ch2='a';

- ch1 and ch2 are strings
- **ch1 is string and ch2 is character**
- ch2 is string and ch1 is character
- ch1 and ch2 are characters

Question :The size of a double variable is

- 2 bytes
- 4 bytes
- **8 bytes**
- 10 bytes

The size of an int is: 4 bytes.
The size of a short int is: 2 bytes.
The size of a long int is: 4 bytes.
The size of a char is: 1 bytes.
The size of a float is: 4 bytes.
The size of a double is: 8 bytes.

Question :An array is also called

- an array variable
- array declaration
- struct
- **constant pointer**

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MCQS

Syntax of a union is identical to _____ .
structure
Class
Function
Oop

A union is a user-defined data type that contains only _____from its list of members at a time.
one object
two objects
three objects
four objects

Which of the given file handling modes are similar in their functionality ?

ios::out, ios::trunk
ios::trunc, ios::ate
ios::trunc, ios::nocreate
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

In
Out
Trunk
Get

In C/C++, the header file used for string manipulation is _____.
stdlib.h
string.h
strings.h
stype.h

A 2D array multi[5][10] can be accessed using the array name as **multi , this technique is called _____.
Single referencing
Single dereferencing
Double referencing
Double dereferencing

C language was evolved from _____ language(s).

BASIC
C++
B and BCPL
FORTRAN

The _____ statement forces the immediate next iteration of the loop.

Switch
Goto
Continue
Break

_____ are very good tools for code reuse.
Operators
Loops
Functions
Variables

When an argument is passed by reference, _____

the function cannot access the argument‘s value.
a variable is created in the function to hold the argument‘s value.
a temporary variable is created in the calling program to hold the argument‘s value. **the function accesses the argument’s original value in the calling program.**

_____ executes all the lines before error and stops at the line which contains the error.
Intrepreter
Compiler
Linker
Debugger

Analysis is the ---------- step in designing a program.

Middle
Post design
First
Last

Which of the following is the correct function call, having array named student of 10 elements as a parameter?
addRecord(student[]);

addRecord(student);
addRecord(student[10]);
addRecord(*student);

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When an array element is passed to a function, it is passed by _____.
Reference
data type
value
data

What is the correct syntax to declare an array of size 10 of int data type? int [10] name ;
name[10] int ;
int name[10] ;
int name[] ;

If we want to copy an array, both arrays need to be of same_____.
Elements and size
Data and size
Data type and size
Data and data type

Which of the following is the correct syntax to print multiple values or variables in a single command using cout?
cout << "H" << x << "\n";
cout << "Hello" + x + "\n";
cout << "H", x, "\n";
cout << ("H" & x & "\n");

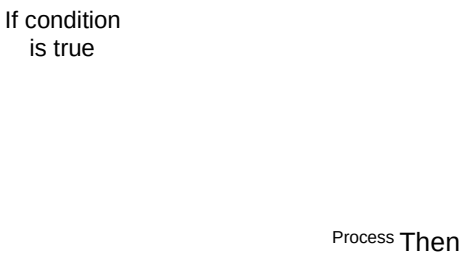
Which one of the statements given below is equivalent to **x %= 5**?
x = % x 5
x = x % 5
x = % 5
x % x = 5

The condition in loop should be a(n) _____.

Arithmatic Expression
Constant Expression
Boolean Expression
Primary Expression

Which structure is represented by following flow chart ?

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if-else structure
else-if structure
switch structure
if structure

MCQS

Stream which sends data to the program is called _____.
Input stream
Output stream

Inline stream
Function stream

Syntax of a union is identical to _____ .
Structure
Class
Function
Loop

When accessing a structure member, the identifier to the left of the dot operator is the name of _____.
a structure member
a structure tag
a structure variable
the keyword struct

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The parameter passed to isdigit() function is _____. **a**
character variable
a boolean variable
an integer variable
a character string

TWAIN stands for _____ .
Technology With An Interesting Name
Technology Without An Informative Name
Technology Without An Interesting Name
Technology With An Informative Name

_____ translates high level language program into machine language code.

Compiler
Linker
Debugger
Editor

From the option given below, what will be the correct output of the code?

for (int a = 1; a <= 3; a++)
 cout<<a*3-1<<" ";
2 4 6
2 5 8
no output is displayed
1 2 3

If the return type of a function is void then it means that it will _____.
return any type of data
return some specific type of data
return no data
return just character data

The functions that have already been defined as a part of the language are called _____.
user-defined functions
programmer-defined functions
inner funtions
built-in functions

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Given that doubleArray is an array of 7 integers. Which of the below is the correct statement to access the 5th element of the array?
doubleArray[7]
doubleArray[4]
doubleArray{7}
doubleArray(4)

The symbol which is used to represent a process in a flow chart is _____.
Rectangle
Arrow
Oval
Circle

When an array is passed to a function, by default it will be passed by_____.
Data
Reference
Value
Data type

What is the range of Random number generator function rand()?
0 – 32768
1 – 32768
0 – 32767
1 – 32767

The first character of a variable name must be an alphabet or _____.
Underscore
Digit
Special character
Comma

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference
double dereference
single reference
double reference

Initialization of variable at the time of definition is ----------practice.

Bad Programming
Necessary

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Good Programming
Not a necessary

Which looping process checks the test condition at the end of the loop? For
While
do-while
no looping process checks the test condition at the end

You can use a _____ statement to transfer control elsewhere out of the nested structure.
Continue
Goto
Pause

Break

Which of the following array is the most suitable for storing a matrix structure?
Single-dimensional array
Two-dimensional array
Three-dimensional array

Four-dimensional array

The microsoft word document(.doc) is a kind of _____ .
Sequential File
Random Access File
Binary Access File
Executable File

A union is a user-defined data type that contains only _____from its list of members at a time.
one object
two objects
three objects
four objects

In C/C++, _____ are the doors through which data can enter and come out of a program.

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Streams
Fields
Variables
Header files

Which one of the given option is not a mode for reading/writing the data from a file?

In
Out
Trunk
Get

C++ views each file as a sequential stream of _____.

Bits
Bytes
Numbers
Words

In 2D array, the technique used to access the array elements is called _____
Single referencing
Double referencing
Double dereferencing
Single dereferencing

From the options given below, identify the correct option which is used for calling the function float square (int &);

square (int num);
square (&num);
square (num);
square (*num);

Identify the correct option which is used for calling the function float area (int).
area(&num) ;
area(num) ;
area(int num) ;
area(*num) ;

Which kind of error occurs in the code below to access the variable num in the main function?

int num =10;

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int main(){
int x ;

x = num ;
}

Syntax error

Logical error

Run time error
No error

A program statement that invokes a function is called _____.
function declaration
function call
function definition
function prototype

What will be the output of the following code segment?

```
main(){
int a = 10 ;
int b =0;
int *x = &a;
b = (*x)+3 ;
cout << a << —, ‖ << b ;
}
```

10,0
10,3
10,13
0,13

When the logical operator AND (&&) combines two expressions exp1 and exp2 then the result will be true only _____
When both exp1 and exp2 are true
When both exp1 and exp2 are false
When exp1 is true and exp2 is false

When exp1 is false and exp2 is true

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For which array, the size of the array should be one more than the number of elements in an array?
int
double
float
char

What is the range of Random number generator function rand()?
0 – 32768
1 – 32768
0 – 32767
1 – 32767

To assigned a value to a character type variable, _____ are used around the value.
parenthesis ( )
single qoutes ' '
double qoutes " "
curly braces { }

In C/C++, the #include is called_____.
Header file
Preprocessor Directive
Statement
Function

The number 544.53 must be stored in _____ data type.
Int
Short
Float
Char

Use of the _____ statement violates the rules of structured programming.

Break
Continue
Goto
Switch

In Flow Chart, flow of control is represented by _____.

Rectangle
Circle

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Diamond
Arrow

What will be the correct syntax for initialization of pointer ***ptr*** of type int with variable ***x***? int ptr = &x ;
int ptr = x ;

int *ptr = &x ;

int ptr* = &x ;

MCQS

Syntax of a union is identical to _____ .
structure
Class
Function
Oop

A union is a user-defined data type that contains only _____from its list of members at a time.
one object
two objects
three objects
four objects

Which of the given file handling modes are similar in their functionality ?

ios::out, ios::trunk
ios::trunc, ios::ate
ios::trunc, ios::nocreate
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

In
Out
Trunk
Get

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MCQS

Stream which sends data to the program is called _____.
Input stream
Output stream
Inline stream
Function stream

Syntax of a union is identical to _____ .
Structure
Class
Function
Loop

When accessing a structure member, the identifier to the left of the dot operator is the name of _____.
a structure member
a structure tag
a structure variable
the keyword struct

The parameter passed to isdigit() function is _____.
a character variable
a boolean variable
an integer variable
a character string

TWAIN stands for _____ .
Technology With An Interesting Name
Technology Without An Informative Name
Technology Without An Interesting Name
Technology With An Informative Name

_____ translates high level language program into machine language code.

Compiler
Linker
Debugger
Editor

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From the option given below, what will be the correct output of the code?

```
for (int a = 1; a <= 3; a++)
 cout<<a*3-1<<" ";
```

2 4 6
2 5 8
no output is displayed
1 2 3

If the return type of a function is void then it means that it will _____.
return any type of data
return some specific type of data
return no data
return just character data

The functions that have already been defined as a part of the language are called _____.
user-defined functions
programmer-defined functions
inner funtions
built-in functions

Given that doubleArray is an array of 7 integers. Which of the below is the correct statement to access the 5th element of the array?
doubleArray[7]
doubleArray[4]
doubleArray{7}
doubleArray(4)

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Rectangle
Arrow
Oval
Circle

When an array is passed to a function, by default it will be passed by_____.
Data
Reference
Value
Data type

The first character of a variable name must be an alphabet or _____.

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Underscore
Digit
Special character
Comma

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.
single dereference
double dereference
single reference
double reference

Initialization of variable at the time of definition is ----------practice.

Bad Programming
Necessary
Good Programming

Not a necessary

Which looping process checks the test condition at the end of the loop?
For
While
do-while
no looping process checks the test condition at the end

You can use a _____ statement to transfer control elsewhere out of the nested structure.
Continue
Goto
Pause
Break

MCQS:

An object of _____ class can be created for saving the current position of any opened file before reading from the file
Filepos
Streampos
Stream
Filestream

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The value returned by the eof() function is of _____ type.

Integer
Float
Character
Boolean

If a file is not properly closed in a program then what is the status of the program ?
Runtime error will be generated in the program
The program will terminate normally
Compiler will generate syntax error
The Program will crash

The parameter passed to isdigit() function is _____.
a character variable
a boolean variable
an integer variable
a character string

In C/C++, the header file used for string manipulation is _____.
stdlib.h
string.h
strings.h
stype.h

Arrays are best data structures _____.
they take least space in memory
for the size of the structure and the data in the structure are constantly changing **for relatively permanent collections of data**
they take much space in memory

Each array declaration must provide the information about all these things except _____.

Name of the array
Type of data stored in the array
The location of the first element to be stored
Number of elements of the array

The First step for developing a program is _____.
Linking
Debugging
Analysis
Loading

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_____ transfers the executable code from hard disk to main memory.
Linker
Loader
Editor
Interpreter

_____ operator is used to pass the address of a variable to the called function. *

**
&&
&

In call by reference, _____ of a variable is passed to the called function.
Address
Size
Type
Value

_____ of a function is also known as signature of a function.
Definition
Declaration
Calling
Invoking

Preprocessor program performs its function before _____ phase takes place.
Editing
Linking
Compiling
Loading

Which of the following is the correct function call, having array named student of 10 elements as a parameter?

addRecord(student[]);
addRecord(student);
addRecord(student[10]);
addRecord(*student);

The remainder (%) operator is a _____operator.

Logical
Arithmetic

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Relational
Conditional

Which of the following array is the most suitable for storing a matrix structure?

Single-dimensional array

Two-dimensional array

Three-dimensional array

Four-dimensional array

Question # 1 of 10 (Start time: 12:27:31 AM)	**Total Marks:** 1
+= , *= , /= , etc are called,	
Select correct option:	
Assignment operators	
Logical operator	
Compound assignment operator	
OK	
Unary operator	

Question # 2 of 10 (Start time: 12:28:02 AM) Total Marks: 1
_____ statement interrupts the flow of control.

Select correct option:

switch

- continue
- goto
- break

OK

Question # 4 of 10 (Start time: 12:29:18 AM)	**Total Marks:** 1

According to c++ norms; the first character of a variable name must be an alphabet or

Select correct option:

- Underscore
- Special character
- Digit
- None of the given options

OK

Question # 5 of 10 (Start time: 12:29:56 AM)	**Total Marks:** 1

What is the output of the following code if the 3rd case is true switch (var) { case _a‘: cout<<lapple<<endl; case _b‘: cout<<lbanana<<endl; case _m‘: cout<<lmango<<endl; default: cout<<lany fruit<<endl; }

Select correct option:

mango OK mango any fruit

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apple none of the above

Question # 6 of 10 (Start time: 12:31:14 AM)	**Total Marks:** 1
X is an integer variable; what does X++ means,	
Select correct option:	

Add 1 two times in X value

Add 1 in X value

OK

Add 2 in X value

None of these

Question # 8 of 10 (Start time: 12:32:40 AM) Total Marks: 1

_____ will explain the function of a program.

Select correct option:

Comments

OK

Debugger

Compiler

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Linker

Question # 10 of 10 (Start time: 12:33:19 AM)	Total Marks: 1

_____ transfers the executable code from main memory to hard disk.

Select correct option:

Loader

Debugger

Compiler

OK

Linker

Question # 1 of 10 (Start time: 10:08:10 AM) Total Marks: 1

the sizeof operator is used to determine the size of _____.
Select correct option:
data variable data type OK

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None of the given

Question # 2 of 10 (Start time: 10:08:44 AM)	**Total Marks:** 1
Structures use _____ allocation.	
Select correct option:	

Queue

Heap

Cache

Stack

Ok

Question # 3 of 10 (Start time: 10:09:22 AM) Total Marks: 1

char name [] = ―Hello World‖ ; In the above statement, a memory of _____ characters will be allocated

Select correct option:

13

11

12

Ok

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10

Question # 4 of 10 (Start time: 10:09:54 AM) Total Marks: 1

Which header file must be included to use the functions tolower() and toupper()?

Select correct option:

iostream.h

conio.h

ctype.h

OK

stdlib.h

Question # 5 of 10 (Start time: 10:10:53 AM) Total Marks: 1 In Analysis, we try to have a_____
Select correct option:

Determined the inputs

Break up of problem

Precise problem statement

Ok

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None of the given

Question # 6 of 10 (Start time: 10:11:50 AM)	**Total Marks:** 1
Pointers store the _____	
Select correct option:	

value of a variable

memory address

Ok

characters

None of the given

Question # 7 of 10 (Start time: 10:12:09 AM) Total Marks: 1 _____Returns true if c is a digit and false otherwise.

Select correct option:

int isalpha(int c)

int isalnum(int c)

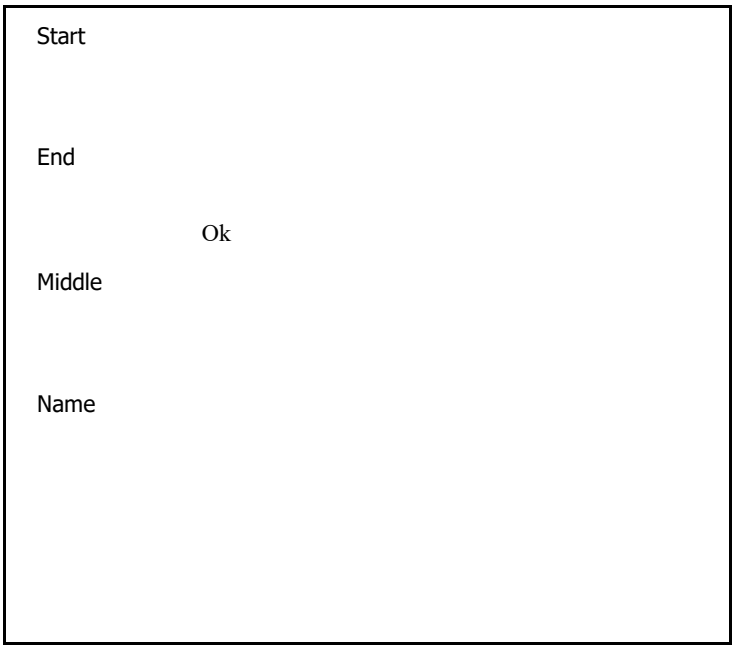
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int isxdigit(int c)

int isdigit(int c)

Ok

Question # 8 of 10 (Start time: 10:12:43 AM)	**Total Marks:** 1
eof is used to check for the _____ of file when a file is being read.	
Select correct option:	



Question # 9 of 10 (Start time: 10:13:03 AM) Total Marks: 1 The statement cout << yptr will show the _____the yptr points to.

Select correct option:

Value

memory address

Ok

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Variable
None of the given

Which of the following is true about streams?
A. It is a sequence of bytes
B. It is an ordered sequence
C. All bytes can go through the stream simultaneously
D. Bytes that enters first into the stream will go out at last
ANS:
A& B

Question # 1 of 10 (Start time: 10:55:29 AM) Total Marks: 1
While handling files, one can have _____ options
Select correct option:

read the file

write in some file

read and write in the same file

All of the given

Ok

Question # 2 of 10 (Start time: 10:55:55 AM)	**Total Marks:** 1
If an array has 50 elements, what is allowable range of subscripts?	

Select correct option:

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0 – 49

OK

1 – 49

0 – 50

1 – 50

Question # 4 of 10 (Start time: 10:56:40 AM) Total Marks: 1

A structure is a collection of _____under a single name.

Select correct option:

values

variables

ok

data

None of the given

Question # 5 of 10 (Start time: 10:57:09 AM) Total Marks: 1 Ifstream is used for_____

Select correct option:

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Input file stream

ok

Output file stream

Input and output file stream

All of the given

Question # 6 of 10 (Start time: 10:57:55 AM) Total Marks: 1

The ASCHI code of null character is_____

Select correct option:

000

OK

010

111

110

Question # 7 of 10 (Start time: 10:59:12 AM)	Total Marks: 1
dereferencing operator is represented by _____ **Select correct option:**	

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*

Ok

+

–

None of the given

Question # 8 of 10 (Start time: 10:59:26 AM) Total Marks: 1
Whenever some number is added in an array name, it will jump as many _____as the added number.
Select correct option:

rows

OK

value

column

None of the given

Question # 9 of 10 (Start time: 11:00:25 AM) Total Marks: 1 To access the data members of structure, _____ is used.

Select correct option:

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Logical operator

Dereference operator

Dot operator

OK

Address operator

Question # 10 of 10 (Start time: 11:01:00 AM) Total Marks: 1
Which of the following is true about streams? A. It is a sequence of bytes B. It is an ordered sequence C. All bytes can go through the stream simultaneously D. Bytes that enters first into the stream will go out at last
Select correct option:
A only C only A and B OK A and D

Question # 4 of 10 (Start time: 11:05:34 AM)	Total Marks: 1
We use _____ to open a file or stream for extraction	

Select correct option:

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in

OK

out

app

ate

Question # 8 of 10 (Start time: 11:06:20 AM) Total Marks: 1

char **argv can be read as_____.

Select correct option:

pointer to pointer

pointer to char

pointer to pointer to char

OK

None of the given

Question # 10 of 10 (Start time: 11:07:07 AM) Total Marks: 1

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

Select correct option:

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arr[10] = {0.0};

double arr[10]= 0.0;

double arr[10] = {0.0};

Ok

double arr[] = 0.0;

Pointers work by pointing to a particular_____

Select correct option:

Value

variable

data type

ok

None of the given

Click here to Save Answer & Move to Next Question

Question # 2 of 10 (Start time: 12:21:44 PM)	**Total Marks:** 1

_____function give the position of the next character to be read from that file.

Select correct option:

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tellp()

tellg()

OK

seekg()

seekp()

Question # 4 of 10 (Start time: 12:22:40 PM)	Total Marks: 1

aFile. seekg (-10L, ios:cur)

Select correct option:

forward direction

backward direction

Ok

both direction

none of the given

Question # 6 of 10 (Start time: 12:23:34 PM)	Total Marks: 1

An object of _____ class can be created for saving the current position of any opened file before reading from the file.

Select correct option:

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Stream

Filepos

Streampos

Filestream

Question # 7 of 10 (Start time: 12:24:46 PM) Total Marks: 1

Structures are syntactically defined with the word_____.

Select correct option:

struc

struct

structure

None of the given

Question # 8 of 10 (Start time: 12:25:12 PM)	Total Marks: 1

_____ allow us to have a memory location and use it as int or char interchangeably

Select correct option:

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structures

union

OK

construct

None of the given

Question # 9 of 10 (Start time: 12:25:41 PM) Total Marks: 1
A hierarchy of classes which are used to deal with console and disk files are called _____.
Select correct option:

Stream classes

Simple classes

Binary classes

IO classes

Question # 10 of 10 (Start time: 12:26:41 PM) Total Marks: 1

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_____function is used to determine the next position to write a character while writing into a file.

Select correct option:

tellg()

seekg()

seekp()

tellp()

Ok

Question No: 1 (Marks: 1) - Please choose one

*.doc is _____ by type.
.

► Sequential File

► Random Access File

► Data File

► Record File

Question No: 2 (Marks: 1) - Please choose one

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Which of the following is NOT a preprocessor directive?

► #error

► #define

► #line

► #ndefine

Question No: 3 (Marks: 1) - Please choose one The return

type of operator function must always be void.

► True

► False

Question No: 4 (Marks: 1) - Please choose one What

does **(*this)** represents?

► The current function of the class

► The current pointer of the class

► The current object of the class

► A value of the data member

Question No: 5 (Marks: 1) - Please choose one

The statement **cin.get ();** is used to,

► Read a string from keyboard

► Read a character from keyboard

► Read a string from file

► Read a character from file

Question No: 6 (Marks: 1) - Please choose one
When we do dynamic memory allocation in the constructor of a class, then it is necessary to provide a destructor.

► True
► False

Question No: 7 (Marks: 1) - Please choose one
Overloaded new operator function takes parameter of type *size_t* and returns

► void (nothing)
► void pointer
► object pointer
► int pointer

Question No: 8 (Marks: 1) - Please choose one

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The second parameter of operator functions for << and >> are objects of the class for which we are overloading these operators.

► True
► False

Question No: 9 (Marks: 1) - Please choose one
C++ is a case-sensitive language

► True
► False

Question No: 10 (Marks: 1) - Please choose one
To include code from the library in the program, such as iostream, a directive would be called up using this command.

► #include —iostream.h‖
► include <iostream.h>
► include <iostream.h>
► #include <iostream.h>

Question No: 11 (Marks: 1) - Please choose one
A template function must have only generic data types.

► True
► False

Question No: 12 (Marks: 1) - Please choose one
Template class can not have static variables.

► True
► False

Question No: 13 (Marks: 1) - Please choose one

What will be the correct syntax to assign an array named ***arr*** of 5 elements to a pointer ***ptr***?

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► *ptr = arr ;
► ptr = arr ;
► *ptr = arr[5] ;
► ptr = arr[5] ;

Question No: 14 (Marks: 1) - Please choose one

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

► ptr[3]

► (ptr+3)

► *(ptr+3)

► Both 1and 3

Question No: 15 (Marks: 1) - Please choose one
If most significant bit of un-signed number is 1 then it represents a positive number.

► True

► False

Question No: 16 (Marks: 1) - Please choose one
If there is a symbol (& sign) used with the variable name followed by data type then it refers to _____ and if & is being used with variable name then it refers to _____.

► Address of variable, reference variable

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► Reference variable, value of variable

► Reference variable, address of variable

► Address of variable, value of variable

Question No: 17 (Marks: 1) - Please choose one
We can also do conditional compilation with preprocessor directives. ►

True

► False

Question No: 18 (Marks: 1) - Please choose one
The default value of a parameter can be provided inside the _____ ►

function prototype

► function definition

► both function prototype or function definition

► none of the given options.

Question No: 19 (Marks: 1) - Please choose one
Classes defined inside other classes are called _____ classes ►

looped

► nested

► overloaded

► none of the given options.

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Question No: 20 (Marks: 1) - Please choose one What purpose do classes serve?

► Data encapsulation

► Providing a convenient way of modeling real-world objects ►

Simplifying code reuse

► All of the given options

Question No: 21 (Marks: 1) - Please choose one Every class contains _____.

► Constructor

► Destructor

► Both a constructor and a destructor

► None of the given options

Question No: 22 (Marks: 1) - Please choose one new operator is used to allocate memory from the free store during

► Compile Time

► Run Time

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► Link Time

► None of the given options

Question No: 23 (Marks: 1) - Please choose one
When an object of a class is defined inside another class then, ►

Destructor of enclosing class will be called first

► Destructor of inner object will be called first

► Constructor and Destructor will be called simultaneously ►

None of the given options

Question No: 24 (Marks: 1) - Please choose one
It is possible to define a class within another class.

► True

► False

Question No: 25 (Marks: 1) - Please choose one
New and Delete are also used with _____ and data types as well. ►

Class, Objects

► Structures, Pointers

► Both Class and structures

► None of above

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Question No: 26 (Marks: 1) - Please choose one
With New keyword, data types and class members are initialized with meaningful values instead of garbage.

► True

► False

Question No: 27 (Marks: 2)
How many arguments a Unary Operator take? Can we make a binary operator as unary operator?
Ans: Unary operator takes only one aurgument like i++ or i— (Post increment or post decrement operators for intergers) or ++i,--i (Pre increment or pre decrement operators for intergers) ,we can not make Unary operator as binary or binary as Unary operator.

Question No: 28 (Marks: 2)
Which arithmetic operators cannot have a floating point operand?
Ans:
Modulus operator
This operator can only be used with integer operands ONLY

Question No: 1 (Marks: 1) - Please choose one

C language is developed by

► Bill Gates

► Robert Lafore

► **Dennis Ritchie**

► Deitel & Deitel
Dennis Ritchie developed a general purpose language, called C language pag no 12

Question No: 2 (Marks: 1) - Please choose one

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Which of the following choice is not an example of an int data type? ►

0

► -32

► 65531

► **-4.0**

Question No: 3 (Marks: 1) - Please choose one

In flow chart, the symbol used for decision making is, ► Rectangle

► Circle

► Arrow

► **Diamond**

Then draw a line to its right
and use the decision symbol i.e. diamond diagram. Pag no 51

Question No: 4 (Marks: 1) - Please choose one

Switch statement deals with,

► Integer data only

► float data only

► character data only

► **Integer and character data**

Question No: 5 (Marks: 1) - Please choose one Default

case in switch statement is,

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► Must

► **Optional**

► syntax error

► Necessary

The *default* statement is optional. If
there is no *case* which matches the value of the *switch* statement, then the statements of *default* are executed pag no 68

Question No: 6 (Marks: 1) - Please choose one

http://vustudents.ning.com
*.doc is _____ by type.
.

► **Sequential File**

► Random Access File

► Data File

► Record File

Question No: 7 (Marks: 1) - Please choose one

Member function tellg() returns the current location of the _____ pointer. ►

tellptr()

► write()

► seekg()

► get()

Question No: 8 (Marks: 1) - Please choose one

s
Dealing with structures and functions passing by reference is the most economical method

http://vustudents.ning.com
► True

► False

Question No: 9 (Marks: 1) - Please choose one

In C/C++ all character strings are terminated with,

► **Null character**

► String

► Zero

► Full stop
http://www.vuzs.net/index.php?option=com_content&view=article&id=306:cs201-spring2009-4-solved-by-vuzs-team-with-reference&catid

Question No: 10 (Marks: 1) - Please choose one

Word processor is http://vustudents.ning.com

► Operating system

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► **Application software**

► Device driver

► Utility software

Question No: 11 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

► area

► _area

► **10area**

► area2

Question No: 12 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known? ► for

► **while**

► do-while

► all looping processes require that the iterations be known

Question No: 13 (Marks: 1) - Please choose one By default an

array of characters is passed by value to a function, ► True

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► **False**

Question No: 14 (Marks: 1) - Please choose one

Which of the following operator is used to access the address of a variable?

► * operator

► -> operator

► && operator

► **& operator**

Question No: 15 (Marks: 1) - Please choose one

The name of an array represents address of first location of array element.

► True

► **False**

Compiler is a

► System software

► **Application Software**

► Driver

► Editor

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Question No: 2 (Marks: 1) - Please choose one

If Num is an integer variable then Num++ means,

► Add 1 two times with Num

► **Add 1 with Num**

► Add 2 with Num

► Subtract 2 from Num

Question No: 3 (Marks: 1) - Please choose one

For one byte there are _____ combinations of values that can be stored in computer. ►

2^6

► 2^7

► 2^8

► 2^4

http://vuzs.net/index.php?option=com_content&view=article&id=431:cs201-mid-for vuzs&catid=315&Itemid=54

Question No: 4 (Marks: 1) - Please choose one

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

► cplext.h

► **ctype.h**

► stdio.h

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► delay.h

The function toupper and islower are part of the character handling library<ctpe.h>

Question No: 5 (Marks: 1) - Please choose one

Default case in switch statement is,

► Must

► **Optional**

► syntax error

► Necessary

Question No: 6 (Marks: 1) - Please choose one

When break statement is encountered in switch statement, it

► Stops the entire program

► Stops the execution of current statement

► **Exits from switch statement**

► None of the given options

Question No: 7 (Marks: 1) - Please choose one

What will be the result of arithmetic expression 6+27/3*3? http://vustudents.ning.com ►

33

► 45

► 9

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► 30

Question No: 8 (Marks: 1) - Please choose one

What is the correct syntax to declare an array of size 10 of int data type?

► int [10] name ;

► name[10] int ;

► **int name[10] ;**

► int name[] ;

Question No: 9 (Marks: 1) - Please choose one

How many dimensions does n-dimensional array has?

► **n dimensions**

► 2n dimensions

► (n+1) dimensions

► (n-1) dimensions (Array starts from 0th element)

Question No: 10 (Marks: 1) - Please choose one

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

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► **ptr[3]**

► (ptr+3)

► *(ptr+3)

► Both 1and 3

Question No: 11 (Marks: 1) - Please choose one

Which of the following values C++ use to represent true and false?
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► **1 and 0**

► 1 and -1

► 11 and 00

► Any numerical value

Question No: 12 (Marks: 1) - Please choose one

Declaring structures does not mean that memory is allocated.

► **True**

► False

Question No: 13 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

► int

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► double

► float

► **char**

Question No: 14 (Marks: 1) - Please choose one

If a variable is passed by value to a function and the function makes some changes to that variable then it

► **does not affect the original variable**

► *affects the original variable*

► causes syntax error

► None of the given options

Question No: 15 (Marks: 1) - Please choose one

In C/C++ the #include is called,

► Header file

► **Preprocessor Directive**

► Statement

► Function

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Question No: 16 (Marks: 1) - Please choose one

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Loops are ---------- Structure. ►

Decision

► **Repetition**

► Sequential

► Hierarchical

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MIDTERM EXAMINATION
2011
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

- ► Must
- ► Necessary
- ► Good Programming
- ► None of the given options

Question No: 2 (Marks: 1) - Please choose one

Preprocessor program perform its function before _____ phase takes place.

- ► Editing
- ► Linking
- ► Compiling
- ► Loading

Question No: 3 (Marks: 1) - Please choose one

If there are 2(n+1) elements in an array then what would be the number of iterations required to
search a number using binary search algorithm?

► n elements
► (n+1) elements
► 2(n+1) elements
► 2(n+1) elements

Question No: 4 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer?

► * operator
► -> operator
► && operator
► & operator

Question No: 5 (Marks: 1) - Please choose one

Analysis is the ---------- step in designing a program

► Last
► Middle
► Post Design
► First

Question No: 6 (Marks: 1) - Please choose one

When a pointer is incremented, it actually jumps the number of memory addresses

►According to data type (Pg 160)
►1 byte exactly
►1 bit exactly
►A pointer variable can not be incremented

Question No: 7 (Marks: 1) - Please choose one

Call by reference mechanism should be used in a program when there is
i. large amount of data to be passed
ii. small amount of data to be passed
iii. need to change the passed data
iv. no need to change the passed data
Choose the appropriate option for the above case.

► (i) and (ii) only
►(i) and (iii) only
►(ii) and (iii) only
►(ii) and (iv) only

Question No: 8 (Marks: 1) - Please choose one

If an array has 100 elements, what is allowable range of subscripts?

(a) 0 - 99
(b) 1 - 99
(c) 0 - 100
(d) 1 - 100

Question No: 9 (Marks: 1) - Please choose one_____

Initialization of variable at the time of definition is,

- Must
- Necessary
- Good Programming
- None of the given options

Question No: (Marks: 2)

A two-dimensional array has 3 rows and 4 columns. Write down the syntax to initialize first element of all three rows of two-dimensional array with value 2.

Ans:

```
int matrix[0][0]=2
int matrix[1][0]=2
int matrix[2][0]=2
```

Question No: (Marks: 2) - Please choose one_____

Explain smart pointer

Question No: (Marks: 2)

---

which standard library we use in programming to read , write files

Question No: (Marks: 3)

Identify the errors in the following code segment and give the reason of errors.

```
main(){
int x = 10
const int *ptr = &x ;
*ptr = 5 ;
}
```

Ans:

Int x=10….No ending semicolon.

*ptr=5 .. Declaring a pointer to constant integer.You can not use this pointer to change the value being pointed to.

Question No: (Marks: 3)

Can you use an assignment operator to assign the value of one C-string to another?

Ans:Yes,we use assignment operator,whenever we use objects that allocate memory it is important that assignment operator should be defined for it,otherwise default operator will copy the value of addressed and pointers.

MIDTERM EXAMINATION
Spring 2010
CS201- Introduction to Programming (Session - 2)

Question No: 1 (Marks: 1) - Please choose one

In order to get 256 from the number 2568 we divide this number by 10 and take,

- ► Its remainder
- ► The number
- ► Its quotient
- ► Its divisor

Question No: 2 (Marks: 1) - Please choose one

The correct syntax of do-while loop is,

- ► (condition) while; do { statements; };
- ► { statements; } do-while ();
- ► while(condition); do { statements; };
- ► do { statements; } while (condition);

Question No: 3 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in **stdlib.h** header file?

- ► double atof(const char *nptr)
- ► int atoi(const char *nptr)
- ► char *strcpy (char *s1, const char *s2)
- ► 1 and 2 only

Question No: 4 (Marks: 1) - Please choose one

If the break statement is missed in switch statement then,

- ► The compiler will give error
- ► This may cause a logical error
- ► No effect on program
- ► Program stops its execution

Question No: 5 (Marks: 1) - Please choose one
The data type before a function name represents its,

► Return Type
► Function data
► Function arguments
► Function name

Question No: 6 (Marks: 1) - Please choose one
Member function tellg() returns the current location of the _____ pointer.

► tellptr()

► write()

► seekg()

► get()

Question No: 7 (Marks: 1) - Please choose one
What does 5 | 6 , evaluate to in decimal where '|' is bitwise OR operator?

3 ►
4 ►
5 ►
7 ►

Question No: 8 (Marks: 1) - Please choose one
C is widely known as development language of _____ operating system.

► Linux
► Windows
► Unix
► Mac OS

Question No: 9 (Marks: 1) - Please choose one
What will be the result of arithmetic expression 6+27/3*3?

► 33
► 45
► 9
► 30

Question No: 10 (Marks: 1) - Please choose one
How many bytes are occupied by declaring following array of characters?
char str[] = "programming";

► 10

► 11
► 12
► 13

Question No: 11 (Marks: 1) - Please choose one
What will be the correct syntax for initialization of pointer ***ptr*** with string "programming"?

► char ptr = ’programming’ ;

► char *ptr = “programming” ;

► char *ptr = ‘programming’ ;

► *ptr = “programming” ;

Question No: 12 (Marks: 1) - Please choose one
What will be the result of expression **x%= 2**, if **x = 7**?
x = 1 ►
x = 3 ►
x = 7 ►
x = 2 ►

Question No: 13 (Marks: 1) - Please choose one
UNIX has been developed in _____ language.
JAVA ►
B ►
C ►
FORTRAN ►

Question No: 14 (Marks: 1) - Please choose one
Declaring structures does not mean that memory is allocated.
True ►
False ►

Question No: 15 (Marks: 1) - Please choose one
What will be the value of i and j in the following code segment?

```
int i, j ;
int x[5] = {2, 3, 4, 8, 9} ;
int *ptr =&x[2];
i = (*ptr)++ ;
j = *ptr++ ;
```

i = 5, j = 5 ►
i = 5, j = 8 ►

i = 4, j = 8 ►
i = 5, j = 9 ►

Question No: 16 (Marks: 1) - Please choose one
When an array element is passed to a function, it is passed by ----------.

reference ►
data type ►
value ►
data ►

Question No: 17 (Marks: 2)
What is the difference between **switch** statement and **if** statement.
Ans:The "switch" statement is use to slect among multiple alternatives.It uses many if statements to execute a particular case,while "if" statement is use to slect among two alternatives.

Question No: 18 (Marks: 2)
Why we close a file after use?
Ans:To execute the .exe file properly with latest changes.

Question No: 19 (Marks: 2)
A two-dimensional array has 3 rows and 4 columns. Write down the syntax to initialize first element of all three rows of two-dimensional array with value 2.
Ans:
int matrix[0][0]=2
int matrix[1][0]=2
int matrix[2][0]=2

Question No: 20 (Marks: 3)
Identify the errors in the following code segment and give the reason of errors.

```
main(){
int x = 10
const int *ptr = &x ;
*ptr = 5 ;
}
```

Ans:
Int x=10….No ending semicolon.
*ptr=5 .. Declaring a pointer to constant integer.You can not use this pointer to change the value being pointed to.

Question No: 21 (Marks: 3)
Can you use an assignment operator to assign the value of one C-string to another?

Ans:Yes,we use assignment operator,whenever we use objects that allocate memory it is important that assignment operator should be defined for it,otherwise default operator will copy the value of addressed and pointers.

Question No: 22 (Marks: 5)

Why binary search algorithm is more efficient than the linear search algorithm?

Ans:Binary search algorithm is more efficient than liner algorithem because the arrays are sorted in asending or desending order and we use “devide and conqrer” technique.In binery search each iteration reduces the search by the factor of two but in the linear we have the same number of searches as we have the number of elements.e.g,if we have array of 1000 elements the linear search will take 1000 iterations however binery search will take max 10.

Question No: 23 (Marks: 5)

Write down the output of the code given below :

Hint:

Size of char is 1 byte
Size of int is 2 byte
Size of float is 4 byte

```
#include <iostream.h>

union mytypes_t {
  char c;
  int i;
  float f;
  } mytypes;

int main(){

    mytypes.c = 'H';
    mytypes.i = 15;

    cout << sizeof(mytypes)<<endl;

    mytypes.i = 15;
    mytypes.c = 'H';

    cout << sizeof(mytypes)<<endl;

    system("PAUSE");
    return 0;
}
```

CS201 - Midterm Solved Paper

Question No: 1 (Marks: 1) - Please choose one
What is the output of the following statement?
int i = 2.5; do { cout i * 2; } while (i > 3 && i < 10);
(a) 510
(b) 5
(c) 48
(d) error
Question No: 2 (Marks: 1) - Please choose one
What does !(7) evaluate to in decimal where ! is a NOT operator?
(a) 7
(b) 8
(c) 9
(d) 10

Question No: 3 (Marks: 1) - Please choose one
The condition in while loop may contain logical expression but not relational expression.
(a) True
(b) False

Question No: 4 (Marks: 1) - Please choose one
Searching is easier when an array is already sorted
(a) True
(b) False
Question No: 5 (Marks: 1) - Please choose one
If an array has 100 elements, what is allowable range of subscripts?
(a) 0 - 99
(b) 1 - 99
(c) 0 - 100
(d) 1 - 100
Question No: 6 (Marks: 1) - Please choose one
What will be the value of 'a' and 'b' after executing the following statements?
a = 3;
b = a++;
(a) 3, 4
(b) 4, 4
(c) 3, 3
(d) 4, 3
Question No: 7 (Marks: 1) - Please choose one
What will be the correct syntax to initialize all elements of two-dimensional array to value 0?
(a) int arr[2][3] = {0,0} ;
(b) int arr[2][3] = {{0},{0}} ;
(c) int arr[2][3] = {0},{0} ;
(d) int arr[2][3] = {0} ;
Question No: 8 (Marks: 1) - Please choose one
Which of the following functionreturns the size of a string variable?
(a) strlength()
(b) stringlen()
(c) **strlen()**
(d) strLength()
Question No: 9 (Marks: 1) - Please choose one
What will be the range of numbers generated by function rand () % 9?

(a) 0 to 9
(b) 1 to 9
(c) 0 to 8
(d) 1 to 8
Question No: 11 (Marks: 1) - Please choose one
Computer can understand only machine language code.
(c) True
(d) False
Question No: 13 (Marks: 1) - Please choose one
What does 5 ^ 6 , evaluate to in decimal where '^' is Exclusive OR operator?
(a) True
(b) False
Question No: 14 (Marks: 1) - Please choose one
If the file is not properly closed in the program, the program _____.
(a) Terminate normally
(b) Indicate Runtime error
(c) Indicate Compile time error
(d) Crashes
Question No: 15 (Marks: 1) - Please choose one
Which of the following header file include string conversion functions?
(a) string.h
(b) stdlib.h
(c) ctype.h
(d) sconvert.h

Question No: 17 (M - 1)

Which header file must be included while handling files?

Question No: 18 (M - 1)

What is meant by C++ statement: const int *ptr = &x;

Question No: 19 (M - 2)

What is a truth Table?

Question No: 20 (M - 3)

(i) An array day is declared as: int day[] = {1, 2, 3, 4, 5, 6, 7};
How many elements does array 'day' has?
(ii) If the declaration is changed as: int day[7] = {1, 2, 3, 4, 5, 6, 7};
How many elements does array 'day' has?

Question No: 21 (M - 5)

What are similarities and differences between Structures and Unions?

Question No: 22 (M - 10)

Write a void function( ); that takes integer numbers from the user and then displays the sum of odd and even numbers entered by the user. Your program should terminate if user enters a negative number?

MIDTERM EXAMINATION

Spring 2009
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one
A precise sequence of steps to solve a problem is called
► Statement
► **Program**
► Utility
► Routine

Question No: 2 (Marks: 1) - Please choose one
The Compiler of C language is written in
► Java Language
► UNIX
► FORTRON Language
► **C Language**

The C language is so powerful that the compiler of C and other various operating systems are written in C.

Question No: 3 (Marks: 1) - Please choose one
Initialization of variable at the time of definition is,
► Must
► Necessary
► **Good Programming**
► None of the given options

Question No: 4 (Marks: 1) - Please choose one
In if structure the block of statements is executed only,
► When the condition is false
► When it contain arithmetic operators
► When it contain logical operators
► **When the condition is true**

Question No: 5 (Marks: 1) - Please choose one
Which of the following function(s) is/are included in **stdlib.h** header file?
► double atof(const char *nptr)
► int atoi(const char *nptr)
► char *strcpy (char *s1, const char *s2)
► **1 and 2 only**

Question No: 6 (Marks: 1) - Please choose one
Dealing with structures and functions passing by reference is the most economical method
► **True**

► False

Question No: 7 (Marks: 1) - Please choose one
Pointer is a variable which store,
► Data
► **Memory Address**
► Data Type
► Values

Question No: 8 (Marks: 1) - Please choose one
Preprocessor program perform its function before _____ phase takes place.
► Editing
► Linking
► **Compiling**
► Loading

The C preprocessor modifies a source code file before handing it over to the compiler. You're most likely used to using the preprocessor to include files directly into other files,

Question No: 9 (Marks: 1) - Please choose one
Which of the following can not be a variable name?
► area
► _area
► **10area**
► area2

Question No: 10 (Marks: 1) - Please choose one
Which looping process is best, when the number of iterations is known?
► for
► **while**
► do-while
► all looping processes require that the iterations be known

Question No: 11 (Marks: 1) - Please choose one
Which character is inserted at the end of string to indicate the end of string?
► new line
► tab
► **null**
► carriage return
null character inserted at the end of the string by C automatically

Question No: 12 (Marks: 1) - Please choose one
How many bytes are occupied by declaring following array of characters?
char str[] = “programming”;
► 10

► 11
► **12**
► 13
11 plus one for null char (11+1= 12)

Question No: 13 (Marks: 1) - Please choose one
Which of the following header file defines the **rand()** function?
► iostream.h
► conio.h
► **stdlib.h**
► stdio.h

The function is *rand()* and is in the standard library. To access this function, we need to include <stdlib.h> library in our program. This function will return a random number. The number can be between 0 and 32767.

Question No: 14 (Marks: 1) - Please choose one
Commenting the code _____
► **Makes a program easy to understand for others.**
► Make programs heavy, i.e. more space is needed for executable.
► Makes it difficult to compile
► All of the given options.

Question No: 15 (Marks: 1) - Please choose one
What's wrong with this for loop?
for (int k = 2, k <=12, k++)
► the increment should always be ++k
► the variable must always be the letter i when using a for loop
► there should be a semicolon at the end of the statement
► **the commas should be semicolons**

Question No: 16 (Marks: 1) - Please choose one
For which array, the size of the array should be one more than the number of elements in an array?
► int
► double
► float
► **char**

Question No: 17 (Marks: 1)
To Which category of the software “Compiler and Interpreter” belongs?
They belong to system software.
There are two type of system software

1. Operating system
2. Language translators.

These are part of language translators

Question No: 18 (Marks: 1)

What is the result of the expression x = 2 + 3 * 4 – 4 / 2

12

first multiplies 3*4 = 12 then Division 4/2 = 2

2+12-2 = 12

Question No: 19 (Marks: 2)

Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

float tmp [10] = {1.0,2.0,3.0,4.0};

Question No: 20 (Marks: 3)

Write down the output of the following code?

```
int array[7], sum = 0;
for(int i=0;i<7;i++)
{
array[i] = i;
sum+= array[i];
}
cout<< " Sum = " <<sum;
```

answer: 21

Loop will run times starts from zero and add values from 1 to 6 which is equal to 21

What will be the output of the following segment of C++ code?

```
int A[5] = {1 , 2, 3, 4};
int i;
for (i=0; i<5; i++)
{
A[i] = 2*A[i];
cout << A[i] << "  ";
}
```

2 4 6 8 0

Loops will run 5 times as its starting from zero. It will multiply the value of each item in array as last time is not initialized so it will multiply it with zero to give zero as output

Question No: 22 (Marks: 10)

Write a C++ program that will determine if a departmental store customer has exceeded the credit limit on a charge account.

Program should input the following facts in five variables

1. Account number
2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit

Calculate the new balance

New balance = Beginning balance + charges – credits

Determine if **new balance** exceeds the **allowed credit limit**. For those customers whose credit limit is exceeded. The program should display the message “Credit Limit exceeded.”

CS201- Introduction to Programming Complete Solved Paper

MIDTERM EXAMINATION
Spring 2009

CS201- Introduction to Programming (Session - 1)
Question No: 1 (Marks: 1) - Please choose one

In C/C++ the #include is called,
Header file

Preprocessor Directive
Statement

Function
Question No: 2 (Marks: 1) - Please choose one

To access the element of two dimensional array we use,
Single referencing

Single dereferencing
Double **dereferencing**

Double referencing
Question No: 3 (Marks: 1) - Please choose one

Data Size of the file is always _____ the actual size of the file.
Greater than

Equal to
Less than or equal to

None of the above
Question No: 4 (Marks: 1) - Please choose one

When an identifier is declared with keyword const then,
Its value can be changed during execution.

Its value can not be changed
Its value can be changed with arithmetic operator

Its value can be overwritten
Question No: 5 (Marks: 1) - Please choose one

In C/C++ if we define an array of size eight (8) i.e. int Arr [8]; then the last element of this array will be stored at,

Arr[0]
Arr[8]

Arr[7]
Arr[-1]

Question No: 6 (Marks: 1) - Please choose one
If it is required to copy an array to another array then,

Both arrays must be of the same size and data type
Both arrays may be of different size

Both arrays may be of different data type
Both arrays may be of different size and type

Question No: 7 (Marks: 1) - Please choose one
In C/C++ all character strings are terminated with,

Null character
String

Zero
Full stop

Question No: 8 (Marks: 1) - Please choose one
Let suppose

```
struct intorDouble{
Int ival;

Double charvar;
};

main(){
intorDouble  VAZ;

int size ;
size = sizeof(VAZ);

}
```

What will be the value of variable size, if int occupies 4 bytes and double occupies 8

bytes?
2

4
8

12

Question No: 9 (Marks: 1) - Please choose one

When a pointer is incremented, it actually jumps the number of memory addresses

According to data type

1 byte exactly

1 bit exactly

A pointer variable can not be incremented

Question No: 10 (Marks: 1) - Please choose one

Do-while loop executes at least,

Zero Time

One Time

Two Times

N Times

Question No: 11 (Marks: 1) - Please choose one

+= , *= , /= , etc are called,

Assignment operators

Logical operator

Compound assignment operator

Unary operator

Question No: 12 (Marks: 1) - Please choose one

Computer can understand only machine language code.

T**rue**
False

Question No: 13 (Marks: 1) - Please choose one
Which of the following is the correct syntax to print multiple values or variables in

a single command using cout?
cout << "Hello" + x + "\n";

cout << "H" << x << "\n";
cout << "H", x, "\n";

cout << ("H" & x & "\n");
Question No: 14 (Marks: 1) - Please choose one

The compilers and interpreters also belong to the System Software category.
True

False
Question No: 15 (Marks: 1) - Please choose one

Editors are used to compile the code.
True

False
Question No: 16 (Marks: 1) - Please choose one

The variables having a name, type and size are just like empty boxes.
True

False
Question No: 17 (Marks: 1)

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What will be the result of the statement?

rand ( ) % 50
Question No: 18 (Marks: 1)

What is the ASCII code of null character and how is it represented?
Question No: 19 (Marks: 2)

What is a truth Table?
Question No: 20 (Marks: 3)

How learning to design programs is like learning to play soccer?
Question No: 21 (Marks: 5)

What is the purpose of the default statement in the switch statement?
Question No: 22 (Marks: 10)

Write a program which contains a user defined function named
ConvertInSeconds

that
takes 3 integer arguments hours, minutes and seconds, this function converts the time into

seconds and returns the number of seconds.
Input variables hours , minutes and seconds in main program and call the function

ConvertInSeconds
and display the number of seconds returned by function.

Hint:
1 hour =60 minutes
1 minute =60 seconds

MIDTERM EXAMINATION

Spring 2009

CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

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- Statement
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- **1 and 2 only**

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Dealing with structures and functions passing by reference is the most economical method

- **True**
- False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

- Data
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- **10area**
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11 plus one for null char (11+1= 12)

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- double
- float
- **char**

Question No: 17 (Marks: 1)

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Solution:

They belong to system software.

Question No: 18 (Marks: 1)

What is the result of the expression x = 2 + 3 * 4 – 4 / 2

Solution:

12

Question No: 19 (Marks: 2)

Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

Solution:

float tmp [10] = {1.0,2.0,3.0,4.0};

Question No: 20 (Marks: 3)

Write down the output of the following code?

```
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for(int i=0;i<7;i++)
{
array[i] = i;
sum+= array[i];
}
cout<< “ Sum = “ <<sum;
```

Solution:

21

Question No: 21 what will be the output of the following segment of C++ code?

```
int A[5] = {1 , 2, 3, 4};
int i;
for (i=0; i<5; i++)
{
A[i] = 2*A[i];
cout << A[i] << " ";
}
```

Solution:

2 4 6 8 0

Question No: 22 (Marks: 10)

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CS201:Grand Quiz Quiz Start

Question # 1 of 30 (Start time: 12:05:02 AM, 31 December 2020)

_____ allow us to have a memory location and use it as int or char interchangeably

Select the correct option

- ○ structures
- ◉ union
- ○ construct
- ○ None of the given

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CS201:Grand Quiz Quiz

Question # 2 of 30 (Start time: 12:05:23 AM, 31 December 2020)

A hierarchy of classes which are used to deal with console and disk files are called _____

Select the correct option

- (●) Stream classes
- ( ) Simple classes
- ( ) Binary classes
- ( ) IO classes

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CS201:Grand Quiz Quiz Start Tim

Question # 3 of 30 (Start time: 12:05:43 AM, 31 December 2020)

A repetition statement specifies that an action is to be continued while some_____ remains true.

Select the correct option

- (●) Condition
- ( ) Control
- ( ) Operator
- ( ) Asignment

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CS201:Grand Quiz

Question # 4 of 30 (Start time: 12:05:58 AM, 31 December 2020)

The most suitable data type for number 325.25 is _____.

Select the correct option

- ○ char
- ○ int
- ○ short
- ◉ float