BIO-201 CELL BIOLOGY MCQS FOR FINAL TERM

1 : The small sub unit of Ribosomes is bind to mRNA this sequence is called ?

A) Plaindromic sequences B) Shine sequence C) Shine –Dalgarno sequence D) Dalgarno sequence

2 : After translation,.....can be removed?

A) Alanine B) Methionine C) Arginine D) Lysin

3 : rRNA in small subunit stabilizes ..... between m and t RNA?

A) H –bonding B) C – bonding C) I – bonding D) M – bonding

4 : Large subunit breaks bond between .....?

A) mRNA B) rRNA C) SNRNa D) tRNA

5 : Protein folding information is a function of..... Sequences?

A) UU B) AA C) GG D) CC

6 : Stop codon is....?

A) AUG B) UCA C) UGA D) UAG

7 : Protein sequences begins on.....?

A) cytoplasm B) Nucleus C) Free ribosomes D) Ribosomes

8 : The signal sequences for the action of protein is present in.....?

A) Polypeptide chain B) Smooth ER C) A site D) P site

9 : An NLS is necessary for import of protein into the.....?

A) Cytoplasm B) Nucleus C) Prokaryotes D) Eukaryotes

10 : Which mutation cells passed on to the daughter cells after mitosis?

A) chromosomal mutation B) Point mutation C) Somatic mutation D) Germ line mutation

11 : Point mutation has base pair?

A) Double B) Single C) Triple D) None

12 : No change in amino acid sequences in.....?

A) Point mutation B) Somatic mutation C) Silent mutation D) Chromosomal mutation

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13 : A protein that carries oxygen in human.....?

A) White blood cells B) Bone cells C) Red blood cells

14 : .....is the study of heritable changes in gene expression?

A) Epistasis B) Epigenetics C) Genetics D) Genome

15 : Cluster of genes with .....promoter is called operon?

A) 1 B) 2 C)3 D) 4

16 : Which polymerase binds to initiate transcription of lac operon?

A) DNA B) RNA C) mRNA D) tRNA

17 : Transcription is blocked by .....process?

A) 1 B) 2 C) 3 D) 4

18 : Tryptophan blocks RNA polymerase from.....?

A) Binding B) Transcribing genes C) DNA polymerase D) Binding and transcribing genes

19 : Which regulatory molecule enhances transcription?

A) CRP – cAMP B) CRP C) cAMP D) None

20 : An operon regulated by.....?

A)Repressor protein B)Activated protein C) Structural genes D) Regulatory protein

21 : Genes are located in nucleus in a.....material?

A) Nucleolus B) Chromatin C) Tangled chromatin D) Cytoplasm

22 : DNA is highly ordered around positively charged .....?

A) Repressor proteins B) Histone proteins C) Activated proteins D) Regulatory proteins

23 : Which groups reduce positive charge when add to histones?

A) Alkyl B) Carboxy C) Acetyl D)Ketone

24 : Promoter has .....essential sequences?

A) One B) Two C) Three D) Four

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25 : TATA box where ……..begins to denature?

A) RNA B) mRNA C) DNA D) rRNA

26 : Eukaryotic promoter have TATA box ,which is located…….?

A)25bp B)26bp C)27bp D)28bp

27: The first transcription factor is…….?

A) TFD11 B) TF11D C) T11FD D) FT11D

28 : Many genes have enhancer away ……..nucleoitide?

A) 1000 B) 2000 C) 3000 D) 4000

29 : During RNA maturation introns are…….?

A) Produced B) Removed C) Increase D) Decrease

30 :RNA has complimentary bases that bind CS at…….exon – introns boundery?

A) 3 ’ B) 5’ C) 3’- 5’ D) 5’-3’

31 :The active X makes RNAi anti –Xist gene appropriately called…?

A) Tsix B) Tseven C) Teight D) Tnine

32 Which attract chromosomal proteins?

A) Methylation B) Histone deacetylation C) a and b D) None

33 : Multicellular organism cells are specialized for the support ……?

A)Table sugar B) Sweat sugar C) Brain sugar D) All of these

34 :Our sense organ allow us to chemical respond to…..?

A) Odor B) Light c)Taste D) Touch

35 : Signal detection to final response is called…..?

A) Signal translation pathway B) Signal transduction pathway
C) Signal transcription pathway D) Signal transformation pathway

36 :Which signals receptors on the cells that secret them?

A)Paracrine signals B)Transdution signal C)Autocrine signal D)Translation signal

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37 :Cell behavior in an environment flooded with.....of ligands?

A) Hundred B)Thousand C)Millions D)Twenty

38 : Inactive ICR may be.....bond?

A)RNA B)mRNA C)rRNA D)DNA

39 : Activated receptor binds DNA induces gene.....?

A)Transdution B) Transcription C)Translation D)Transformation

40 :How many types of proteins?

A) 5 B) 6 C) 7 D)8

41 : Which protein spread signal from one pathway to another?

A) Bifurcation B) Integrator C) Amplifier D) Transducer

42 : Which protein produce intracellular mediators?

A) Relay B) Amplifier C) Adopter D) Gene regulatory

43 :Many cells use .....proteins to enhance protein?

A) Transducer B) Amplifier C) Relay D) Scaffold

44 :.....are produced by in response to signal received by the receptor?

A) SCIMs B)SICMs C)SMICs D)SMCIs

45 : EnvZ change the cytoplasmic domain and make it a.....?

A)Ligase B)Helicase C)Kinase D)primase

46 : Helices .....that participate in agonist binding?

A)3 , 5 and 6 B)3 , 4 and 6 C) 3 , 4 and 7 D) 3 ,4 and 8

47 :Ligand activates .....protein?

A)T B) C C) G D) A

48 :cAMP can bind .....to open them?

A) A protein B) G protein C) Ion channels D) Ionic bond

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49 : One receptor ..... active Gs?

A) 100 B)200 C)300 D)400

50 : Per receptor –hormone complex are produced by .....cAMP?

A) Millions B)Thousand C) several thousand D)Hundred

51 : Release of glucose fuels.....response?

A)Fight B) Flight C) Fight and flight D) Fight or flight

52 : AKA cAMP depend protein.....?

A) Kinase B) Ligase C) Helicase D) Primase

53 : The PKAs are.....?

A)Hexamerse B) Hetramerse C) pentamerse D) Tetramerse

54 : PDE1 receptor interact with.....?

A) G_{ia-} B) G_{BY-} C) G_{Y-} D) G_i

55 : G_{BY} open K channel in .....?

A) Blood cells B) Brain cells C) Bone cells D) a and c

56 : The G protein the synthesis of cAMP by.....?

A) Adenylyl cyclase B) Adinosine phosphate C) G_i D) cyclase

57 : cAMP causing diarrhea resulting in death from .....?

A) Hydration B) Dehydration C) Duffution D) osmosis

58 : One rhodopsin molecule absorbs .....proton?

A) One B) Two C) Three D) Four

21 june

59 : Calmodulin binds 4 Ca^{2+} allosteric (PKA).....?

A) 1% B) 2% C) 3% D) 4%

60 : Tired brain produces.....?

A) Cytosine B) Guanine C) Adenosine D) Thymine

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61 : Extracellular ligand – binding domainon .....segment?

A) 1 transmembran B) 2 trnsmembran C) 3 trnsmembran D) 4 trnsmembran

62 : Most numerous receptor tyrosine.....?

A) ligases B) Helicases C) Kinases D) primases

63 : EGF activated MAPK stays active for .....mint?

A) 8 B) 7 C) 6 D) 5

64 :.....genes encode kinases?

A) 2 % B) 3 % C) 4% D) 5 %

65 : .....proteins are phosphorilated ?

A) ¼ B) 1/5 C) 1/3 D) 1/6

66 : Acitvated Raf is phosphorylates many molecules of.....?

A)MEK B) MAP C) MKE D) MPA

67 : Chromosomal translocation between chromosome.....?

A) 9 and 52 B) 9 and 42 C) 9 and 32 D) 9 and 22

68 : APC gene mutations accur in human colon cancer.....?

(a). 80% (b). 90% (c). 70% (d). None of these

69 : Proteolysis means: protein's .....?

(a). Breaking (b). Production (c). None of these (d). All of these

70 : APC adherens junctions scaffold protein called.....?

(a). Axin (b). Arginin (C). Both (d). None

71: Stimulation of milk production is due to.....?

(a). Erythropoientin (b). Prolaction (c). Growth hormone (d). Alpha. Interferon

72 : ABL protein preventing ATP from.....?

A) Produced B) Removed **C) Binding** **D) CML**

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73 : BTK and PLC – Y to the cytoplasmic face of the.....?

A) Nucleus B) Cell membrane C) plasma membrane D) All of these

74 : Bruton,s tyrosine mutation is associated with .....agammaglubulemia?

A) Y – linked B) X – linked C) XY – linked D) XX – linked

75 : Which signal cells indirectly activating protein kinase B?

A) PDK1 B) PKB C) PI 3 D) PIP3

76: Intracellular protease cleaves off the cytoplasmic tail of _____ when it binds _____.?

(a). Notch, delta (b). Delta, notch (c). Notch, notch (d). Delta, delta

77 : Activated protein is .....?

A) PDK1 B) PKB C) PI 3 D) PIP 3

78 : Which Recepter required for signalling:

(a). Type_1 TGF.beta (b). Type_2 TGF.beta (c). Both D) None of these

79: Smad complex move into_____ for association of other gene regulatory proteins:

(a). Nucleus (b). DNA (c). Target Gene (d). All of these

80 : _____ protein called Dishevelled is activated when Wnt is present.

(a). Nucleus signalling (b). Cytoplasmic signaling (c). Contact dependent (d) None

28 june : lec 119 – 128

81 : Which is the primary concerns due to skin is lost?

A) Infectious particals B) Plasmodium infection C) Injury infection D) None

82 : Pathogen may cause infection of.....?

A) Digestive system B) Immune system C) Nerve system D) All of these

83 : Our tears and saliva have enzymes that destroy .....?

A) Organisms B) Macroorganisms C) Microorganisms D) None

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84 : How many steps of immune system?

A) 7 B) 6 C) 5 D) 4

85 : Histamine diffuse into .....?

A) Vains B) Artries C) Capillaries D) All of these

86 : Phagocytes engulf .....and dead cells?

A) Bacteria B) Plasma C) Enzyme D) Histamine

87 : Erythrocytes transport oxygen and.....?

A) Carbohydrate B) Protein C) Carbon dioxide D) None

88 : Which cells differentiate form antibody- producing cells and memory cells ?

A) Dendritic cells B) Mast cells C) T cells D) B cells

89 : Which cells release histamine when damaged?

A) Mast cells B) Basophils C) Neutrophils D) T cells

90 : T cells mature in .....?

A) Lymphatic vessel B) Medulla C) Thymus D) Bone marrow

91 : Lymph nodes contain .....?

A) REDs B) Tissues C) WBCs D) All of these

92 : AIS has.... Component?

A) Two B) Three C) Four D) Five

93 : B lymphocyte kill pathogen.....?

A) 20% – 60% B) 20% - 50% C) 20% - 40% D) 20% - 30%

94 : How many lymphocytes in human body?

A) 2×10^{2} B) 2×10^{12} C) 2×10^{22} D) 2×10^{32}

95 : Substance that activate AIS are called?

A) Antigens B) Antibody C) Antibody protein D) AIR

96 : The rates were unable to mount.....?

A) AIS B) IIS C) AIR D) None

97 : B cells develop in.....?

A) Thymus B) peripheral lymphocyte organ C) Bone marrow D) Hemopoietic tissue

98 : The B – cells is composed of four polypeptide chains , these are....?

A) 1 identical heavy chain and 3 identical light chains B) 2 identical heavy chains and 2 identical light chains C) 3 identical heavy chains and 1 identical light chains D) 4 identical heavy chains

99 : Immunoglobin domain is.....long?

A) 110 AA B) 111 AA C) 112 AA D) 113 AA

100 : Polyvalent.....times stronger than monovalant ?

A) 400 B) 300 C) 200 D) 100

101 : Which is the first class of Ab to appear on cell surface?

A) IgE B) IgM C) IgA D) IgD

102 : How many classes of antibodies?

A) 5 B) 10 C) 12 D) 15

103 : Which chain is required for pentamer formation?

A) L chain B) J chain C) H chain D) None

104 : IgG is monomer ,it is only.....?

A) IIS B) AIR C) AIS D) Ab

105 : Which receptors are located on the mast cells?

A) IgA Fc B) IgE Fc C) IgM Fc D) IgG Fc

106 : A myeloma cell is fused with a B cell to form.....?

A) Spleen B) Native cells C) Beta cells D) Hybridoma

107 : In the absence of antigen human can make more than .....different antibody molecule?

A) 10^{12} B) 10^{13} C) 10^{14} D) 10^{15}

108 : Number of human gene is.....?

A) 30,000 B) 40,000 C) 50,000 D) 60,000

109 : Immunoglobulin genes have relatively.....mutation rate?

A) Low B) High C) a and b D) very low

Mcqs 129 – 138

110) Effecter helper T cell stimulate the responses of other cells.....?

A) Phagocitic macrophages , B cells B) macrophages , T cells
C) Intracellular phathogen D) Cytotoxic T cells

111) T cells receptor recognizes processed antigen bond to a class .....?

A) T cells receptor B) MHC protein C) BCR gene D) All of these

112) How many protein are not immunoglobulins ?

A) 3 B) 2 C) 1 D) 4

113 : Antigen is .....?

A) Lymphoid organ B) Dendritic cell C) Protein antigen D) Peptide fragment

114) A virus infected cell in the case of .....?

A) Cytotoxic C cell B) Effecter helper T cell C) MHC genes D) None

115) How many types of MHC molecules?

A) 1 B) 2 C) 3 D) 4

11 6) APC express major histocompatibility compex.....?

A) cytotoxic T cell B) Macrophages b cells C) MHC genes D) Protein antigen

117) How many genes are present in MHC classes ?

A) 3 B) 4 C) 5 D) 6

118) 3 genes for class 1 proteins.....?

A) HLA – A , B , C B) HLA – A , C , D C) HLA – DP , DQ D) HLA – DQ , DP

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119) Class 11 can .....pair up?

A) α and γ B) α and β C) α , β , γ D) None

120) MHC groove can accommodate an extended peptide about .....long?

A) 8 – 30 amino acids B) 8 – 20 amino acids C) 8 – 10 amino acids D) 8 – 11 amino acids

121) Each class 1 MHC protein can bind a peptide of....?

A) Parallel sequences B) Perpandicular sequences C) Multiple sequences D) Diverse sequences

122) Which terminal bond to invariant pockets ?

A) C B) N C) C , N D) C , N , P

123) Cytotoxic T cells provide protection against .....?

A) Protein antigen B) Macrophage pathogen T cell C) MHC genes D) Intracellular pathogen

124) Which cell form a clone?

A) T_c B) T_b C) T_a D) T_d

125) How many steps is present in perforin – depending killing?

A) 3 B) 4 C) 2 D) 1

126) Helper T cell is activated by an .....cell to become an affector cell?

A) Macrophage pathogen cell B) MHC C) Antigen cell D) All of these

127) How many types of effector cell ?

A) 5 B) 4 C) 3 D) 2

128) TH2 cells mainly help activate .....?

A) B cell B) T cell C) B , T D) None

129) APCs provide .....types of signal?

A) One B) Two C) Three D) Four

130) Signal 1 is provided by.....?

A) B 7 protein B) MHC protein C) Peptide bond D) Costimulatory protein

131) B 7 protein are ……..?

A) CD80 – CD 83 B) CD80 – CD 84 C) CD80 – CD 85 D) CD80 – CD 86

132) Which protein is present on the surface of T cell?

A) CD 28 B) CD 29 C) CD 30 D) CD 31

133) The compliment system consist of ……..protein?

A) 40 B) 30 C) 20 D) 10

134) The compliment protein are account for about …….of the globulin?

A) 3 % B) 4 % C) 5 % D) 6 %

135) C1 compex consist of …..molecules?

A) Three B) Four C) Five D) Six

136) Which molecule binding the surface of pathogen?

A) C1q B) C1r C) C1s D) All of these

137) The conformational changes leads to C1q to the activation of two…..?

A) C1s B) C1r C) C4 D) C2a

138) The complex of C4b . 2b is called?

A) C1 B) C2 C) C3 D) C4

139) Marcophages and neutrophils have receptor for….?

A) C1b B) C2b C) C3b D) C4b

140) Cleavage of C5 by the …?

A) C1b / C5 B) C1 / C5 C) C3b / C5 D) C3 / C

Topic : 139 – 148

141) C3b binds a protein called?

A) Factor B B) Factor C C) Factor D D) Factor E

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142) C3 convertase into .....form?

A) 2 B) 3 C) 4 D) 5

143) The MBL – associated serine proteases,.....?

A) MASP-2 , MASP- 4 ,MASP- 6 B) MASP -3 ,MASP-5,MASP-7

C) MASP-1,MASP-2,MASP-3 D) All of these

144) The explosive potential of the compliment system requires at least .....protein?

A) 9 B) 10 C) 11 D) 12

145) Factor 1 is inactivates.....?

A) C3b B) C5 C) C3 D) Bb

146) C1 inhibitor binds to sites on activated.....?

A) C 1 and C 2 B) C 1r and C 2s C) C 2 and C 4 D) C 2r and C 4s

147) C 4 and C 2 deactivated by .....?

A) CNH11 B) CHN11 C) C11NH D) C12NH

148) A proto – oncogene can become a oncogene after.....?

A) Translation B) Transcription C) Transformation D) Mutation

149) Proto – oncogene code for .....?

A) Protein B) Enzyme C) Transformation D) Translation

150) Proto – oncogene are involved in signal .....?

A) Transformation B) Transdution C) Translation D) Transcription

151) How many classes of oncogenes?

A) 2 B) 3 C) 4 D) 5

152) Autonomous cell growth is present in.....cell?

A) Tumors B) Virus C) a and b D) Cancer

153) Many glioblastomas secrete .....?

A) PDGF B) PGDF C) PFGD D) PFDG

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154) EGF receptor ERBB1 is over expressed in .....of SCC of lung?

A) 70 % B) 80 % C) 90 % D) 100 %

155) ERBB2 / HER2 is amplified in .....of cancer?

A) 25 % - 60 % B) 25 % - 70 % C) 25 % - 40 % D) 25 % - 30 %

156) Mutation of RAS is present approximately .....in all human tumors?

A) 30 % B) 40 % C) 50 % D) 60 %

157) BCR – ABL hybrid gene activates.....?

A) MYC B) RAC C) MAP D) ERBB2

158) MYC assemble on a specific DNA sequence and drive .....of genes?

A) Translation B) Transformation C) Transcription D) Transduction

159) MYC binds with.....?

A) RNA B) mRNA C) Protein D) DNA

160) MYC gene encoding the .....?

A) Cyclin D B) Cyclin E C) Cyclin F D) Cyclin G

161) RB which overcome the hurdle of .....hurdle?

A) G1 to G2 B) G1 to S C) G1 to M D) All of these

162) The activated of CDKs is regulated by .....?

A) CDK1 B) CDK2 C) CDK D) CDK4

163) CDKS is occur in .....?

A) TGF – γ B) TGF – β C) TGF – γ ,β D) TGF – α

164) RB bind factor E2F when RB is phosphorilated by.....?

A) CDK4 , CDK6 , CDK2 B) CDK2 , CDK3 , CDK4 C) CDK5 , CDK 6 , CDK7 D) All of these

165) Which can activate DNA repair protein?

A) TP53 B) p21 C) P53 D) CIP

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166) Which is most commonly mutant gene in human cancers?

A) p21 B) CIP C) TP53 D) P53

167) P53 protein is stabilize by.....?

A) Damaged DNA B) Undamaged DNA C) Damaged RNA D) Undamaged RNA

168) How many types of Cdks?

A) 5 B) 4 C) 3 D) 2

169) Active p53 binds to requlatory region of .....gene?

A) p20 B) p21 C) p23 D) p24

170) Abnormally high level of Myc cause the activation of .....?

A) PARF19 B) PRAF19 C) P19ARF D) PA19RF

171) One of the p53 alleles mutated which causes .....fold increased chance of developing malignant tumor by age.....?

A) 25 , 25 B) 25 , 35 C) 25 , 45 D) 25 , 50

172) Papillomavirus uses .....viral proteins?

A) Two B) Three C) Four D) Five

173) Two vital proteins are.....?

A) E5 .E6 B) E6 . E7 C) E7 .E8 D) E8 .E9

174) Which virus uses a single dual purpose protein?

A) Rb B) Mdm2 C) Sv40 D) p53

175) How many bone cells die in a healthy adult?

A) Hundred B) Thousand C) Millions D) Billions

176) .....biochemical processes take place in membrane?

A) Vital B) Viral C) Protein D) None

177) An animal cell contains about.....protein molecule?

A) 10^{9} B) 10^{10} C) 10^{11} D) 10^{12}

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178) How many kinds of protein molecule?

A) 10,000 – 40,000 B) 10,000 – 30,000 C)10,000 – 20,000 D)10,000 – 10,000

179) Lipid bilayer of organelle membranes is impermeable to most.....molecule?

A) Hydrophobic B) Hydrophilic C) a and b D) None

180) The transport vesicles molecule derived from the lumen of .....compartment?

A) One B) Two C) Three D) Four

181) .....direct protein from the cytosol into the ER?

A) SS2 B) SS1 C) a and b D) Mdm2

182) SS2 consist of a specific .....dimensional arrangement of atoms on the protein surface ?

A) One B) Two C) Three D) Four

Mcqs 149 – 158

183) Envelop consists of ....concentric membrane?

A) 2 B) 3 C) 4 D) 5

184) The inner nuclear membrane contains specific .....that act as binding site?

A) Ribosome B) Protein C) mRNA D) tRNA

185) Bidirectional traffic between the cytosol and ....?

A) Inner membrane B) Outer membrane C) Protein D) All of these

186) Each complex has molecular mass of about .....?

A) 125 hundred B) 125 thousand C) 125 millions D) 125 billions

187) Each complex is composed of about.....different protein?

A) 20 B) 30 C) 40 D) 50

188) 17,000 daltons takes ....minutes to protein larger?

A) 2 B) 3 C) 4 D) 5

189) Nuclear pore contains a pathway for few diffusion .....nm in diameter and .....long?

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A) 9 , 14 B) 9 , 15 C) 9 , 16 D) 9 , 17

190) The nuclear envelop of a typically mammalian cell contains.....more complex?

A) 1000 – 2000 B) 2000 – 3000 C) 3000 – 4000 D) 4000 – 5000

191) The signal defined in numerous proteins by using .....technology?

A) DNA recombinant B) RNA recombinant C) both D) None

192) Immunoflourescence microphages showing the cellular location of ...virus ?

A) SV_{20} B) SV_{30} C) SV_{40} D) SV_{50}

193) .....repeat line the path through nuclear pore complex taken by the import receptor?

A) GF B) FG C) Cytosol D) a and b

194) The energy is provided by the hydrolysis of .....?

A) ATP B) ADP C) GDP D) GTP

195) How many subcompartment in mitochondria ?

A))One B) Two C) Three D) Four

196) Matrix signal sequences have propensity to fold into an amphipathic .....helix?

A) α B) β C) γ D) All of these

197)Chaperon protein belonging to the.....family?

A) hsp60 B) hsp70 C) hsp80 D) hsp90

198) TIM22 complex mediates .....of inner membrane protein?

A) Duplication B) Deletion C) Insertion D) Single gene

199) The N – terminal signal sequence of precursor protein is recognized by.....complex?

A) TIM B) TOM C) TIM22 D) TOM22

200) Protein transport require .....signal sequences?

A) One B) Two C) Three D) Four

201) The regions of ER that lack bound ribosome is called ?

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A) Rough ER B) ER membrane C) Smooth ER D) a an c

202) ER protein import is a co .....process?

A) Translational B) Transcriptional C) Transformational D) a and b

203) The SRP consist of ....different polypeptide chains ?

A) Three B) Four C) Five D) Six

204) The translocator .....complex forms a water filled pore in the membrane ?

A) Sec61 B) Sec62 C) Sec63 D) Sec64

205) The stop transfer sequence is a ....α helix membrane?

A) Single B) Double C) Triple D) b and c

Mcqs lec 159 – 168

206) Golgi apparatus are packed into small ....coated transport vesicles ?

A) COP11 B) CPO11 C) C11PO D) C11OP

207) Which protein are actively recrurited into....?

A) Repressor B) Cargo C) Receptor D) Resident

208) Which protein serve as receptor .....for packing some secondary protein into COP11 coated vesicles?

A) ERG1C51 B) ERG1C52 C) ERG1C53 D) ERG1C54

209) The ERG1C53 protein is a lectin that bind on factor .....?

A) 111 and 1V B) v and v11 C) V and v1 D) V and V111

210) Homotypic fusion and heterotypic fusion requires a set of matching .....?

A) SNAREs B) SANREs C) SANERs D) SNAERs

211) Resident ER membrane protein consist of .....lysines?

A) One B) Two C) Three D) Four

212) Signal sequences is called ?

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A) KKXX B) Bip C) KDEL D) a and c

213) Lysosomes contain .....types of hydrolytic enzyme?

A) 10 B) 20 C) 30 D) 40

214) Lysosome contain PH....?

A) 5.0 B) 6.0 C) 7.0 D) 8.0

215) Lysosome hydrolysis carry a unique marker in the form of .....groups?

A) M5P B) M6P C) M7P D) M8P

216) M6P receptor binds its specific oligosaccharide at PH....?

A) 4.5 B) 5.5 C) 6.5 D) 7.5

217) Phagocytosis involves the ingestion of .....?

A) Fluid B) Solutes C) a and b D) Microorganism

218) How many classes of WBs in mammals ?

A) Three B) Four C) Five D) Six

219) Phagcytosis partical contain a core of about....cholesterol molecule ?

A) 1400 B) 1500 C) 1600 D)1700

220) Skin regenerate every .....?

A) 10 years B) One week C) Two week D) 20 years

221) All organs have limited ability to regenerate ...?

A) 4 cm B) 3 cm C) 2 cm D) 1 cm

222) Every .....a person dies from a disease that can be treated with tissue replacement?

A) 30 sec B) 30 min C) 20 sec D) 20 min

223) Human blood discover.....?

A) Alexander Bogdanov Moscow B) Austrian Karl Landsteiner C) Joseph Murray D) Eduard Zirm

224) Embryonic stem cell are derived from the embryos .....?

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A) AA option B) BB option C) CC option D) DD option

225) Dusseldorf group performed clinical stem cell application for the first time...?

A) 2004 B) 2003 C) 2002 D) 2001

226) Which cells do not cause rejection?

a) WBCs b) RBCs c) adult stem cells d) customized stem cells

227) There is a growing evidence that bone marrow is derived stem cells which improve!

a) cardiac function b) muscle function c) Stumich function d) Both a and c

228) The evidence suggested by ____about bone marrow ;

a) Leri b) Robert c) irtaza

229) Stem cells right from ;

a) oxygenated blood b) deoxygenated blood c) cord blood d) both a and b

230) Cord blood have cells with features of____ stem cells;

A) adult embryonic C) customized D) both a and b

231) Fertilized egg result in the formation of :

A) somatic cells sex cells C) mature cells D) embryo

232) When cells taken from the embryos in embryonic stem cells as a result embryo

A) copied dead C) shrink. D) both a and b in some conditions

233) Macrophages scevange senescent RBCs regenerate about ;

A) 10 million 100 million C) 10 billion. D) 100 billion

Lec 169 – 177

234) In .....Bogdanov blood transfusion experiment?

A) 1924 B) 1925 C) 1926 D) 1927

235) Lenin´s sister..... was take part in Bogdanvo experiment?

A) Sadia B) Maria C) Nadia D) Shazia

236) In .....2014 the media reported on a blood transfusion that contain a protein called....?

A) March , GFD11 B) April , G11DF C) May , GDF11 D) June , G11FD

237) Which things should be used all time when working with chemicals or biological agent ?

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A) Lab coat B) Safety glasses C) Special gloves D) All of these

238) Which gas maintain the ph in incubator ?

A) Co_2 B) N C) O D) All of these

239) Microscope is used for.....?

A) RNA copies B) DNA copies C) a and b D) SRNA

240) In centrifuge mechine temperature is used ...?

A) 1000 – 15000◦C B) 1000 – 16000◦C C) 1000 – 17000◦C D) 1000 – 18000◦C

241)) In centrifuge mechine..... temperature is used for DNA extract?

A) 4◦C B) 18◦C C) 19◦C D) 20◦C

242) In water bath is used fix temperature .....?

A) 37◦C B) 32◦C C) 40◦C D) 4◦C

243) In incubators Co_2 is used ....?

A) 5 – 8 % B) 5 – 10 % C) 5 – 12 % D) 5 – 14 %

244) Ethanol .....is used in incubator?

A) 50 % B) 60 % C) 70 % D) 80 %

245) How many pore size of filter ?

A) 5 B) 4 C) 3 D 2

246) Two pore size are .....of filter?

A) 0.2um and 0.45um B) 0.2um and 0.46um C) 0.2um and 0.47um D) 0.2um and 0.48um

247) A vertebrate can have more than .....different cell types?

A) 80 B) 100 C) 120 D) 200

248) How many types of cell culture?

A) 4 B) 3 C) 2 D) 1

249) Cell lines have at least ....passage?

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A) One B) Two C) Three D) Four

250) Which type of cell culture is dissociated enzymatically?

A) Suspension B) Adherent C) a and b D) None

251) suspension cultures have density .....?

A) 2.0 to 2.5 B) 0.7 to 1.0 C) a and b D) None

252) In which phase DNA replicate?

A) M B) G1 C)G2 D) S

253) Which phase is maximum condensed ?

A) Prophase B) Metaphase C) Anaphase D) Telophase

254) Separation of chromatids is start in.....?

A) Prophase B) Metaphase C) Anaphase D) Telophase

255) In animal cell , invisible thread tightening between the ...poles?

A) Five B) Four C) Three D) Two

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