BIO401 Important MCQs

Lecture no 59-64

1. A sequence of Bernouli trials forms a ----------?

Bernouli process

2. Each Bernouli trials results in one of the ---------- possible outcomes?

Two

3. The name of two possible outcomes are?

- Failure
- Success

4. The probability of success denoted by --------?

P

5. The probability of success remains -------- from trial to trial?

Constant

6. The trials are ----------?

Independent

7. A ---------- results from Bernouli process?

Bionomial probability Distribution

8. A bionomial probability of distribution has ---------- no of trials?

Fixed

9. ---------- will denote the probabilities of S and F respectively?

P and q

10. "P" is ---------?

Probability of success

11. "q" is ----------?

Probability of failure

12. "n" is a fixed number of -------?

Trials

13. "x" is a ---------?

Specific number of success in "n" trials

14. P(x) is equal to --------?

Probability of getting exactly "x" success among the "n" trials

15. $p^x(1-p)^{n-x}$ **= is a ---------?**

Probability of "x" success among "n"

16. How many methods for finding Probability?

Three

17. In a --------, we finding the probabilities corresponding to the random variable "x" ?

Bionomial Distribution

18. Methods of finding probability?

- Using the bionomial probability formula
- Using the Table of probabilities

- Using technology

19. Suppose we have n = 5 and $p = 0.60$ The probability that bionomial trials yeild four success will be given as :

Ppppq = (0.60)4 x 0.40 = 0.05184

20. One has to be very certain that "x" and "p" both refers to the same cetagory being called a ----------?

Success

21. When sampling is conducted without replacement, then consider events to be -------- if n<0.05 n:

Independent

22. The -------- suggests that values are unusual if they are outside of these limits.

Range rule of Thumb

23. $\mu + 2\sigma$ is a ---------- value.

Maximum value

24. $\mu - 2\sigma$ is a ---------- value.

Minimum Value

25. For p = 0.5 and large or small "n" the bionomial distribution will be:

Symmetric

26. For large "p" and small "n" the bionomial distribution will be ------?

Left skewed

27. For small “p” and small “n” the bionomial distribution will be -------?

Right skewed

28. For small “p” but large “n” the bionomial distribution approaches -------?

Symmetry

29. By using MS excel we will use a function

BINOMDIST

30. In interest, number of events occurring ?

2

31. Number of Deaths claims received per day by a -------- company?

Insurance

32. Number of Alpha particles emitted from a ---------- during a given period of time?

Radioactive source

33. The discrete distribution used for such instances; number of families with child, About deaths claims and alpha particles emitted from radioactive source is called --------?

Poisson probability distribution

34. Who invented the poisson distribution?

French mathematician “Simeon Denis Poisson”

35. The probability that event occurs in a given unit of time is the ----- for all units?

Same

36. The events that occur in one unit of time is -------- of the number of events in other units.

Independent

37. The mean or expected rate Is ----?

λ. (lamda)

38. λ. Is -----?

Average number of events per interval

39. The base of natural logarithms is --------?

Euler's number

40. $p(x) = \frac{\lambda^x}{x!} e^{-\lambda}, \qquad x = 0, 1, 2, \ldots$ the following equation is called ------?

Poisson Random variable

41. The poisson process generates a -------?

Poisson distribution

42. How many traits in poisson process ?

Three

43. In poisson process -------- are discrete??

Outcomes

44. The probability of two or more successes over a sufficiently small interval is essentially --------?

Zero

45. In the study drug induced of anaphylaxis among patients taking ---------- as a part of their anesthesia?

Recuronium bromide

46. $P(X = 3) = \frac{e^{-12}12^3}{3!} = .00177$ **i**t is the -------- of patients receiving recuronium?

Probability

47. poisson distribution is often used as an ------ for bionomial probabilities ?

Approximation

48. Poisson distribution is important because it is often used for discribing the behaviour of ----------?

Rare events

49. A --------- is a collection of all elements of interest?

Population

50. A -------- is a subset of population?

Sample

51. kinds of sample ??

Representive or non-representive

52. --------- samples are samples selected using the principles of probability?

Probabilistic

53. The researcher can determine the probability of any given sampling error and make ---------- about population characteristics.

Statistical interferences

54. --------- sample may be resonably representative?

Quota sample

55. Sample for each stratum or subgroup of a population?

Startified samples

56. Combinations of random , systematic ,startified and cluster sampling?

Multistage sampling

57. If probability involves at each stage then which sample distribution can be obtained?

Sample statistics

58. The -------- CMAs of Regina and Saskatoon are strata?

Two

59. Lists of elements that sample selected from is called -----?

Frame

60. Characteristics of a population is called ?

Parameter

61. Numerical characteristics of a population is called?

Statics

62. Probability of distribution of a static is called -------?

Sample distribution

63. In -------- each sample possible of size *n* has the same probability of being selected.

Simple random sample

64. It may be difficult to obtain a -------?

Frame

65. The --------- is the frequency of occurence of a characteristic divided by total number of elements.

Proportion

66. ---------- may also be termed as population values ?

Parameters

67. A specific value of point estimator is reffered as ---------- of a parameter.

Point estimator

68. Difference between the point estimate and the value of parameter is called ?

Sampling Error

69. Culter poll has a sampling error of only ------ % point for the liberals.

0.2%

70. A ----- is the probability diatribution for all possible values of sample static.

Sample distribution

71. In sampling distribution each sample contain ------- elements.

Different