

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

Test Booklet No. :

Series

21569

TEST BOOKLET

Paper—II

Part-II (ACCOUNTANCY/STATISTICS/MATHEMATICS)

(Objective Type)



Time Allowed : 2 Hours

Full Marks : 100

Read the following instructions carefully before you begin to answer the questions :

1. The name of the Subject, Roll Number as mentioned in the Admission Certificate, Test Booklet No. and Series are to be written legibly and correctly in the space provided on the Answer-Sheet with Black/Blue ballpoint pen.
2. Answer-Sheet without marking Series as mentioned above in the space provided for in the Answer-Sheet shall not be evaluated.
3. All questions carry equal marks.

The Answer-Sheet should be submitted to the Invigilator.

Directions for giving the answers : Directions for answering questions have already been issued to the respective candidates in the 'Instructions for marking in the OMR Answer-Sheet' along with the Admit Card and Specimen Copy of the OMR Answer-Sheet.

Example :

Suppose the following question is asked :

The capital of Bangladesh is

- (A) Chennai
- (B) London
- (C) Dhaka
- (D) Dhubri

You will have four alternatives in the Answer-Sheet for your response corresponding to each question of the Test Booklet as below :

(A) (B) (C) (D)

In the above illustration, if your chosen response is alternative (C), i.e., Dhaka, then the same should be marked on the Answer-Sheet by blackening the relevant circle with a Black/Blue ballpoint pen only as below :

(A) (B) (●) (D)

The example shown above is the only correct method of answering.

4. Use of eraser, blade, chemical whitener fluid to rectify any response is prohibited.
5. Please ensure that the Test Booklet has the required number of pages (56) immediately after opening the Booklet. Students can attend questions of any one subject—Accountancy or Statistics or Mathematics. In case of any discrepancy, please report the same to the Invigilator.
6. No candidate shall be admitted to the Examination Hall/Room 20 minutes after the commencement of the examination.
7. No candidate shall leave the Examination Hall/Room without prior permission of the Supervisor/ Invigilator. No candidate shall be permitted to hand over his/her Answer-Sheet and leave the Examination Hall/Room before expiry of the full time allotted for each paper.
8. No Mobile Phone, Electronic Communication Device, etc., are allowed to be carried inside the Examination Hall/Room by the candidates. Any Mobile Phone, Electronic Communication Device, etc., found in possession of the candidate inside the Examination Hall/Room, even if on off mode, shall be liable for confiscation.
9. No candidate shall have in his/her possession inside the Examination Hall/Room any book, notebook or loose paper, except his/her Admission Certificate and other connected papers permitted by the Commission.
10. Complete silence must be observed in the Examination Hall/Room. No candidate shall copy from the paper of any other candidate, or permit his/her own paper to be copied, or give, or attempt to give, or obtain, or attempt to obtain irregular assistance of any kind.
11. This Test Booklet can be carried with you after answering the questions in the prescribed Answer-Sheet.
12. Noncompliance with any of the above instructions will render a candidate liable to penalty as may be deemed fit.
13. No rough work is to be done on the OMR Answer-Sheet. You can do the rough work on the space provided in the Test Booklet.

N.B. : There will be negative marking @ 0.25 per 1 (one) mark against each wrong answer.

/1202-A

[No. of Questions : 100

SEAL

OR
STATISTICS

1. The data taken from the publication 'Agricultural Statistics in India' will be considered as

- (A) primary data
- (B) secondary data
- (C) both primary data and secondary data
- (D) neither primary data nor secondary data

2. A, B, C are three sets of values of a variable X :

A : 2, 3, 3, 1, 3, 2, 3

B : 7, 5, 9, 12, 5, 3, 8

C : 4, 4, 11, 7, 2, 3, 4

Which of the following statements is true?

- (A) Mean of A = Mode of C
- (B) Mean of C = Median of B
- (C) Median of B = Mode of A
- (D) Mean, median and mode of A are equal.

3. For the mid-values given as 25, 34, 43, 61, the first class interval of the distribution is

- (A) 24.5-34.5
- (B) 25-34
- (C) 20-30
- (D) 20-29

4. In an ordered series, the data are in

- (A) increasing order
- (B) decreasing order
- (C) Either (A) or (B)
- (D) Neither (A) nor (B)

5. If mean and mode of some data are 4 and 10 respectively, its median will be

- (A) 1.5
- (B) 5.3
- (C) 16.0
- (D) 6.0

6. If the standard deviation (SD) of a distribution is 15, the quartile deviation (QD) of the distribution is

- (A) 15
- (B) 10
- (C) 12
- (D) None of the above

7. Non-dimensional diagrams are also known as

- (A) cubes
- (B) spheres
- (C) pictograms
- (D) All of the above

8. A histogram can be drawn for the distribution with unequal class interval by considering

- (A) class frequency
- (B) height of bars proportional to class intervals
- (C) height of bars proportional to frequency density
- (D) All of the above

9. Which of the following represents the median of a given data?

- (A) First quartile
- (B) Fiftieth percentile
- (C) Sixth decile
- (D) None of the above

10. If a constant value 50 is subtracted from each observation of a set, the mean of the set is

- (A) increased by 50
- (B) decreased by 50
- (C) not affected
- (D) zero

11. Geometric mean of two observations can be calculated only if

- (A) both the observations are positive
- (B) one of the two observations is zero
- (C) one of them is negative
- (D) both of them are zero

12. Which of the following are correct in respect of a frequency distribution?

- I. Arithmetic mean is less than the harmonic mean.
- II. $\beta_2 > 1$
- III. $\beta_2 - \beta_1 - 1 > 0$
- IV. Karl Pearson's coefficient of skewness lies between -1 and +1.

(Symbols have their usual meanings.)

Select the correct answer using the codes given below.

- (A) I and II
- (B) II and III
- (C) III and IV
- (D) I and IV

13. For a positively skewed distribution, the correct inequality is

- (A) $Q_1 + Q_3 > Q_2$
- (B) $Q_3 - Q_1 > Q_2$
- (C) $Q_1 + Q_3 > 2Q_2$
- (D) $Q_1 + Q_3 > 2Q_3$

14. If the correlation coefficient between two variables is 0.8, the percentage of variation in the response variable explained by the variation in the explanatory variable is

- (A) 80%
- (B) 0.80%
- (C) 0.64%
- (D) 64%

15. Which of the following is a unitless measure of dispersion?

- (A) Standard deviation
- (B) Mean deviation
- (C) Coefficient of variation
- (D) Range

16. In a sample, all observations are same. Then their variance is

- (A) zero
- (B) one
- (C) not possible to calculate
- (D) None of the above

17. In an equation of a straight line $y = mx + c$, if $m = -2$, then

- (A) the relationship between the two variables is perfect
- (B) there is no relationship between the variables
- (C) there is positive relationship between the variables
- (D) there is negative relationship between the variables

18. Consider the following bivariate data :

X	:	1	2	3	4	5
Y	:	4	1	0	1	4

What is the correlation coefficient between X and Y ?

- (A) $-1/2$
- (B) 0
- (C) -1
- (D) +1

19. In case of three variables x_1 , x_2 and x_3 , it is given that every pairwise correlation coefficient equals r . What is the partial correlation coefficient $r_{12.3}$ equal to?

- (A) r
- (B) $\frac{1}{(r+1)}$
- (C) $\frac{r}{(r+1)}$
- (D) $\frac{1}{(1-r)}$

20. If A and B are two events which have no point in common, the events A and B are

- (A) complementary event to each other
- (B) independent
- (C) mutually exclusive
- (D) dependent

21. It is known that an event A has occurred, the probability of an event E given A is called

- (A) empirical probability
- (B) a priori probability
- (C) posterior probability
- (D) conditional probability

22. There is 80% chance that a problem will be solved by a Statistician and 60% chance that the same problem will be solved by a Mathematician. The probability that at least the problem will be solved is

- (A) 0.48
- (B) 0.92
- (C) 0.75
- (D) 0.10

23. An unbiased coin is tossed four times. The probability that the number of heads exceeds the number of tails is

- (A) $\frac{1}{12}$
- (B) $\frac{3}{4}$
- (C) $\frac{3}{8}$
- (D) $\frac{5}{16}$

24. For a post in a factory, husband and wife both applied. The probability of selection of a male is $\frac{1}{5}$ and that of a female is $\frac{1}{3}$. The probability of selection of only one of them is

- (A) $\frac{2}{15}$
- (B) $\frac{4}{15}$
- (C) $\frac{8}{15}$
- (D) $\frac{2}{5}$

25. A random variable X has the following probability distribution :

X	-1	-2	1	2
$P(X = x)$	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{3}$

Then the expected value of X is

- (A) $\frac{3}{2}$
- (B) $\frac{1}{6}$
- (C) $\frac{1}{2}$

(D) None of the above

26. The joint probability distribution of X and Y is given by

$Y \backslash X$	-1	0	1
-1	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{1}{6}$
0	0	0	0
1	$\frac{1}{6}$	0	$\frac{1}{6}$

Consider the following statements :

I. X and Y are independent random variables.

II. $\text{Cov}(X, Y) = 0$

Which of the statements given above is/are correct?

- (A) I only
- (B) II only
- (C) Both I and II
- (D) Neither I nor II

27. The outcome of an experiment classified as success A or failure A^c will follow a Bernoulli distribution if

- (A) $P(A) = \frac{1}{2}$
- (B) $P(A) = 0$
- (C) $P(A) = 1$
- (D) $P(A)$ remains constant in all trials

28. For a normal distribution, the QD, MD and SD are in the ratio

- (A) 5:6:7
- (B) 10:12:15
- (C) 2:3:4
- (D) None of the above

29. Binomial distribution tends to Poisson distribution if

- (A) $n \rightarrow \infty, p \rightarrow 0$ and $np = \mu$ (finite)
- (B) $n \rightarrow \infty, p \rightarrow \frac{1}{2}$ and $np = \mu$ (finite)
- (C) $n \rightarrow 0, p \rightarrow 0$ and $np = \mu \rightarrow 0$
- (D) $n \rightarrow 15, p \rightarrow 0$ and $np = \mu \rightarrow 0$

30. The probability of drawing a unit at each selection remains same in

- (A) simple random sampling with replacement
- (B) simple random sampling without replacement
- (C) Both (A) and (B)
- (D) Neither (A) nor (B)

31. 'Sampling frame' is a term used for

- (A) a list of random numbers
- (B) a list of voters
- (C) a complete list of sampling units of a population
- (D) None of the above

32. Which of the following statements is true?

- (A) More the standard error, better it is.
- (B) Less the standard error, better it is.
- (C) Standard error is always zero.
- (D) Standard error is always unity.

33. If the number of population units N is an integral multiple of sampling size n , then the systematic sampling is called

- (A) linear systematic sampling
- (B) circular systematic sampling
- (C) modified systematic sampling
- (D) All of the above

34. When the errors are **not** independently distributed, this is referred to

- (A) collinearity
- (B) heteroscedasticity
- (C) autocorrelation
- (D) linearity

35. A regression diagnostic tool used to study the possible presence of multicollinearity is

- (A) the autocorrelation matrix
- (B) the residual plot
- (C) the slope
- (D) the Durbin-Watson statistic

36. The method of least squares for determining trend is used when

- (A) trend is known
- (B) trend is curvilinear only
- (C) the value of Y is not a function of time t
- (D) None of the above

37. Which of the following relations amongst the finite differences is **not** correct?

- (A) $\Delta^3 Y_{-1} - \Delta^3 Y_{-2} = \Delta^4 Y_{-2}$
- (B) $\Delta^2 Y_{-1} - \Delta^2 Y_0 = \Delta^3 Y_0$
- (C) $\Delta Y_2 - \Delta Y_1 = \Delta^2 Y_1$
- (D) $Y_2 - Y_1 = \Delta Y_1$

38. The highest order of polynomial for which Simpson's $\frac{1}{3}$ rd rule of integration is exact is

- (A) first
- (B) second
- (C) third
- (D) fourth

39. Newton-Raphson method fails when

- (A) $f'(x)$ is negative
- (B) $f'(x)$ is too large
- (C) $f'(x)$ is zero
- (D) Never fails

40. What is the third-order difference with arguments 2, 4, 9 and 10 of the function $f(x) = x^3 - 2x$?

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

41. Which of the following statements best describes the relationship between parameter and statistic?

- (A) A parameter has sampling distribution with the statistic as its mean.
- (B) A parameter has a sampling distribution that can be used to determine what values of statistic is likely to have a repeated sample.
- (C) A parameter is used to estimate the statistic.
- (D) A statistic is used to estimate a parameter.

42. If the sample mean \bar{X} is an estimate of the population mean μ , then \bar{X} is

- (A) unbiased and efficient
- (B) unbiased and inefficient
- (C) biased and efficient
- (D) biased and inefficient

43. An estimator T_n of $\tau(\theta)$ is said to be more efficient than any other estimator $\tau_n^*(\theta)$, if and only if

- (A) $\text{var}(T_n) < \text{var}(T_n^*)$
- (B) $\frac{\text{var}(T_n)}{\text{var}(T_n^*)} < 1$
- (C) $\frac{\text{var}(T_n^*)}{\text{var}(T_n)} > 1$
- (D) All of the above

44. If T is unbiased for θ and $\text{var}(T) \rightarrow 0$ as the sample size tends to ∞ , then T is consistent for θ . This result follows from

- (A) Chebyshev's theorem
- (B) central limit theorem
- (C) Cramer-Rao inequality
- (D) Rao-Blackwell inequality

45. Let (X_1, X_2, \dots, X_n) be a random sample from a population with the probability density function (p.d.f.)

$$f(x, \theta) = \theta \cdot x^{\theta-1}; 0 < x < 1; \theta > 0$$

Which of the following is correct?

- (A) $t_1 = \sum_{i=1}^n X_i$ is sufficient for θ
- (B) $t_1 = \prod_{i=1}^n X_i$ is sufficient for θ
- (C) No sufficient statistic exists for θ
- (D) None of the above

46. Power of the test is related to

- (A) type I error
- (B) type II error
- (C) both type I error and type II error
- (D) None of the above

47. The Neyman-Pearson fundamental lemma gives the method of construction of

- (A) uniformly most powerful test
- (B) most powerful test
- (C) unbiased test
- (D) randomized test

48. For the problem of testing $H_0: \mu = \mu_0$ against $H_1: \mu \neq \mu_0$ in sampling from $N(\mu, \sigma^2)$ distribution, where both μ and σ^2 are unknown, the likelihood ratio test is equivalent to

- (A) uniformly most powerful test
- (B) uniformly most powerful similar test
- (C) uniformly most powerful invariant test
- (D) uniformly most powerful unbiased test

49. Which of the following statements is true?

- (A) Bayes estimator is always a function of minimal sufficient statistics.
- (B) Bayes estimators are most efficient.
- (C) Bayes estimators are always asymptotically normal.
- (D) None of the above

50. If $n_1 = n_2 = n$, then the degree of freedom (d.f.) to test mean of two small samples is

- (A) $n_1 + n_2 - 2$
- (B) $n_1 + n_2 + 2$
- (C) $2n - 2$
- (D) $2n + 2$

51. The test statistic to test the significance of difference between sample proportion and population proportion is

- (A) $\frac{p - P}{\sqrt{p/n}}$
- (B) $\frac{p + P}{\sqrt{PQ/n}}$
- (C) $\frac{p - P}{\sqrt{PQ/n}}$
- (D) $\frac{p - P}{\sqrt{Q/n}}$

where p = sample proportion and P = population proportion.

52. The degrees of freedom for chi-square in case of contingency table of order (4×3) are

- (A) 12
- (B) 9
- (C) 8
- (D) 6

53. Kolmogorov-Smirnov test is a
- (A) one left-sided test
 - (B) one right-sided test
 - (C) two-sided test
 - (D) All of the above
54. A sequence of symbols shows lack of randomness if there are
- (A) too many runs
 - (B) too few runs
 - (C) Both (A) and (B)
 - (D) Neither (A) nor (B)
55. The statistic under the Kruskal-Wallis test is approximately distributed as
- (A) Student's t
 - (B) Snedecor's F
 - (C) chi-square
 - (D) normal deviate Z
56. If X and Y are two variates, there can be at most
- (A) one regression line
 - (B) two regression lines
 - (C) three regression lines
 - (D) an infinite number of regression lines
57. If the two lines of regression are $X + 2Y - 5 = 0$ and $2X + 3Y - 8 = 0$, the means of X and Y are
- (A) $X = -3, Y = 4$
 - (B) $X = 2, Y = 4$
 - (C) $X = 1, Y = 2$
 - (D) None of the above
58. The combination of AB of attributes is known as the class of
- (A) first order
 - (B) second order
 - (C) third order
 - (D) None of the above
59. The range of homogeneity error in reference to index number is
- (A) 0 to 1
 - (B) 0 to ∞
 - (C) -1 to 1
 - (D) $-\infty$ to ∞
60. Laspeyres index number possesses
- (A) downward bias
 - (B) no bias
 - (C) upward bias
 - (D) parallel bias

61. An appropriate method for working out consumer price index is
- weighted aggregate expenditure method
 - family budget method
 - price relative method
 - chain base method
62. The decision about a lot under sampling inspection procedures can be of
- two types
 - three types
 - no use
 - one type
63. Control chart consists of
- three control lines
 - upper and lower control limits
 - the level of the process
 - four control lines
64. A control chart based on known parameter value is
- more advantageous than the one based on estimated values
 - complicated than that of control chart based on estimated values
 - less reliable than the control chart based on estimated values
 - All of the above
65. In a sequential probability ratio test (SPRT), the criterion for acceptance of the lot with usual notation is
- $\lambda_m \leq \frac{\beta}{1-\alpha}$
 - $\lambda_m \geq \frac{\beta}{1-\alpha}$
 - $\lambda_m \leq \frac{1-\beta}{\alpha}$
 - $\lambda_m \geq \frac{1-\beta}{\alpha}$
66. A TV voltage stabilizer manufacturer checks the quality of 50 units of his product daily of 15 days and finds the average fraction defective as 0.93 with 70 number of defectives in total. With these information the 3-sigma control limits for np -chart are
- UCL = 10.81, CL = 4.65, LCL = -1.57
 - UCL = 10.81, CL = 4.65, LCL = 0
 - UCL = 6.25, CL = 0.093, LCL = 0
 - UCL = 0.46, CL = 0.093, LCL = 0
67. Registration of vital statistics in India is organized at the apex by
- Director General
 - Registrar General
 - Census Commissioner
 - All of the above

68. The age-specific death rate for the babies of age less than one year is specially called as

- (A) neonatal death rate
- (B) infant mortality rate
- (C) maternal mortality rate
- (D) foetal death rate

69. Fertility rate provides an adequate basis for

- (A) population growth
- (B) family planning
- (C) checking infant mortality
- (D) All of the above

70. Having known the population of two consecutive census, the formula for population estimate \hat{P}_t in the intercensal year t with usual notation is

(A) $\hat{P}_t = P_0 + \frac{N}{n}(P_1 - P_0)$

(B) $\hat{P}_t = P_1 + \frac{n}{N}(P_1 - P_0)$

(C) $\hat{P}_t = P_0 + \frac{n}{N}(P_1 - P_0)$

(D) $\hat{P}_t = P_0 + \frac{N}{n}(P_0 - P_1)$

71. Vital rates are customarily expressed as

- (A) percentages
- (B) per thousand
- (C) per million
- (D) per trillion

72. A value of $NRR > 1$ will result in

- (A) increase in population
- (B) decrease in population
- (C) zero increase in population
- (D) None of the above

73. A life table is mostly utilized by

- (A) Life Insurance Company
- (B) General Insurance Company
- (C) Employment Exchange
- (D) Stock Exchange Office

74. Local control is a device to maintain

- (A) homogeneity among blocks
- (B) homogeneity within blocks
- (C) Both (A) and (B)
- (D) Neither (A) nor (B)

75. While analyzing the data of a $k \times k$ Latin square design, the error d.f. in analysis of variance is equal to

(A) $(k-1)(k-2)$

(B) $k(k-1)(k-2)$

(C) (k^2-2)

(D) $(k-2)$

76. In a randomized block design (RBD) with 4 blocks and 5 treatments having one missing observation, the error degrees of freedom (d.f.) will be

(A) 12

(B) 11

(C) 10

(D) 9

77. The ratio of the number of replications required in completely randomized design (CRD) and randomized block design (RBD) for the same amount of information is

(A) 6:4

(B) 10:6

(C) 10:8

(D) 6:10

78. The total number of possibilities in which arrangement can be made in 3×3 Latin square (LS) is

(A) 6

(B) 9

(C) 12

(D) 22

79. If σ_1^2 is the error variance of design-1 and σ_2^2 of design-2 utilizing the same experimental material, the efficiency of design-1 over design-2 is

(A) $\frac{1}{\sigma_1^2} / \frac{1}{\sigma_2^2}$

(B) $\frac{1}{\sigma_2^2} / \frac{1}{\sigma_1^2}$

(C) σ_1^2 / σ_2^2

(D) None of the above

80. If F -value for treatments comes out to be less than 1, it may be due to

(A) improper randomization

(B) non-normality of response measure

(C) selection of wrong statistical model

(D) All of the above

81. Classify the given stochastic process based on the state space and index set :

Number of incoming phone calls in an interval $[0, 1]$

- (A) Discrete time discrete state stochastic process (SP)
- (B) Discrete time continuous SP
- (C) Continuous time discrete state SP
- (D) Continuous time continuous state SP

82. If P is the t.p.m. of a homogeneous Markov chain (MC), then the n -step t.p.m. $P^{(n)} = P^n$ is known as

- (A) probability theorem
- (B) Chapman-Kolmogorov theorem
- (C) Markov theorem
- (D) Wald's equation

83. If $(X, Y) \sim \text{BVN}(\mu_1, \mu_2, \sigma_1^2, \sigma_2^2, \rho)$, then the conditional mean of X given Y is equal to

- (A) the correlation coefficient between X and Y
- (B) the regression equation of X on Y
- (C) the regression equation of Y on X
- (D) None of the above

84. Let $X \sim N_3(\mu, \Sigma)$, where $\mu^T = (1, -1, 2)$ and

$$\Sigma = \begin{pmatrix} 4 & 0 & -1 \\ 0 & 5 & 0 \\ -1 & 0 & 2 \end{pmatrix}$$

Which of the following statements are correct?

- I. X_1 and X_2 are independent.
- II. X_1 and X_3 are independent.
- III. (X_1, X_3) and X_2 are independent.

Select the correct answer using the codes given below.

- (A) I and II only
- (B) I and III only
- (C) II and III only
- (D) I, II and III

85. A basic solution is a solution obtained by setting

- (A) some independent variables equal to zero
- (B) all the independent variables equal to zero
- (C) some dependent variables equal to zero
- (D) all the dependent variables equal to zero

86. If the following system

$$px + qy + rz = 0$$

$$qx + ry + pz = 0$$

$$rx + py + qz = 0$$

has non-trivial solution, then which of the following options is correct?

- (A) $p - q + r = 0$ or $p = q = -r$
- (B) $p + q - r = 0$ or $p = -q = r$
- (C) $p + q + r = 0$ or $p = q = r$
- (D) $p - q - r = 0$ or $p = -q = -r$

87. The most important factor in determining the size of a sample is

- (A) availability of resources
- (B) purpose of the survey
- (C) heterogeneity of the population
- (D) None of the above

88. With usual notations, the formula for optimum sample size n_j for the j th stratum ($j = 1, 2, \dots, k$) for fixed total sample size n is

$$(A) \quad n_j = \frac{nW_j S_j}{\left(\sum_j W_j S_j^2 \right)}$$

$$(B) \quad n_j = \frac{W_j S_j}{(\sum W_j S_j)}$$

$$(C) \quad n_j = \frac{nW_j S_j^2}{(\sum W_j S_j^2)}$$

$$(D) \quad n_j = \frac{nW_j S_j}{\left(\sum_j W_j S_j \right)}$$

89. If $F(x, y)$ is a non-decreasing cumulative distribution of two-dimensional random variables X and Y , then $F(x, y)$ holds the relation

- (A) $F(-\infty, y) = F(x, -\infty) = 0, F(\infty, \infty) = 1$
- (B) $F(-\infty, y) = F(x, -\infty) = 1, F(\infty, \infty) = 1$
- (C) $F(-\infty, y) = F(x, -\infty) = F(\infty, \infty) = 0$
- (D) None of the above

90. The 'data processing error' refers to

- (A) activities or events related to the sampling process
- (B) faulty techniques of coding and managing data
- (C) problems with the implementation of the research process
- (D) the unavoidable discrepancy between the sample and the population

91. Interpolation approach of estimation is

- (A) probabilistic
- (B) non-probabilistic
- (C) non-mathematical
- (D) None of the above

92. Interpolation and extrapolation are same in the sense that

- (A) both determine most likely estimates
- (B) both result into same value
- (C) both are complementary to each other
- (D) All of the above

93. Divided differences are useful when
- (A) arguments are equally spaced
 - (B) arguments are not equally spaced
 - (C) arguments advance with unit intervals
 - (D) None of the above
94. The general decline in sales of cotton clothes is attached to which component of the time series?
- (A) Secular trend
 - (B) Cyclical variation
 - (C) Seasonal variation
 - (D) All of the above
95. Statistical results are
- (A) hundred percent correct
 - (B) not correct
 - (C) true on average
 - (D) always misleading
96. Extreme values have no effect on
- (A) average
 - (B) median
 - (C) geometric mean
 - (D) harmonic mean
97. Numerical data presented in descriptive form are called
- (A) classified presentation
 - (B) tabular presentation
 - (C) graphical presentation
 - (D) textual presentation
98. In case of positively skewed distribution, the relation among mean, median and mode is
- (A) median > mean > mode
 - (B) mean > median > mode
 - (C) mean = median = mode
 - (D) None of the above
99. A population is perfectly homogeneous in respect of a particular characteristic. What size of sample would you prefer?
- (A) A single item
 - (B) A small sample
 - (C) A large sample
 - (D) No item
100. If the correlation between two variables is unity, then there exists
- (A) a perfect correlation
 - (B) a perfect positive correlation
 - (C) a perfect negative correlation
 - (D) No correlation