گوجرانوالہ

Roll No. of Candidate: _____

Statistics (New Scheme) **(INTERMEDIATE PART-I) 319-(IV)** **Paper: I**
Time: 20 Minutes **OBJECTIVE** **Marks: 17**
Code: 6187

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave other blank.

1.

1. If mean of 10 numbers is 8 then sum of numbers is:
   A) 10 B) 70 C) 80 D) 90
2. If 'x' and 'y' are random variables, E[x − y] is
   A) E(x) + E(y) B) E(x) − E(y) C) x − E(y) D) E(x) − y
3. No. of parameters in hypergeometric distribution is:
   A) 2 B) 3 C) 4 D) 5
4. A distribution having one mode is called:
   A) unimodal B) bimodal C) multimodal D) none of these
5. Variance of Binomial Distribution is:
   A) nq B) npq C) np D) pq
6. If $P(A \cap B) = P(A)\,P(B)$, events A and B are:
   A) not-mutually exclusive B) mutually exclusive
   C) independent D) dependant
7. Which is not measure of dispersion:
   A) mean B) range C) mean deviation D) standard deviation
8. Fisher Index number is the _____ of Laspeyre's and Paasche's index numbers
   A) arithmetic mean B) median C) geometric mean D) mode
9. If 'c' is non-random variable, then E(c) is:
   A) c B) zero C) one D) $\sum x\,p(x)$
10. Data which have been arranged in ascending or descending order is:
    A) quantitative variable B) grouped data C) arrayed data D) un-grouped data
11. The data about the sex of new born babies is called:
    A) quantitative B) qualitative C) continuous D) discrete
12. The sum of absolute deviations of observations from median is:
    A) maximum B) minimum C) zero D) one
13. Base year quantities as weight are used in:
    A) Laspeyre's method B) Paasche's method C) Fisher D) none of these
14. A set of all possible outcomes of a random experiment is called:
    A) null set B) sample space C) simple event D) all of these
15. The Co-efficient of variation is:
    A) absolute dispersion B) relative dispersion C) skewness D) average
16. If there are ten values each value equal to 10, then standard deviation is:
    A) zero B) 10 C) 100 D) 1000
17. The difference between upper and lower class boundary of each group is:
    A) mid-point B) average C) class interval D) frequency

226-(IV)-319-9000

Guj-P-1-11-19

ParhloPakistan.com

Statistics (New Scheme) **(INTERMEDIATE PART-I) 319** **Paper: I**
Time: 2:40 Hours **SUBJECTIVE** **Marks: 68**
Note: Section I is compulsory. Attempt any THREE (3) questions from Section II.

(SECTION – I)

(2 × 8 = 16)

2. Write short answers to any EIGHT questions.

i. Define "Primary Data".
ii. Define "Variable".
iii. Define "Median" with formula.
iv. Write two properties of A.M (Arithmetic Mean).
v. Write two demerits of H.M (Harmonic Mean).
vi. Define "Mode".
vii. Write two properties of G.M (Geometric Mean).
viii. Define "Weighted Index Number".
ix. If $\sum p_o q_o = 362$, $\sum p_1 q_o = 428$, $\sum p_o q_1 = 398$, $\sum p_1 q_1 = 470$ then compute Fisher's index number.
x. Define "Price Index Number".
xi. Write two advantages of Chain base method.
xii. Find Paasche's Price Index Number given that: $\sum p_1 q_1 = 1210$, $\sum p_o q_1 = 850$

(2 × 8 = 16)

3. Write short answers to any EIGHT questions.

i. What is simple classification?
ii. Define "Grouped Data".
iii. Define "Range".
iv. What are different measures of absolute dispersion?
v. If Var(x) = 4 , Find Var(3x)
vi. What is "Variance"?
vii. If $\mu_2 = 4$, $\mu_4 = 56$, Find β_2
viii. What is "Kurtosis"?
ix. Define "Random Experiment".
x. Define "Equally Likely Events".
xi. If P(A) = 0.5 , P(B) = 0.2 , Find P(A ∪ B) when 'A' and 'B' are mutually exclusive events.
xii. A card is selected from 52 playing cards. What is probability that the card is a king?

(2 × 6 = 12)

4. Write short answers to any SIX questions.

i. Define "Mathematical Expectation" of a random variable.
ii. Explain continuous random variable with an example.
iii. What are the properties of a discrete probability distribution?
iv. Given: E(x) = 0 and $E(x^2) = \frac{8}{9}$. Find $E(3x^2 - 2x + 5)$.
v. Given: E(x) = 0.56 , Var(x) = 1.36 and if y = 2x + 1 then find E(y) and Var(y).
vi. Define "Binomial experiment".
vii. If 'x' is a binomial random variable with n = 9 , $p = \frac{1}{3}$ then find S.D(3 + 2x).
viii. State probability function of Hypergeometric distribution. Also write its mean and variance.
ix. Given: N = 10 , n = 2 and k = 2 . Find P(x = 0).

(Turn Over)

Guj – II – 19

PanjoPakistan.com