UNIVERSITY OF THE PUNJAB

Fifth Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. .....

Roll No. in Words. .....

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Signature of Supdt.:

PAPER: Educational Statistics **MAX. TIME: 15 Min.**

Course Code: EDU-318 Part–I (Compulsory) **MAX. MARKS: 10**

Attempt this Paper on this Question Sheet only.
Please encircle the correct option. Division of marks is given in front of each question.
This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)

i) Which of the following measures is affected most by extreme values?

(a) Median (b) Mean (c) Mode (d) Frequencies

ii) The blood pressure of a person is

(a) Continuous variable (b) Discrete variable (c) Qualitative variable (d) None of theses

iii) What kind of average is suitable for open end classes?

(a) Arithmetic mean (b) Median (c) Geometric Mean (d) Harmonic mean

iv) First hand collected data is called_____.

(a) Secondary data (b) Primary data (c) Official data (d) Semi-official data

v) For a normal distribution the measure of kurtosis equals to

(a) Zero (b) 3 (c) Positive number (d) Negative number

vi) Mr. Rizwan calculated a correlation coefficient of -0.96. Which of the following reflects the best interpretation of this?

(a) Strong relationship (b) Moderate relationship (c) Weak relationship (d) No relationship

vii) Which of the following is not a measure of dispersion?

(a) Range (b) Standard deviation (c) Second Quartile (d) Coefficient of variation

viii) If in a normal distribution $\mu = 10$ and $\sigma^2 = 25$ then the Mode is_____.

(a) 05 (b) 10 (c) 25 (d) 50

ix) The correlation coefficient is _____ _____ of the two regression coefficients.

(a) Arithmetic Mean (b) Geometric Mean (c) Harmonic Mean (d) Median

x) The correlation coefficient lies between

(a) -1 to 0 (b) 0 to 1 (c) -1 to +1 (d) both (a) and (c)

UNIVERSITY OF THE PUNJAB

Fifth Semester – 2019

Examination: B.S. 4 Years Program

Roll No. .....

PAPER: Educational Statistics
Course Code: EDU-318 Part – II

MAX. TIME: 2 Hrs. 45 Min.
MAX. MARKS: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2: Solve The Following Questions. Each Question Carry Two Marks. (10×2=20)

i. Describe Skewness with the help of examples.

ii. Compute the range of the data 2, 5, 8, 15, 30.

iii. Given $\sum X = 180$, $\sum X^2 = 6660$ & N=5. Find Variance.

iv. Find the Median of the values 4,5,6,8,11,12,14.

v. Compute Mode of the data 2,2,2,3,3,3,2,3,3,4

vi. What is meant by independent sample t- Test and when it is used?

vii. What is meant by Statistical Hypothesis? Give examples.

viii. What is mean by dispersion? Briefly describe its types.

ix. In a moderate skewed distribution mean = 25, and mode = 28. Find the value of median.

x. Write down the properties of variance.

SECTION II

Solve the Following Questions. (3×10=30)

Q. 3: The following data show Kilowatt Hours of electricity used in one month by residential consumers in certain locality of Lahore. Estimate the Mean and Median. **(5+5)**
40, 32, 65, 0, 11, 28, 24, 31,15, 5, 11, 0, 6, 14, 22, 47, 23, 27, 19, 7, 15, 32, 0, 23, 36, 45, 26, 31, 30, 25, 52, 50, 42, 34, 93, 53, 80, 74, 38, 69, 61, 54, 37, 50, 31, 39, 44, 68. 50, 55.

Q.4: The following table gives the ages of husbands and their wives at the time of marriage. Find the relationship between their ages by calculating the Pearson Product Moment correlation coefficient. Also write your decision about the relationship between ages. **(10)**

Husband's age	28	27	28	23	29	30	36	35	33	31
Wife's age	27	20	22	18	21	29	29	28	29	27

Q.5: Following is the data of monthly expenditures of families in two towns. Compute Mean, Standard Deviation and Co-efficient of Variation for the expenditures to compare the results. **(4+4+2)**

Expenditure (Thousand Rupees)	Number of Families	
	Town A	Town B
21 - 30	3	2
31 - 40	61	14
41 - 50	132	20
51 - 60	153	27
61 - 70	140	28
71 - 80	51	7
81 - 90	2	2