



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program : Fifth Semester – 2020

Paper: Educational Statistics

Course Code: EDU-318

Part – I (Compulsory)

Time: 15Min. Marks: 10

Roll No. in Fig.

Roll No. in Words.

Attempt this Paper on this Question Sheet only.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Signature of Supdt.:

Q.1. Encircle the right answer cutting and overwriting is not allowed. (10x1=10)

- i. Which of the following is used to measure the spread of values in a distribution?
 - a. Mean
 - b. Mode
 - c. Variance
 - d. Both A & B
- ii. Which of the following is the variance of the data 4,4,4,4, 4?
 - a. Zero
 - b. 4
 - c. 0.4
 - d. 5
- iii. When the scores of B.S. Ed. and B. Ed. programs are to be tested, the suitable test of significance is referred to as:
 - a. t- test of independent samples
 - b. t- test of dependent samples
 - c. ANOVA
 - d. Chi-square
- iv. The basic aim of inferential statistics is to draw conclusions about characteristics of:
 - a. Sample
 - b. Population
 - c. Both A & B
 - d. None of the above
- v. Hypothesis testing and estimation belongs to:
 - a. Descriptive statistics
 - b. Inferential statistics
 - c. Levels of measurement
 - d. Both A & B
- vi. In the regression equation $X = a + bY$, X is called:
 - a. Dependent variable
 - b. Independent variable
 - c. Qualitative variable
 - d. Quantitative variable
- vii. Newspapers are the source of _____ data.
 - a. Primary
 - b. Secondary
 - c. Ungrouped
 - d. Grouped
- viii. A perfect negative correlation is described by:
 - a. + 1.00
 - b. – 1.00
 - c. + 0.00
 - d. – 0.00
- ix. If the mean, mode, and median of a distribution fall at same point, the distribution is said to be:
 - a. Normal
 - b. Skewed
 - c. Bimodal
 - d. Both A & C
- x. If a statistics teacher wants to know the performance of his/her class, he will calculate:
 - a. Mean
 - b. Standard deviation
 - c. Correlation
 - d. Both A & B



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Time: 2 Hrs. 45 Min. Marks: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Solve the following questions. (10x2=20)

- i. Differentiate between parameter and statistic.
- ii. Write down the properties of Variance.
- iii. Write the properties of correlation coefficient.
- iv. Briefly describe the term Level of Significance.
- v. The data 66,91, 80, 85, 79, 80, 81,64, 94, 75, 69 show the temperature of a city recorded in Fahrenheit. Find the average temperature of the city in Fahrenheit.
- vi. When it is suitable to calculate Independent Sample t- Test? Briefly describe.
- vii. Define Kurtosis and give at least two examples.
- viii. When does a variable have normal curve distribution? Also sketch the graph of a normal distribution.
- ix. Find the standard deviation if the sum of the raw scores of 10 students in a test is 69 and $\sum X^2=515$.
- x. Write the characteristics of Inferential Statistics.

Solve the following questions. (3x10=30)

Q.3. The scores of the male and female students in a test of statistics are given below. Calculate Independent Sample t- Test to compare their scores in the test of statistics.

Male	71	68	71	65	68	68	64	66	62	65
Female	87	96	66	71	55	83	67	71	86	60

Q.4. Compute the Coefficient of Variations for the following data of the employees working in two factories. Also show that in which factory the wages are more consistent. (5+5)

Wages (Rs.)		30 – 34	35 – 39	40 – 44	45 – 49	50 – 54	55 – 59
No. of workers	Factory A	12	18	29	32	16	8
	Factory B	4	10	31	67	35	15

Q.5. Find the Median and Mode of the following frequency distribution. (5+5)

Weekly Income (Rs.)	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39
No. of workers	15	17	25	18	12