



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Second Semester – Spring 2023

Paper: Business Statistics

Course Code: STAT-121

Roll No.

Time: 3 Hrs. Marks: 60

THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions: (15x2=30)

- i. Define data and name the sources of secondary data.
- ii. Define class limits.
- iii. What is pie chart?
- iv. Define Geometric Mean.
- v. What is mean deviation?
- vi. Differentiate between positive and negative skewness.
- vii. Differentiate between simple and composite index number.
- viii. Define the term basket.
- ix. Define discrete random variable with example.
- x. Write down the properties of probability distribution of discrete random variable.
- xi. Define simple linear regression with model.
- xii. Write any two properties of correlation coefficient 'r'.
- xiii. Define Mode and how you compute it for grouped data?
- xiv. Name the two methods with formula for computing consumer price index number.
- xv. Define range of data.

Q.2. Answer the following questions: (3x10=30)

1. Given below the distribution of weekly income of 100 house-holds

Income	35-39	40-44	45-49	50-54	55-59	60-64	65-69
No. of house-holds	13	15	17	28	12	10	5

Calculate coefficient of variation.

2. An inquiry into the budgets of the lower middle class families is

Expense on	Food	Rent	Clothing	Fuel	Misc
	35%	15%	20%	15%	15%
Prices (2019)	150	50	100	40	45
Prices (2020)	200	70	150	60	50

Compute consumer price index number by suitable method.

3. The following table shows three consecutive weeks earnings of three salesmen employee by a firm

Salesmen		
A	B	C
152	181	160
170	171	130
180	203	124

Test at 5% level of significance weather difference between salesmen is significant by making ANOVA Table.