SET-1

INDIRA UNIVERSITY, PUNE

SCHOOL OF COMMERCE & ECONOMICS-BSC (ECO)

Term End Examination (2025 Pattern) December – 2025 - Semester – I

Subject Name: Elementary Statistics **Max. Marks: 25**
Subject Code: 25ECO109T **Time: 1.30 Hours**

Instructions

- All questions are compulsory.
- Figures to the right indicate full marks.
- Use of scientific (Non-Programmable) calculator is allowed.

CO #	Cognitive Ability	Course Outcome
CO1	**Remember**	**Recall** and **define** essential statistical concepts, data classifications, summary measures, and the role of statistics in economics across all topics.
CO2	**Understand**	**Describe**, **explain**, and **interpret** different statistical methods, including data visualization, central tendency, dispersion, correlation, and regression, in relation to economic and social issues.
CO3	**Apply**	**Apply** appropriate statistical tools—such as tables, graphs, dispersion measures, and linear regression—to real-world datasets and economics-related problems.
CO4	**Analyze**	**Analyze** structured and unstructured data by comparing different statistical representations and drawing conclusions using regression, variation, and distribution patterns.
CO5	**Evaluate**	**Evaluate** statistical findings for accuracy and relevance by comparing outcomes from different methods, checking consistency, and interpreting index numbers.
CO6	**Create**	**Construct**, **organize**, and **present** a complete statistical report by integrating classification, diagrams, measures, and analytical techniques using real or simulated data.

Q.1	**Attempt all of the following (5 Marks)**	**CO1**
	a) Primary data means… i) original data ii) it may be result of survey iii) it may be result of enquiry iv) all the above. **b) The class mark of the class interval 20-30 is ….** i) 25 ii) 10 iii) 50 iv) 20 c) **When one variable increases and the other decreases, the correlation is** i) positive correlation ii) negative correlation iii) zero correlation iv) perfect correlation	

d) **The median is:**

i) The most frequent value ii) The middle value

iii) The average value iv) The difference between highest and lowest value

e) The square root of variance is known as

i) Mean Deviation ii) Standard deviation

iii) Coefficient of Variation iv) Range

Q.2 **Solve any ONE from the following (10 Marks)** **CO3**

A. The number of runs scored by cricketers A and B in 10 test matches are shown below:

A	5	20	90	76	102	90	6	108	20	16
B	40	35	60	62	58	76	42	30	30	20

Find:

(i) Which cricketer is better in average?

(ii) Which cricketer is more consistent?

OR

B. Draw a histogram and frequency polygon for the given data:

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students	2	3	5	8	10	6	4	2

Q.3 **Solve any ONE from the following (10 Marks)** **CO4**

A. Calculate Karl Pearson's Coefficient of correlation between X and Y from the following data and interpret the result.

X	10	12	13	16	17	18	19	20	24	25
Y	40	38	43	45	37	49	48	50	54	56

OR

B. Compute price index for 2002 with 2000 as base year using:

(i) Simple aggregate method.

(ii) Simple average for price relatives using arithmetic mean.

Commodities	A	B	C	D	E	F
Price in 2000	40	60	16	50	80	72
Price in 2002	50	60	30	64	104	98