

U.G. 4th Semester Examination - 2022

ECONOMICS

[PROGRAMME]

Skill Enhancement Course (SEC)

Course Code : ECO-G-SEC-T-2

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any **five** questions: 2×5=10
- What do you mean by Statistics?
 - What is the difference between sample and population?
 - What is central tendency of data?
 - What is Standard deviation?
 - What is the difference between primary and secondary data?
 - What do you mean by Skewness?
 - Define Median.

- What is cumulative frequency?
- Find mode of the following numbers:
0, 1, 2, 3, 3, 3, 3, 4, 4, 5

2. Answer any **two** questions: 5×2=10

- Calculate the Arithmetic Mean and Geometric Mean of four persons whose ages are 2, 6, 8 and 24 respectively.
- The Arithmetic Mean calculated from the following frequency distribution is known to be 67.45 inches. Find the value of f_3 .

Height (inches)	60-62	63-65	66-68	69-71	72-74
Frequency	15	54	f_3	81	24

- The coefficient of variation is 40 and the mean is 30; find the standard deviation.
 - Define Quartile Deviation. 3+2
 - Describe the various steps in the construction of a frequency distribution from unclassified data.
3. Answer any **two** questions: 10×2=20
- Prove that for two positive real quantities:
 $A.M \geq G.M. \geq H.M.$

- b) Find the Arithmetic Mean and Median from the following distribution:

Class	15-25	25-35	35-45	45-55	55-65	65-75
Distribution:						
Frequency:	4	11	19	14	0	2

- c) i) Define Mean deviation. Calculate Mean deviation of the following series:

x	10	11	12	13	14
Frequency	3	12	18	12	3

- ii) Prove that the Standard deviation is independent of any change of origin but is dependent on the change of scale.

$$2+5+3$$

- d) i) Define different types of Kurtosis using diagram.
- ii) The Mean, Median and Pearson's measure of skewness for a certain distribution are respectively 86, 80 and 0.42. Calculate the coefficient of variation.
- iii) Show the positions of Mean, Median and Mode for different types of Skewness.

$$3+4+3$$
