

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.A. DEGREE EXAMINATION – ECONOMICS

SECOND SEMESTER – APRIL 2022

16/17/18UEC2MC02 – QUANTITATIVE METHODS IN ECONOMICS

Date: 18-06-2022

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

PART-A

Answer any **FIVE** Questions:

(5 x 4 = 20 marks)

- 1) List down the Measures of Central Tendency.
- 2) Distinguish between equally likely events and mutually exclusive events.
- 3) State the probability density function of Poisson distribution. What are its properties?
- 4) Define the Classical Probability.
- 5) Define Null Hypothesis and Alternative Hypothesis.
- 6) Distinguish between Type I and Type II errors.
- 7) Write a note on Chi-Square test.

PART –B

Answer any **FOUR** Questions:

(4 x 10 = 40 marks)

- 8) Calculate Arithmetic Mean and Median for the following data:

Income (Rs)	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30
Frequency	5	7	10	8	6	4

- 9) State and prove the Theorems of Probability.
- 10) Eight coins are tossed together 256 times. Find the expected frequencies of success (getting a head) and tabulate the result obtained.
- 11) Write short notes on the following:
 - a. Exhaustive event. (2 marks)
 - b. Composite event. (2 marks)
 - c. Null event. (2 marks)
 - d. Dependant event. (2 marks)
 - e. Complimentary event. (2 marks)

- 12) Daily demand for transistors is having the following probability distribution:

Demand:	1	2	3	4	5	6
Probability:	0.10	0.15	0.20	0.25	0.18	0.12

Determine the daily demand for transistors. Also obtain the variance of the demand.

- 13) State the procedure for testing the significance using Z test for large samples.

