

2025

M.Sc. 1st Semester Examination

ECONOMICS

Paper : ECOC404X1

(Data Analytics and Research Methodology)

Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Answer any *two* questions : $2 \times 2 = 4$

1. What do you mean by Focus Group Discussion (FGD)?
[CO1]
2. What is FFP in Research Ethics? [CO5]
3. What do you understand by the mixed method of research methodology? [CO1]
4. Mention any two major data sources for the Indian economy. [CO3]

Answer any *two* questions : $4 \times 2 = 8$

5. Write the in-text citation and Referencing styles in lines with APA and MLA, with examples. $2+2$ [CO5]

P.T.O.

6. Give reasons why non-parametric tests are generally preferred to parametric tests. [CO3]
7. What is the stationarity of a stochastic process? Write a short note on Dickey-Fuller test. 1+3 [CO3]
8. Discuss the difference between probability and non-probability samplings. How is the sample size determined? Discuss. 2+2 [CO1]

Answer any *one* question : $8 \times 1 = 8$

9. (a) What are the ingredient parts of a research project?
(b) Briefly explain Normal, t, Chi-square and F distributions.
(c) Define three Python Libraries (e.g., Pandas, NumPy, and Matplotlib) for Data Analysis and write the python codes to import them.
2+3+3 [CO4 & CO5]
10. (a) Discuss the research process in detail, clearly outlining each step involved.
(b) Explain the role of data analytics in policy and business decision-making. 4+4 [CO1]

Internal Assessment - 5 marks
