

B.Sc./4th Sem (H)/GEO/24(CBCS)

### 2024

# 4th Semester Examination GEOGRAPHY (Honours)

Paper: SEC 2-T

[CBCS]

Full Marks: 40

Time: Two Hours

The figures in the margin indicate full marks.

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

# (Research Methods)

## Group - A

Answer any five questions:

 $2 \times 5 = 10$ 

- 1. What is research ethics?
- 2. What are the major sources of secondary data?
- 3. Why Abstract is important in research report writing?
- 4. What is a research problem?
- 5. What is Random Sampling?
- 6. What is research design?
- 7. What is a citation? Give example.

P.T.O.

8. Mention two disadvantages of non-participant field techniques.

## Group - B

Answer any four questions:

 $5 \times 4 = 20$ 

- 9. Differentiate between Questionnaire and Survey schedule.
- 10. Discuss the importance of literature review.
- 11. Distinguish between quantitative and qualitative research.
- 12. Describe the role of Group discussion as a method of data collection
- 13. Write a short note on Footnotes and Bibliography.
- 14. Explain the major principles and methods of writing an ideal Field Report.

## Group - C

Answer any *one* question :  $10 \times 1 = 10$ 

- 15. Briefly describe the major steps of systematic literature review. Write the importance of literature review in research
- 16. Write a detailed note on common ethical issues in research. What are the selection procedures of study area with suitable example of Geographical research?

5+5

#### OR

# (Advanced Spatial Statistical Techniques)

## Group - A

Answer any five questions:

 $2 \times 5 = 10$ 

- 1. Define Probability Density Functions.
- 2. What are the characteristics of Binomial distribution?
- 3. Differentiate between parameters and statistics.
- 4. Why the product moment method of Karl Pearson is called least square method?
- 5. What is Principal Component Analysis?
- 6. What is the significance of sampling proportions in statistical testing?
- 7. What is the role of standard deviation in a normal distribution?
- 8. What is the role of autocorrelation in time series analysis?

## Group - B

Answer any four questions:

 $5 \times 4 = 20$ 

- 9. Discuss the major properties of a Standard Normal Curve with proper illustration.
- 10. Explain the applications of Poisson distribution in geographical analysis. Give examples.

P.T.O.

- 11. Elucidate different types of correlation with suitable examples.
- 12. Write a short note on the difference between Correlation and Regression.
- 13. Write the importance of Time Series analysis in geographical study.
- 14. "The Spearman's rank correlation is called non-parametric correlation" Justify the statement.

# Group - C

Answer any *one* question:

 $10 \times 1 = 10$ 

- 15. Briefly describe the principles of selecting suitable methods of probability sampling based on the nature of the population.
- 16. Write short note on the application of multi-variate analysis in geographic study.

What is the role of autocome crown in time series analysis?