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1 (Sem-4/FYUGP) GGY 43 MJ

2026

GEOGRAPHY

(Major)

Paper : GGY4400304MJ

(Cartographic Techniques)

Full Marks : 45

Time : 2 hours

*The figures in the margin indicate
full marks for the questions.*

1. Answer the following questions in very short :

1×5=5

- (a) What is the latitude of the equator?
- (b) Give an example of scale in statement.
- (c) What is the surface area of the earth?
- (d) What is an isoline?
- (e) Give an example of qualitative thematic map.

2. Give brief answer of the following questions :

(any five)

2×5=10

- (a) Distinguish between Parallels and Meridians.
- (b) Why is the earth not represented accurately on a flat map?
- (c) Why are the cylindrical projections generally suitable for equatorial regions?
- (d) What are the main limitations of choropleth mapping?
- (e) Differentiate between point data and line data.
- (f) Mention *two* characteristics of a map.

(g) What is digital cartography?

(h) What is the purpose of isopleth mapping?

(i) Mention *two* major classes of map projection.

(j) Mention *two* properties of Zenithal Polar Gnomonic Projections.

3. Give short answer of the following questions :

(any four)

5×4=20

- (a) Describe the shape and size of the earth with necessary illustrations.
- (b) Explain how point, line and area data are represented on maps with examples.
- (c) Describe the principles of conical projections.
- (d) Classify map projection based on the developable surface and explain each type briefly.
- (e) Suggest a suitable map projection for representing India and justify your choice.
- (f) Discuss the meaning and significance of cartography.

(g) Discuss the concept and types of thematic mapping.

(h) Compare the choropleth and isopleth techniques in thematic cartography.

4. Answer the following questions : **(any one)**

10

(a) Explain how different map projection are selected depending on the area to be mapped.

(b) Describe different types of maps and their characteristics.

(c) Critically examine the advantages and limitations of different map projections.

(d) Explain in detail the coordinate system of the earth with suitable diagrams.