2022

GEOGRAPHY

(Honours)

Paper : GGY–HC–1026

(Cartographic Techniques)

Full Marks : 60

Time : Three hours

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

1. Answer **any seven** questions from the
    following very objectively :   1×7=7

    (a) What is the shape of the earth ?

    (b) Write the formula for finding out the
           length of tropic of cancer.

    (c) If the statement scale of a map is 1 cm
           to 25 km, what will be its scale in R.F ?

    (d) How many dimensions do the line
           features have ?

    (e) What is the extension of longitude of
           the globe ?

(f) Give an example of qualitative thematic map.

(g) Mention *one* property of cylindrical map projection.

(h) Write the formula to find out the length of any meridian.

(i) Give an example of choropleth map.

(j) What is the difference in the length between the equatorial diameter and polar diameter ?

(k) What is the average radius of the earth ?

(l) In a cylindrical projection which parallel is normally a standard parallel ?

2. Answer *any four* from the following questions in very short :   2×4=8

(a) Define great circle with an example.

(b) What is a standard parallel ?

(c) If a map with scale 1:250,000 is enlarged by five times, what would be the scale of the resultant map ?

(d) What is meant by polar coordinate system ?

(e) Find out the formula to calculate the area between *two* parallels of latitude on the earth.

(f) What is a conventional projection ?

(g) State the basic difference between gnomonic and stereographic map projections.

(h) Define latitude.

3. Answer *any three* of the following questions in brief :   5×3=15

(a) Distinguish between traditional cartography and modern cartography.

(b) What is thematic map ? Mention its basic characteristics.   1+4=5

(c) What is a map ? Distinguish between planimetric map and hypsometric map with examples.   2+3=5

(d) Distinguish between latitude and longitude with the help of suitable diagrams.

(e) Write a note on choice of map projection.

(f) Compare the basic properties and uses between cylindrical and conical map projections.

(g) Discuss the utilities of thematic maps with examples.

(h) Throw light on representation of line data in thematic maps.

4. Answer *any three* of the following questions : 10×3=30

(a) Define cartography and discuss its importance in geography. 2+8=10

(b) Discuss the changing concept of shape of the earth and highlight the associated problems in the case of construction of map projection. 6+4=10

(c) With necessary illustrations explain the procedure of representation of area data in maps.

(d) What is zenithal map projection ? Present the detailed scheme of its classification. 2+8=10

(e) What is quantitative thematic map ? Explain the procedure of preparing such a map. 2+8=10

(f) Distinguish between choropleth map and isopleth map. Mention their relative utilities in spatial analysis. 5+5=10

(g) Explain with necessary illustrations about conversion of point data into line and area data in thematic maps.

(h) Discuss with justification about selection of suitable map projection for world mapping.

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