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3 (Sem-1/CBCS) GGY HC 1

2022

GEOGRAPHY

(Honours)

Paper : GGY-HC-1016

(Geomorphology)

Full Marks : 60

Time : Three hours

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

1. Answer/Choose the correct answer/option of the following : **(any seven)** $1 \times 7 = 7$
- (a) What is relief?
- (b) 'Foreland' is a term associated with
- (i) isostasy
 - (ii) continental drift theory
 - (iii) Kober's theory
 - (iv) Convection current theory
- (c) What is soil creep?

Contd.

- (d) Define 'Geomorphology'.
- (e) The theory of landscape development was propounded by W. M. Davis in
- (i) 1899
 - (ii) 1889
 - (iii) 1885
 - (iv) 1888
- (f) Cirque is a landform of
- (i) aelian origin
 - (ii) fluvial origin
 - (iii) periglacial origin
 - (iv) glacial origin
- (g) What are gorges?
- (h) Name the landform developed due to tensional force.
- (i) What is solifluction?
 - (j) Name *any one* of the major tectonic plates of the earth.
 - (k) Give an example of endogenetic force.
 - (l) Who gave the concept of 'convective currents'?

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

- (a) How are faults formed?

- (b) Mention *two* characteristics of geosynclines.
- (c) What are convective currents?
- (d) Mention *two* sub-branches of geomorphology.
- (e) Mention the characteristics of levees.
- (f) Define geomorphic processes.
- (g) Mention *two* effects of volcanic eruption.
- (h) What is pediplain?

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

- (a) Explain the depositional processes in arid region.
- (b) Distinguish between weathering and erosion with examples.
- (c) State how folds are formed and mention the major types of folds.
- (d) Discuss the factors responsible for occurrence of earthquakes.
- (e) Explain the process of mass wasting and classify the various types of mass movements.
- (f) Explain the process of peneplain formation.
- (g) Explain the significance of geomorphology.

(h) State the processes of sand dune formation.

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

(a) Describe the characteristics of different layers of the interior of the earth with a neat diagram.

(b) Present a comparative note on the views of Penck and Davis on landform development.

(c) Explain the concepts and ideas associated with the theory of isostasy with necessary diagrams.

(d) How do volcanoes occur? Describe the components of volcanoes with neat diagrams.

(e) Discuss the recent trends of geomorphology with examples.

(f) Discuss the exogenetic forces responsible for landform development.

(g) Explain with diagrams how continents are drifted.

(h) State how the study of earthquake waves helps to understand the characteristics of the interior of the earth.

3 (Sem-1/CBCS) GGY HC 2

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 : $1 \times 7 = 7$
- (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 ?

Contd.

- (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 : $2 \times 4 = 8$

- (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 : $5 \times 3 = 15$

- (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.