

2 0 1 7

GEOGRAPHY

(Major)

Paper : 1.2

(Basis of Geomorphology)

Full Marks : 60

Time : 3 hours

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

1. Choose and write the correct option : 1×7=7

(a) The word Isostasy was first proposed by
American geologist

(i) Dutton

(ii) W. M. Davis

(iii) J. A. Steers

(iv) Woolman

(b) Fire Ring—the volcanic belt is located in

(i) Indian Ocean

(ii) Atlantic Ocean

(iii) Pacific Ocean

(iv) Arctic Ocean

- (c) Ganga-Brahmaputra plain of India is the example of
- (i) erosional plain
 - (ii) depositional plain
 - (iii) piedmont alluvial plain
 - (iv) glacial-depositional plain
- (d) Deflation basins are found in glacial/aeolian/fluviol/coastal environment.
- (e) Jig-saw fitting is seen in between
- (i) North America and South America
 - (ii) South America and Africa
 - (iii) South America and Australia
 - (iv) Australia and North America
- (f) Seismic waves are recorded with the help of an instrument known as
- (i) Barograph
 - (ii) Climograph
 - (iii) Hythergraph
 - (iv) Seismograph
- (g) Which of the following is not a major plate?
- (i) Africa
 - (ii) Eurasia
 - (iii) Antarctica
 - (iv) Arabian

2. Write very briefly on the following : $2 \times 4 = 8$
- (a) Fluvial geomorphology
 - (b) Sial layer
 - (c) Natural levee
 - (d) Eustatism
3. Answer any *three* of the following : $5 \times 3 = 15$
- (a) Describe the place of geomorphology in physical geography. 5
 - (b) Explain the theory of isostasy as proposed by Sir George Airy. 5
 - (c) Write a short note on the origin of rift valley. 5
 - (d) Diagrammatically represent the old stage of normal cycle of erosion and mark thereon the following :
 $2 + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 5$
 - (i) Oxbow lake
 - (ii) Flood plain
 - (iii) Point bar
 - (iv) Braided bar
 - (v) Open V-shaped valley
 - (vi) Erosional hill
 - (e) Distinguish between alluvial fan and delta. 5

(4)

4. Define physical geography. Explain the relationship of physical geography with other branches of earth science. $2+8=10$

Or

Write an account on the modern views regarding the internal structure of the earth. 10

5. Give a critical analysis of the tetrahedral theory on the origin of the continents and oceans. $6+4=10$

Or

Discuss in detail the features developed by erosional and depositional works of glacier. $5+5=10$

6. What do you mean by diastrophic movement? Explain the different diastrophic forces and movements with examples. $2+4+4=10$

Or

What is earthquake? Explain the causes and effects of earthquakes on men and earth's surface. $2+4+4=10$
