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GEOGRAPHY

( Major )

Paper : 4.1

( Forms and Processes in Geomorphology )

Full Marks : 60

Time : 3 hours

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

1. Choose and write the correct answer :  $1 \times 7 = 7$

(a) Which of the following is not a geomorphic agent?

(i) Wind

(ii) Dust-laden wind

(iii) Sand particle

(iv) Sea wave

- (b) Which of the following is not a third-order landform?
- (i) Delta
  - (ii) Floodplain
  - (iii) Natural levee
  - (iv) Plateau
- (c) In which part of river course is the alluvial fan developed?
- (i) Mountainous part
  - (ii) Foothills part
  - (iii) Piedmont zone part
  - (iv) Deltaic part
- (d) Which of the following is not a geomorphic hazard?
- (i) Flood
  - (ii) Riverbank erosion
  - (iii) Stream erosion
  - (iv) Landslide
- (e) A long profile of a river is constructed in relation to
- (i) distance from source and height of places
  - (ii) distance from confluence and height of places
  - (iii) distance from foothills and height of places
  - (iv) distance from piedmont zone and height of places

(f) Which of the following is not a channel pattern?

(i) Straight

(ii) Meandering

(iii) Alluvial

(iv) Braided

(g) Which of the following is not a weathering process?

(i) Exfoliation

(ii) Joint-block disintegration

(iii) Landslide

(iv) Granular disintegration

2. Answer the following in brief :

2×4=8

(a) What is geomorphic agent?

(b) Why does the river channel in the lower course tend to be wider than in the upper course?

(c) Why is chemical weathering mostly dominated in tropical humid region?

(d) State the difference between hazard and disaster.

3. Write short notes on any *three* of the following :

5×3=15

(a) Endogenic processes

(b) Catchment area

- (c) Mass wasting
- (d) Processes of natural levee formation
- (e) Relationship between drainage pattern and underlying rock structure

4. Answer the following questions : 10×3=30

- (a) Explain the processes of development of faulted landforms. 10

Or

Discuss the management strategies to be adopted in mitigating flood hazard. 10

- (b) How does piedmont zone develop? Mention the characteristics of piedmont zone. 6+4=10

Or

Differentiate between alluvial plain and floodplain, and mention their characteristics. 4+3+3=10

- (c) What is meant by fluvio-geomorphic agent? Discuss river as a fluvio-geomorphic agent in relation to development of landforms. 2+8=10

Or

What is long profile of a river? Mention its major characteristics. 4+6=10

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