5 SEM TDC GEOH (CBCS) C 12

2024

(November)

GEOLOGY

(Core) Stand Language

Paper: C-12

(Geomorphology)

Full Marks: 53

Pass Marks: 21

Time: 3 hours

The figures in the margin indicate full marks for the questions

UNIT-1

(Introduction to Geomorphology)

(Marks : 7)

- 1. Write True/False for the following statements: 1×3=3
 - (a) The term 'Uniformitarianism' was proposed by Gould in 1830.
 - (b) Rejuvenation is the reinitiation of cycle of erosion to an earlier stage.

- (c) Mountain building process is also known as 'epeirogeny'.
- What are the chief roles of gradational processes and exogenic processes in shaping earth's surface throughout the geological past?

UNIT-2

(Understanding Earth's Physiography)

(Marks : 6)

- 3. Draft methodology to-
 - (a) calculate relative area with respect to relative elevation for different elevation intervals;
 - (b) calculate hypsometric integral (HI) for a given basin. 3+3=6

Or

- (c) Give a morphological outline of oceanic basins.
- (d) Write on structural and physiographical overview of Himalayas.

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UNIT-3

(Geomorphic Processes)

(Marks : 20)

4.	Answer as directed:		5=5
	(a)	CaCO ₃ + H ₂ CO ₃ →	
		(Complete the reaction)	
	(b)	Formation of kaolinite from K-feldspar is an example of type of chemical weathering.	
		(Fill in the blank)	
	(c)	is the process of shattering of rock by cryostatic pressure generated during frost wedging.	
		(Fill in the blank)	
	(d)	Ephemeral flow of water last for the whole year.	
		(Write True/False)	
	(e)	Wadis are dry desertic valleys.	
		(Write True/False)	
5.	follo	te an explanatory note on any <i>one</i> of the owing geomorphic environments by viding erosional activities of agencies and forms developed:	10

(a) Coastal environment

(b) Glacial environment

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6. What are mass wasting processes? Give a scheme to classify different mass wasting processes. 2+3=5

UNIT-4

(Tectonics and Geomorphology)

(Marks : 10)

- 7. How do tectonic movements of plates influence the formation and evolution of various landforms?
- 8. Explain the tectonic uplift processes and their effects on surface of the earth in different types of gemorphic environments. Mention the effects observed in drainage systems of an area.

UNIT-5

(Indian Geomorphology)

(Marks : 10)

9. What are the physiographic divisions of Indian Subcontinent? State the elevation ranges of each divison and describe their geographic distributions. Distinguish between drainage systems of peninsular India with extra-peninsular.
5+3+2=10

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