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Set-5

Q.P. Code: 58113

[Time: 3 Hours]

[Marks: 100]

Please check whether you have got the right question paper.

- N.B: 1. All questions are compulsory and carry equal marks.
2. Draw sketches and diagrams wherever necessary.
3. Use of map stencil and simple calculator is allowed.
4. Map appendix should be attached to the answer book.

1.	Attempt any two questions from the following:	
a)	Define Geomorphology. Describe its meaning and subject matter. Any one definition-study of landforms, process w.r.t. time-inductive and deductive approaches of studying geomorphology with suitable examples.	(10)
b)	What are rocks? Explain the characteristics and types of sedimentary rocks. Definition of rock and sedimentary rock-layer-absence of crystals-porous-preserve fossils-soft rocks.	(10)
c)	Describe in brief the 'Plate Tectonics Theory'. Definition and distribution of plates in the world-types of plate margins and movements-importance of the theory.	(10)

2.	Attempt any two questions from the following:	
a)	Define volcano. Describe the various volcanic landforms with the help of diagrams. Definition of volcano-landforms-batholith-laccolith-sill-dyke-lava plateau-volcanic cone-cinder cone-crater lake-caldere- along with diagrams.	(10)
b)	What are folds? Explain the various types of folding? Definition of folds-Symmetrical -Asymmetrical -Monoclinial -Isoclinal-Recumbent -Overtured -Nappe-Fan.	(10)
c)	Define earth quake. State the various causes of earth quakes. Definition of earthquake- landslides-collapse of underground tunnels - rock falls-percolation of water from a dam reservoir -internal forces of the earth-plate collision- subduction.	(10)

3.	Attempt any two questions from the following:	
a)	Define erosion. Discuss the factors and agents of erosion. Definition of erosion-factors-structure, process and time-agents- water in river, sea and underground water, glaciers, wind.	(10)
b)	Discuss erosional landforms caused by rivers. Gorge and Canyon-V-Shaped Valley- Inter-locking spurs-Waterfalls-Pot-Holes-Meander and Ox-bow lake-Rivers Terraces.	(10)

c)	<p>What is weathering? Briefly describe the various types of weathering. Definition of weathering-In short description about Physical-Chemical and Biological Weathering.</p>	(10)
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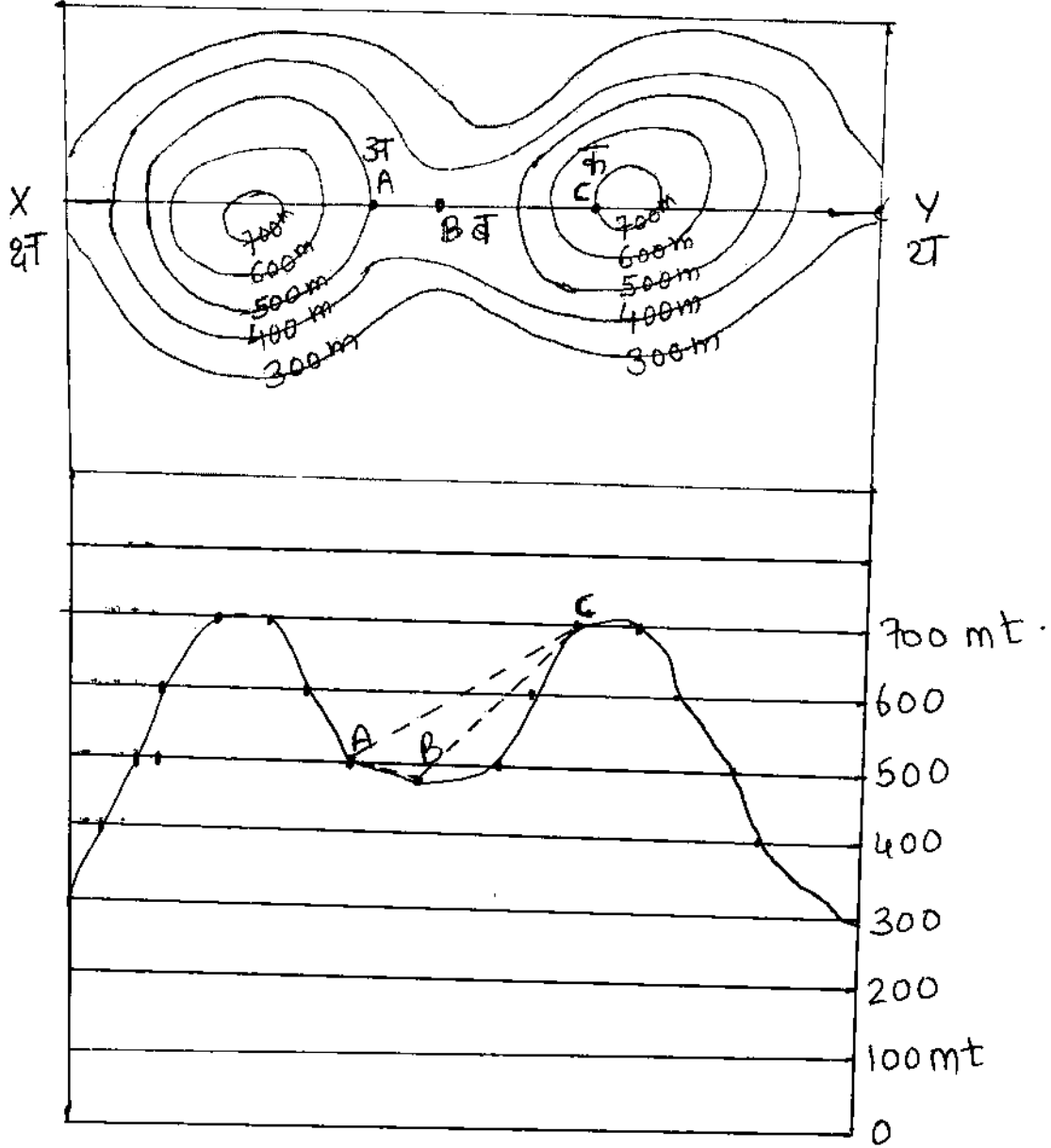
4.	<p>Attempt any two questions from the following:</p>	
a)	<p>What are Aeolian processes? Discuss various processes of wind erosion. Landforms caused by wind- found in arid climate regions-low precipitation-high daily range of temperature- wind erosion-deflation, abrasion, attrition.</p>	(10)
b)	<p>Describe the depositional landforms created by sea waves. Characteristics of: beach-beach cusp-sandbars and barriers-coastal wetlands and saltflats.</p>	(10)
c)	<p>Briefly describe the erosional landforms caused by groundwater. Characteristics of: Lapias-Solution holes- polje-karst valleys-caves or caverns-ponor-natural bridge.</p>	(10)

5.	<p>Attempt any two questions from the following:</p>	
a)	<p>Explain the meaning and features of contours. Isolines that join places of uniform height-indicate nature and height of slope-spacing among contours used to identify the type of slopes-highest contour shows maximum height-contours of different height do not touch each other.</p>	(10)
b)	<p>Draw a cross section X and Y on the contour map given in Appendix 1 and identify the landform. State the intervisibility of points A, B and C.</p>	(10)
c)	<p>Points M and N are on 5,000 metres and 4,000 metres contour lines respectively on a topo map. The scale of the map is 1 cm to 1 km. the distance between points M and N is 2 cms. So find out the gradient between these points. Scale conversion: 1 cm to 1 km =1 cm to 1,000 metres. Therefore 2 cms = 2x1000 = 2,000 metres Gradient=Vertical Interval (V.I.)/Horizontal Equivalent (H.E.) Gradient=(5,000-4,000)/2,000 Gradient=1,000/2,000 Gradient=1:2</p>	(10)
d)	<p>Describe the concept of gradient. Vertical Interval-Horizontal Equivalent their importance in calculation of gradient.</p>	(10)

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Appendix - 1 (परिशिष्ट क्र. 9)

Contour Interval: 1 cm to 100 metres.



The landform is Gap.

Intervisibility: A to B is visible.
B to C is visible.
A to C is visible.

