

1

58112

Set-4

[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)	Write the meaning of Geomorphology and explain its nature? 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 various types of igneous rocks. Definition of rock and igneous rock-oldest-extreme heat and pressure-absence of layers-less porous-absence of fossils.	(10)
c)	Describe in brief the Continental Drift Theory of Alfred Wegner. Background of the theory - Wegner as plant scientist -found evidences of similar kinds of plants species in different continents -conceptualisation of continental drift. The theory - Pangaea and Panthalasa - drift (Laurasia and Gondwana - present world -Evidences - jig saw fit, similar species, fossils, migration of birds- Criticism - incomplete evidences, no sufficient explanation on some anomalies.	(10)

2.	Attempt any two questions from the following:	
a)	Discuss different types of volcanic eruption. Characteristics of Active, Dormant and Extinct volcanoes. Fissure-Hawaiian-Stombolian-Vulcanian-Vesuvius-Peleean and their characteristics.	(10)
b)	What is folding? Discuss the different types of folds. Definition of folds-Symmetrical -Asymmetrical -Monoclinial -Isoclinal- Recumbent -Overturned -Nappe-Fan.	(10)
c)	Define earthquake. State the various effects of earthquake. Definition of earthquake, Positive: creation of new islands-raising of ground water table-new mineral deposits. Negative: destruction of life and property-fires-occurrence of tsunamis-landslides-snow avalanches.	(10)

3.	Attempt any two questions from the following:	
a)	Define mechanical weathering. Explain the types of mechanical weathering. Definition of mechanical weathering-characteristics of: block disintegration, granular weathering, frost action, exfoliation, shattering.	(10)

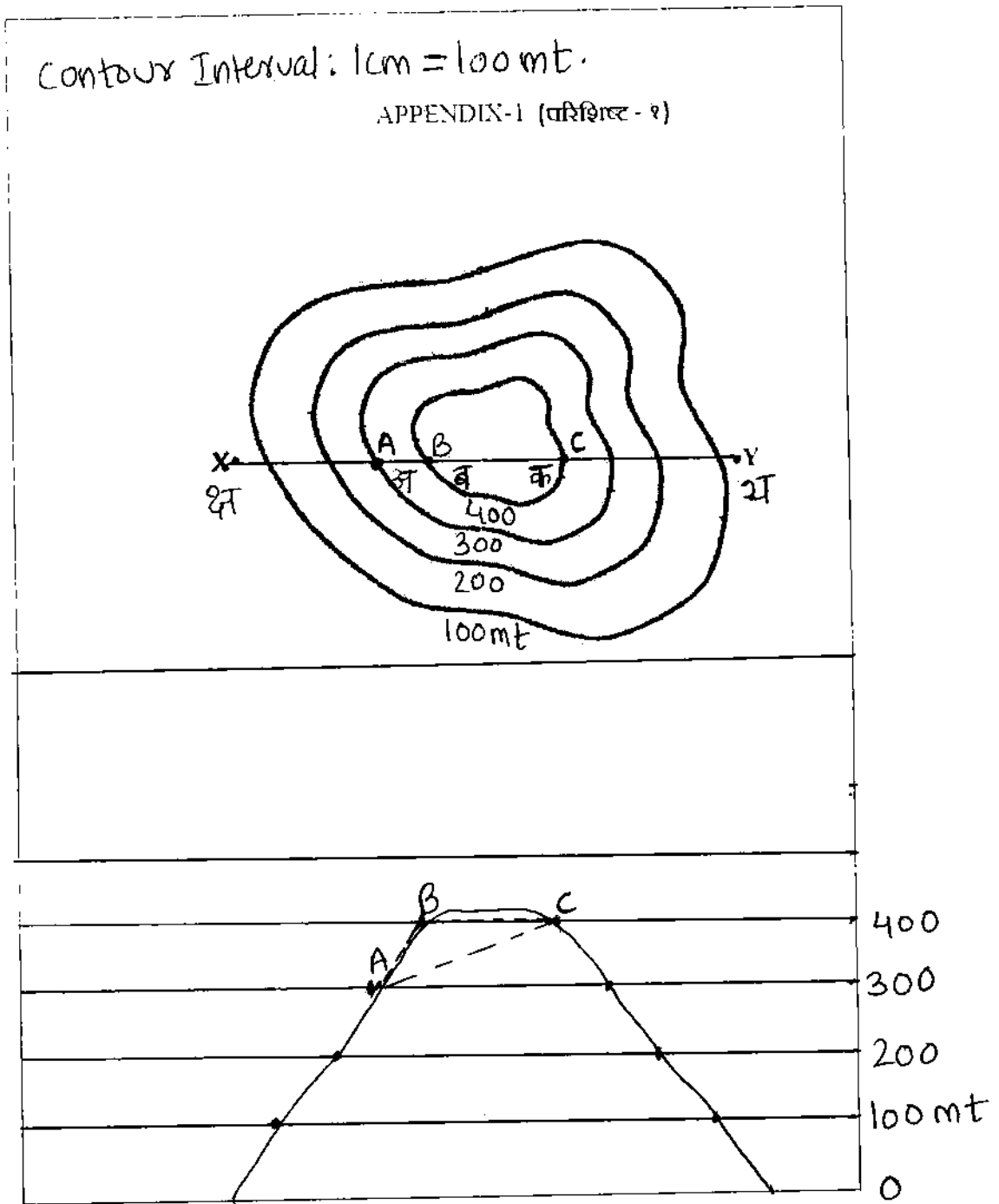


b)	Explain the land forms created by the depositional work of river. Characteristics of: Alluvial fan-flood plains- natural levees-braided streams and delta.	(10)
c)	Explain the depositional landforms created by glaciers. Characteristics of: moraines, outwash plains, drumlins, eskers, kames and kettles.	(10)

4.	Attempt any two questions from the following:	
a)	Give a detailed account of erosional landforms produced by the work of wind. Characteristics of: deflation hollows, desert pavements, mushroom rocks, inselbergs, demoiselles, zeugens, yardangs, stone lattice, wind bridges and windows.	(10)
b)	Describe the erosional landforms created by sea waves. Sea cliff-wave cut platform-sea caves- sea arch-sea stack-sea stump-blow hole.	(10)
c)	What is Karst Region? Explain the erosional land forms created by underground water. Definition of Karst region- Characteristics of: Lapies-Solution holes- polje-karst valleys-caves or caverns-ponor-natural bridge.	(10)

5.	Attempt any two questions from the following:	
a)	Describe the various types of slopes. Nature of contour lines in: convex, concave, steep, gentle and terraced slopes.	(10)
b)	Draw a cross-section on the given contour map and state the intervisibility of points A, B, and C. (Refer to Appendix I)	(10)
c)	Points S and T are on 1000 metres and 500 metres contour lines respectively on a topo map. The scale of the map is 1cm to 1 km. the distance between points Sand T is 5 cm. so find out the gradient between these points. Scale conversion: 1 cm to 1 km =1 cm to 1,000 metres. Therefore 5 cms = 5x1000 = 5,000 metres Gradient=Vertical Interval (V.I.)/Horizontal Equivalent (H.E.) Gradient=(1000-500)/5,000 Gradient=500/5,000 Gradient=1:10	(10)
d)	Explain the concept of intervisibility. Intervisibility a condition where 2 places located on a slope are visible to each other-explanation for how the visibility differs from one topographical feature to another as the placement of contours change.	(10)

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The landform is conical Hill

Intervisibility: A to B is visible
B to C is not visible
A to C is not visible.

