

[Time: Three Hours]

[ Marks:100]

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory.
  2. Draw neat diagrams wherever necessary.

Q1 Fill in the blanks.

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- i) \_\_\_\_\_ drainage pattern develops over a conical hill.
- ii) \_\_\_\_\_ drainage pattern develops if the streams are flowing towards lake.
- iii) Salt weathering or salt wedging is a type of \_\_\_\_\_ weathering.
- iv) Yardangs form as a result of \_\_\_\_\_ erosion.
- v) Elongated, sinuous ridge deposited as a result of glacial activity is called as \_\_\_\_\_.
- vi) A costal landform where a sea arch gets eroded to a vertical pillar like feature, is called as \_\_\_\_\_.
- vii) A conical depositional feature on the floor of the underground karst cave is called as \_\_\_\_\_.
- viii) A \_\_\_\_\_ ratio is the ratio of number of streams of lower order to number of streams of higher order in a basin.
- ix) A landform having one slope with gentle angle and other with steep angle is identified as \_\_\_\_\_.
- x) An imaginary line joining points of equal elevation is called as \_\_\_\_\_.

Q1B Define the following:

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- i) Exfoliation
- ii) Caldera lake
- iii) Tephra
- iv) Lahars
- v) Ventifacts
- vi) Bajada
- vii) Arete
- viii) Hogback
- ix) Projected profile
- x) Mesa

- Q2 Answer any **Two** of the following. 20
- a) Write a note on various types of volcanoes.
  - b) Write a note on formation of corestones, rills and duricrust.
  - c) Give an account of relationship between drainage patterns and lithology/structure citing suitable examples.
  - d) Describe various types of methods used in dating of materials.
- Q3 Answer any **Two** of the following. 20
- a) Describe various types of aeolian erosional landforms.
  - b) Write a note on various glacial depositional landforms.
  - c) Describe various types of poljes formed in karst landforms.
  - d) Write a note on various coastal depositional landforms.
- Q4. Answer any **Two** of the following. 20
- a) Differentiate between spur and saddle. Draw and explain their topographic profiles.
  - b) Write a note on various types of landform profiles used in topography.
  - c) Describe various types of a stream ordering schemes with suitable examples.
  - d) Explain the relationship between the storm hydrograph response and various basin shapes.
- Q5 Write a note on any **Four** of the following. 20
- a) Landforms associated with acidic volcano
  - b) Meandering streams
  - c) Parabolic and barchan dunes
  - d) Dolines and its types
  - e) Drawback of any stream ordering scheme
  - f) Any two laws of drainage basin geometry