

2017

GEOGRAPHY

Paper : 403

ADVANCE GEOMORPHOLOGY

Full Marks: 80

Time: 3 hours

The figures in the margin indicate full marks for the questions

1. Multiple choice questions (answer all) : 1X 10=10
- (i) Which is having the lowest pace
- (a) Mudflow (b) Earth flow
- (c) Snow avalanche (d) Creep
- (ii) Headland is associated with
- (a) Discordant coastline (b) Concordant coastline
- (c) Along the coastline (d) (a) and (b)
- (iii) Blow hole is associated with.....
- (a) Coastal landform (b) Karst topography
- (c) Plate tectonic (d) Fluvial landscape
- (iv) Garo Hills is separated from central part of Meghalaya plateau
by.....
- (a) Moheshkhola Amguri range
- (b) Moheshkhola Adaguri range
- (c) Kylas Range
- (d) Arbela Range

- (v) Notch landform is due to
- (a) Wind Action (b) Wave action
(c) Tide (d) All the above
- (vi) The large compound sink hole
- (a) Uvalas (b) Polje
(c) Ponor (d) Hums
- (vii) What is the highest elevation of Meghalaya plateau ____
- (a) 1961m (b) 1973m
(c) 1681m (d) 1772m
- (viii) Eliminate the odd landform.
- (a) Tombolo (b) Headland
(c) Polje (d) Hooks
- (ix) Karst cycle of erosion was propounded by.....
- (a) A.D. Miall (b) Arthur Holmes
(c) J. W. Beede (d) Willaim Morris Davis
- (x) Most natural slope upon which landslides can occur have F value between.....
- (a) 0.5 and 1.0 (b) 1.0 and 1.3
(c) 1.3 and 1.6 (d) 1.6 and 1.9

2. Answer in brief (any four) : 2X4=8

- (i) What is Phreatic Zone?
(ii) Differentiate Coast line and Sea shore.
(iii) Explain coastal erosion process.

- (iv) What is Lineament?
(v) What is Tectonic geomorphology?
(vi) What is Hook and Tombolo?
(vii) What is Avalanche?

3. Answer in brief (any four) : 5X4=20

- (i) What is the significance of climate based geomorphology?
(ii) What is coreston and tor bolders? Explain its formation.
(iii) Explain the physiography of Meghalaya plateau in brief.
(iv) Briefly Illustrate the theories of origin of underground caverns? Explain.
(v) What is a river terrace? Write its types and origin with suitable diagram.
(vi) Application of spatial technology enhances the geomorphological understanding. Explain

4. Answer in detail (any two) : 9x2=18

- (i) What is mass movement? Explain with suitable diagrams. 2+5+2=9
(ii) What is gradation? Explain.
(iii) What is process geomorphology? Explain its role in understanding landform study. 3+6=9
(iv) Explain the role of geomorphology in land use land cover and environmental planning. 9

5. Answer in detail (any two) : 12x2=24
- (i) Write the fundamental concepts of geomorphology. 12
- (ii) What is karst topography? Explain various landforms associated with it. Draw suitable diagrams. 3+6+3
- (iii) Define morphometry? Justify its importance in geomorphological studies. 6+6
- (iv) What is Escarpment? Explain the presence and characteristics of escarpment across the world with suitable diagram. 2+7+3
