2018

M.A./M.Sc. 1st Seme. Examination

GEOGRAPHY

PAPER-GEO-102

Full Marks: 40

Time: 2 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Unit-102.1

Oceanography

[Marks : 20]

1. Answer any one question :

1×8

(a) Identify and discuss the characteristics of the major subdivisions of the marine environment with related processes of winds and ocean circulation.

(Turn Over)

(b) Explain the dynamic behaviours of the coastal sand dunes in alluvium coasts with transformation of vegetation covers and sediment supplies.

2. Answer any two questions:

2×4

- (a) How do tide-velocity asymmetry of tidal currents occur in an estuary?
- (b) Classify the sediment types of the seas on the basis of their origin.
- (c) Critically discuss the role of CRZ rules in conservation of coastal environment and traditional livelihoods of the people.
- (d) Identify the characteristics of watermasses and their properties.

3. Answer any two questions:

 2×2

- (a) What is the significance of EEZ?
- (b) Define biotic resources of the occan.
- (c) Identify the nature of circulation in the surf zone.
- (d) What is a coastal cell?

Unit-102.2

Hydrology

[Marks : 20]

Group-A

1. Answer any one question:

1x8

- (a) Explain different methods for estimating precipitation volume with illustration.
- (b) Enumerate the steps for constructing a unit hydrograph.

 Examine hydrological importance of basin lag time.

5+3

Group-B

2. Answer any two questions:

2×4

- (a) Assess the importance of hydrology in the context of global climatic change.
- (b) Enumerate different time dimensions of hydrograph with suitable illustration.
- (c) How do you estimate infiltration for a watershed?
- (d) Explain the methods for magnitude-frequency analysis of hydrological events.

Group-C

3. Answer any two questions:

 2×2

- (a) Define aquiclude.
- (b) Define specific yield of an aquifer.
- (c) What do you mean by hydrological soil group?
- (d) What is Piezometric surface?