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#### 2017

### M.A./M.Sc.

## 1st Semester Examination

GEOGRAPHY

PAPER-GEO-102

Subject Code-29

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

## Write the answer Questions of each Unit in separate books

# Unit-III

(Oceanography)

#### Group-A

- 1. Answer any one question from the following: 1×8
  - (a) Discuss the tidal characteristics which play a significant role in marine processes to influence the shallow sea environment.

(b) Explain the origin and role of coral reefs as coastal habitat in the oceanic islands.

#### Group-B

- 2. Answer any two from the following questions: 2x4
  - (a) What are the factors to build up coastal sand dunes?
  - (b) Briefly explain the characteristics of watermasses and their properties.
  - (c) Identify the sediment types and their sources in the sea.
  - (d) What are the human impacts on the coast line.

#### Group-C

- 3. Answer any two from the following questions:  $2\times2$ 
  - (a) Deifine Exclusive Economic Zones (EEZ).
  - (b) Identify the various types of mineral resources of the ocean.
  - (c) What is the significance of sand budget?
  - (d) What is the biological function of mangrove swamps?

#### Unit-IV

#### (Hydrology)

#### Group-A

- 1. Answer any one from the following questions:  $1\times8$ 
  - (a) Examine hydrological importance of a hydrograph. How does hydrograph defind on basin shape?
  - (b) Elucidate cascading and morphological system in a basin scale.

#### Group-B

2. Answer any two questions:

- $2\times4$
- (a) Assess the importance of hydrological frequency analysis.
- (b) Discuss the normal ratio method and Theissen network method for precipitation analysis.
- (c) Bringout the factors controlling ground water recharge and discharge.
- (d) How is hydrostatic pressure associated to confined aquifer?

#### Group-C

3. Answer any two questions:

- $2 \times 2$
- (a) How does capillary rise depend on soil texture?
- (b) Define basin-lag time.
- (c) What is known as dependable rainfall?
- (d) Mention two advantages of Double ring infiltrometer.