2014

M.A./M.Sc.

1st Semester Examination

GEOGRAPHY

PAPER—GEO-102

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* questions from the following : 8×1

(a) Elucidate the characteristics of coastal habitats with special reference to estuaries and mangrove swamps.

(b) Explain the significance of EEZ with particular reference to utilisation of marine resources. What are the criteria for delineating CRZ–I.

Group—B

2. Answer any *two* from the following questions : 4×2

(a) Explain the origin of rotational tides and their characters.

(b) Briefly explain the mechanism of ocean circulation.

(c) Classify oceanic sediments according to origin.

(d) Briefly discuss the physical and biological controls of distribution of corals.

Group—C

3. Answer any *two* from the following questions : 2×2

(a) What is meant by 'beach cycle'?

(b) What is Thermocline?

(c) Define coral reef problems.

(d) What is sand Budget?

Unit–IV

(Hydrology)

Group—A

1. Answer any *one* from the following question : 8×1

(a) Assess the need and mechanism of ground water recharge through roof-top rain-water harvesting.

(b) What are the regulating factors of stream discharge ? Illustrate the variation of stream discharge using area velocity method, with suitable examples.

3+5

Group—B

2. Answer any *two* questions : 4×2

(a) Explain 'Darcy's law' with reference to ground water movement.

(b) Describe how unit hydrograph can be used to predict the runoff from storms.

(c) Assess the possible impacts of global climatic change on regional hydrology.

(d) Illustrate storage co-efficient of confined and unconfined aquifer.

Group—C

3. Answer any *two* questions : 2×2

(a) Define the term 'Drawdown'.

(b) Describe any two methods of separating the base flow from the total runoff.

(c) Define 'Aquiclude'.

(d) Define "recurrence interval" of hydrological phenomena.