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PG CBCS
M.Sc. Semester-I Examination, 2022
GEOGRAPHY
PAPER: GEO 102
(HYDROSPHERIC SCIENCES)

Full Marks: 40 **Time: 2 Hours**

Write the answer for each unit in separate sheet

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.

GEO 102.1: OCEAN SCIENCE

Marks: 20

GROUP-A

1. Answer any ONE question: **1×8=8**

a) Describe the causes of variable distribution of salinity in the oceans of the world.

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

GROUP-B

2. Answer any TWO questions: **2×4=8**

a) Identify the role of law of the sea in conservation of marine resource.

b) Classify ocean sediments on the basis of their origin.

c) How do the atmosphere and ocean interact to affect climate?

d) Write a short note on TS diagram.

GROUP-C

3. Answer any TWO questions: **2×2=4**

a) What is the Hypsographic Curve?

b) What is Wilson Cycle?

c) Write a note on EEZ.

d) What is algal bloom?

P.T.O.

GEO 102.2: HYDROLOGY

Marks: 20

GROUP-A

1. Answer any ONE question: **1×8=8**

a) Discuss with illustration the steps involved in constructing unit hydrograph for a drainage basin.

b) Explain different methods for estimating precipitation volume with suitable illustration.

GROUP-B

2. Answer any TWO questions: **2×4=8**

a) How do you separate base flow from total discharge?

b) Explain the methods for magnitude-frequency analysis of hydrological events.

c) Why is Mann-Kendal trend test important in time series analysis?

d) Examine the importance of Gumbel's equation for hydrologic frequency analysis.

GROUP-C

3. Answer any TWO questions: **2×2=4**

a) Define peizometric level.

b) What is basin-lag time?

c) Define hygroscopic moisture.

d) Define aquiclude.

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