

QP Code: 24/PT/15/IB

POST-GRADUATE DEGREE PROGRAMME

Term End Examination — December, 2024

GEOGRAPHY

Paper-IB : HYDROLOGY & OCEANOGRAPHY

Time : 2 hours]

[Full Marks : 50

Weightage of Marks : 80%

Special credit will be accuracy and relevance in the answer. Marks will be deducted for incorrect spelling, untidy work and illegible handwriting. The weightage for each question has been indicated in the margin.

Answer any *three* questions from Section-A selecting at least *one* from each Unit. Question No. 7 in Section-B is compulsory.

Section - A

10 × 3 = 30

[Unit-I : Hydrology]

1. How does the shape of hydrograph vary with storm direction and basin characteristics ?
2. Differentiate between Global Hydrological Cycle and Basin Hydrological Cycle. Discuss the forms and importance of atmospheric moisture. 3 + 7
3. Classify wetlands based on their characteristics. State the importance of river basin management. 4 + 6

[Unit-II : Oceanography]

4. State the factors controlling the temperature of ocean water. Also discuss how ocean water temperature changes horizontally and vertically. 5 + 5
5. Discuss the different types of coral reefs with examples. Discuss two theories related to the origin of coral reef. 3 + 7
6. Give an account of the major resources available from the ocean water and the ocean bed.

Section - B

7. Write short notes on any *five* of the following : 4 × 5 = 20

- a) Importance of Hydrograph
 - b) Processes for the formation of mid-oceanic ridges
 - c) Role of mangrove during cyclones
 - d) Oceanic deposits
 - e) East Kolkata Wetland as Ramsar site
 - f) Water Balance
 - g) Function of Wetland.
 - h) Application of Unit Hydrograph
 - i) Ecological importance of coral reefs
 - j) Surface Runoff.
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