

QP Code: 22/PT/15/IB

POST-GRADUATE COURSE

Term End Examination — June, 2022/December, 2022

GEOGRAPHY

Paper-IB : HYDROLOGY & OCEANOGRAPHY

Time : 2 hours]

[Full Marks : 50

Weightage of Marks : 80%

Special credit will be given for precise and correct answer. Marks will be deducted for spelling mistakes, untidiness and illegible handwriting.

The figures in the margin indicate full marks.

Use of scientific calculator is strictly prohibited.

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. Define a hydrograph. Classify hydrograph on the basis of its characteristics. What is a unit hydrograph ? 2 + 5 + 3
2. What do you mean by river basin districts ? Classify a drainage unit based on drainage area. Give the outline of an ideal basin management scheme. 3 + 3 + 4
3. Classify wetlands. Elucidate the uses and management of the Kolkata wetlands. 5 + 5

[Unit-II : Oceanography]

4. Classify the forms of coral reefs. Discuss any one theory of origin of coral reefs and atolls in the light of present day investigation. 3 + 7

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[Turn over

5. Classify oceanic deposits on the basis of their origin and mention their characteristics. 5 + 5
6. What are the various landform features formed in oceans ? Explain the structure and formation processes of the mid-oceanic ridge. 2 + 3 + 5

Section - B

7. Write short notes on any *five* of the following : 4 × 5 = 20
- a) The structure of oceanic trenches.
 - b) The benthic zone.
 - c) The characteristics of mangrove plants.
 - d) Bleaching effect in coral reefs.
 - e) Pelagic sediments.
 - f) Surface runoff.
 - g) Darwin's subsidence theory.
 - h) Drainage density.
 - i) The basin hydrological cycle.
 - j) Wetted perimeter.
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