2022

1st Semester Examination

GEOGRAPHY

Paper : GEO 102

Full Marks : 40 Time : Two Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

Paper : 102.1

(Ocean Science)

Group - A

Answer any *two* of the following questions : 2×2=4

1. Define the opening and closing of ocean basins.
2. Where does salt in seawater come form?
3. What is Marine Ooze?
4. Write a short note on the rocky intertidal communities.

Group - B

Answer any *two* of the following questions : 4×2=8

5. How do seafloor spreading processes occur?

P.T.O.

6. Explain the nature of the bathymetry of the continental shelf.

7. Explain the role of temperature as a physical property of seawater.

8. Define thermocline, halocline and pycnocline.

Group - C

Answer any ***one*** of the following questions : 8×1=8

9. Discuss the nature and character of coral reef ecology and morphology with reference to the Andaman and Nicobar Islands.

10. Explain how the land-ocean-atmosphere interactions influence the ocean climate zones.

Paper : 102.2

(Hydrology)

Group - A

Answer any ***two*** of the following questions : 2×2=4

1. Define piezometric level.

2. What is hydraulic gradient?

3. What is basin lag time?

4. Write the hydrological implication of inflection point on a hydrograph.

Group - B

Answer any *two* of the following questions : 4×2=8

5. Briefly describe the types of sub-surface water with suitable diagram.

6. Elucidate the techniques of roof-top rainwater harvesting.

7. Write a critical assessment of Theisson polygon and isohyetal method in estimating rainfall depth.

8. Explain Pennman's method of estimating evapo-transpiration in brief.

Group - C

Answer any *one* of the following questions : 8×1=8

9. Illustrate the methods of estimating stream discharge.

10. Examine the necessity and procedure of magnitude-frequency distribution of hydrological events.
