

M.Sc(Environmental Sci.) Semester - 1 (CBCS) Examination

OCT/NOV-2025

Basic Environmental Science (Core)

Time: 2:30 Hours

Marks:70

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.

Que.1 Answer the following (any 7) (14)

- 1) What is the difference between rain and fog?
- 2) State the significance of the Lithosphere.
- 3) What are the factors responsible for climate change?
- 4) What is the percentage of oxygen in freshwater and seawater?
- 5) What is the difference between fresh water and seawater?
- 6) State the distribution of water on the Earth's surface.
- 7) What are noble gases? Name three of them.
- 8) What is atmospheric stability?
- 9) State the factors affecting soil development.
- 10) What is the difference between bulk density and particle density?

Que.2 Answer the following (any two) (14)

- 1) Write a detailed note on the Structure of the Earth.
- 2) State different forms of precipitation. Explain in detail dew, mist and snow.
- 3) Describe the Biosphere in context to the environment.

Que.3 Answer the following

- 1) Describe the structure and function of the atmosphere. (05)
- 2) Explain: 'Earth's Energy budget'? (05)
- 3) State the radioactivity in the atmosphere. (04)

OR

Que.3 Answer the following (14)

- 1) Explain – inversion and mixing heights.
- 2) Write a note on 'Wind rose'.

Que.4 Answer the following

A. Attempt any two (10)

- 1) Explain the structure of water and its environmental significance.
- 2) State the distribution of water on the surface of the earth.
- 3) Describe the fresh water and its chemistry.

B . Attempt any one. (04)

- 1) Explain various properties of water.
- 2) Describe the solubility of gases in water.

Que.5 Answer the following (any two) (14)

- 1) Write a detailed note on the properties and constituents of seawater.
- 2) What are metallic and non-metallic mineral resources? Explain in detail
- 3) What are the chemical and physical properties of soil?
- 4) Describe different types of soil and their formation.
