

[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 4543

E

Unique Paper Code : 32181201

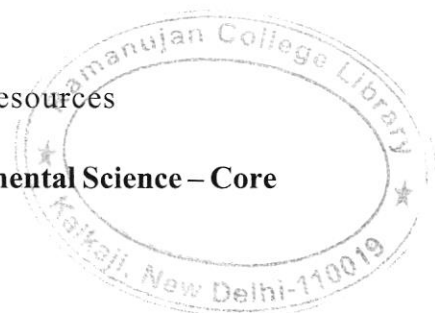
Name of the Paper : Water & Water Resources

Name of the Course : **B.Sc. (H) Environmental Science – Core**

Semester : II

Duration : 3 Hours

Maximum Marks : 75



Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **any five** questions.
3. All questions carry equal marks.

1. Suggest the strategies to maintain balance between the ecological importance of wetlands and their use for economic development. Comment on the role played by Ramsar Convention in conserving wetlands. (15)

2. Write explanatory notes on the following (any three): (5×3=15)

(i) Types of water resources

(ii) Biological constituents of water

(iii) Commercial uses of marine resources

P.T.O.

(iv) Water Quality Standards

3. Write down the difference between the following (any three): (5×3=15)
- (i) Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD).
 - (ii) Overuse and Depletion of water resources
 - (iii) Surface water and Groundwater
 - (iv) Watershed and Drainage Basin
4. Describe different means of dispersal and explain different barriers to dispersal. Discuss its relevance in the process of speciation and extinction with suitable examples. (15)
5. (a) Discuss the economic benefits and environmental costs of river valley projects, especially with reference to India. (6)
- (b) Water demands are changing in different sectors in India due to rapid economic development. How might this changing demand would affect water resource management in India? (9)
6. (a) Elaborate upon how has water resource management in India evolved. (8)
- (b) Discuss the role of macro-invertebrates and microbes in water ecosystems? (7)
7. Critically evaluate the ecological and socio-economic impacts of major water treaties such as the Indus and Ganges water treaties. (15)
8. What are the challenges in implementing rainwater harvesting in urban settings? Discuss the potential impacts of the National River Linking Plan. (15)