

NTK/KW/15–5844

**Third Semester B. Sc. (Part - II)
Examination**

ENVIRONMENTAL SCIENCE

Paper - VI

(Environmental Microbiology and Water Treatment)

Time : Three Hours]

[Max. Marks : 50

- N. B. : (1) All questions are compulsory.
(2) All questions carry equal marks.
(3) Illustrate your answers with suitable diagrams.

1. Discuss in brief the various sources of water supply. 10

OR

- (a) Describe the significance of bacteriological analysis of water. 5
(b) Elaborate the functions of microorganisms in soil. 5
2. Discuss the principle of Sanitation. How low cost sanitation measures are practiced in rural areas ? 10

OR

- (a) How wastage of water is prevented ? 5
(b) Write a brief note on Fluorosis. 5
3. Describe the working of Rapid Sand Filter. 10

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Contd.

OR

- (a) What is the significance of aeration ? 5
 - (b) Describe the chemicals used for disinfection of treated water. 5
4. Discuss in detail the demineralization process. Give chemical reactions. 10

OR

- (a) Briefly explain the method of defluoridation. 5
 - (b) Explain the working of solar distillation plant. 5
5. Answer any **ten** :—
- (i) What is faecal coliform ?
 - (ii) What are aeroallergens ?
 - (iii) Write full form of ICMR.
 - (iv) List the types of Service reservoir.
 - (v) Define Epidemiology.
 - (vi) Enlist air borne diseases.
 - (vii) What is flocculation ?
 - (viii) Describe the role of ozone in water treatment.
 - (ix) Define potable water.
 - (x) What is the need for fluoride removal from water ?
 - (xi) Name different types of hardness.
 - (xii) Enlist various water softening processes. 1x10