

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