

KNT/KW/16/5221

**Bachelor of Science (B.Sc.) Semester—VI (C.B.S.) Examination**

**WATER SUPPLY AND WASTE WATER TREATMENT**

**Paper—2**

**(Environmental Science)**

Time : Three Hours]

[Maximum Marks : 50

**N.B. :—** (1) **ALL** questions are compulsory and carry equal marks.

(2) Illustrate your answer with suitable examples and diagrams.

1. What are the general consideration to be observed in the planning of water distribution system ?  
10

**OR**

- (a) Describe various methods of water distribution system. 5  
(b) Explain any one type of service reservoir in detail. 5  
2. Discuss the various methods available for primary waste water treatment. 10

**OR**

- (a) Distinguish between septic and Imhoff tank. 5  
(b) Write about various types of screens. 5  
3. Discuss the Adsorption and electrolysis as a tertiary wastewater treatment. 10

**OR**

- (a) Discuss the composition and characteristics of sludge. 5  
(b) Explain oxidation pond process. What are its merit and limitation ? 5  
4. What are the characteristics of effluents from pulp and paper industry ? Suggest treatment options ? 10

**OR**

- (a) What is the composition of waste discharged from Dairy Industry ? 5  
(b) Discuss the sources and effects of distillery. 5  
5. Attempt any **TEN** :—  
(a) Distinguish between continuous and intermittent water supply system.  
(b) Write an application of centrifugal pumps.  
(c) How Leakages can be detected ?

NVM—5470

(Contd.)

- (d) What are objectives of waste water treatment ?
- (e) What is meant by sedimentation ?
- (f) Write a role of Ozone as a disinfectant.
- (g) What is ion exchange ?
- (h) What are the advantages of anaerobic sludge blanket ?
- (i) What is the need for disposal of sludge ?
- (j) What is the composition of industrial effluent emitted from textile industry ?
- (k) Why plastic is considered as a nuisance in environment ?
- (l) What is a significance of low-cost waste treatment ? 1×10=10