

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 100669

Roll No.

**B.TECH.**

**Theory Examination (Semester-VI) 2015-16**

**RURAL WATER SUPPLY & SANITATION**

*Time : 3 Hours*

*Max. Marks : 100*

**Section-A**

**1. Attempt all parts. All parts carry equal marks. Write answer of each part in short. (2×10 = 20)**

- (a) What are the issues of rural water supply?
- (b) Explain the meaning of term rural sanitation.
- (c) What are the various aspects of rural sanitation?
- (d) Write critical notes on bio-gas.
- (e) What is meant by mechanical imhoff tank?
- (f) State the advantages of septic tank.
- (g) How is the problem of treatment of industrial wastes tackled?
- (h) Define sanitation.

- (i) What do you mean by rural community?
- (j) What are the problems encountered in solid waste management?

### **Section-B**

**2. Attempt Any five questions from this section.**

(10×5 = 50)

- (a) Discuss the various techniques for rural water supply.
- (b) Discuss the design aspects of an imhoff tank in detail.
- (c) What are the advantages, disadvantages and use of the stabilization pond.
- (d) Explain National Rural Drinking Water Programme.
- (e) Discuss the methods of disposal of septic tank effluent.
- (f) Briefly explain the planning of wastewater collection system in rural areas.
- (g) Enumerates the various methods for the treatment of industrial wastes.
- (h) Explain in detail about solid waste management.

## Section-C

**Attempt any two questions from this section:** (15×2 = 30)

3. (a) Explain in details about occupational hazards in various public buildings.  
(b) Explain epidemiological aspects of water quality.
4. (a) Describe the component parts of biogas plant with the help of neat sketch.  
(b) Explain in details about rural health.
5. (a) Explain industrial plant sanitation.  
(b) Explain in details about incineration with a neat sketch.