Printed pages: 01 **Sub Code:NCE024**

Paper Id: **100618** **Roll No:** | | | | | | | | | | |

B. TECH.
(SEM -VI) THEORY EXAMINATION 2017-18
RURAL WATER SUPPLY AND SENITAION

Time: 3 Hours ***Total Marks: 100***

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **2 x10 = 20**

a. What are various devices available for rural water supply?
b. Discuss the factors influencing per capita demand.
c. What are the issues of rural water supply?
d. Which is the best method of refuse disposal for a small organized community?
e. Mention any four diseases which may spread by contaminated milk.
f. State the advantages of septic tank.
g. What do mean by rural community?
h. Define sanitation.
i. Write short note on bio gas.
j. Define design population.

SECTION B

2. Attempt any *three* of the following: **10 x 3 = 30**

a. Explain in details about occupational hazards in various public buildings.
b. What are the advantages, disadvantages and use of the stabilization pond?
c. What are the important points to be considered for proposed water supply scheme?
d. Explain with neat sketch infiltration galleries in detail.
e. Explain logistic curve method.

SECTION C

3. Attempt any *one* part of the following: **10 x 1 = 10**

(a) What are infiltration wells? Explain with neat diagram.
(b) Explain the following types of refuse;
(i) Garbage (ii) Rubbish (iii) Ashes

4. Attempt any *one* part of the following: **10 x 1 = 10**

(a) Discuss the various techniques for rural water supply.
(b) Explain the National Rural Drinking Water program.

5. Attempt any *one* part of the following: **10 x 1= 10**

(a) Explain in detail about solid waste management.
(b) Discuss with neat sketch for slow sand filter and chlorine diffusion cartridges.

6. Attempt any *one* part of the following: **10 x 1= 10**

(a) Explain the treatment of solid waste by using bio-gas plant.
(b) What is the role of government for rural sanitation? What are the National Policies which govern rural water supply?

7. Attempt any *one* part of the following: **10 x 1= 10**

(a) Explain the trenching and composting methods in detail.
(b) Explain epidemiological aspects of water quality in detail.