Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(CE) (Sem.–5th)

## ENVIRONMENTAL ENGINEERING-I

Subject Code : CE-309

Paper ID : [A0616]

Time : 3 Hrs. Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

### SECTION-A

1. **Answer briefly :**

   i) Define design period.

   ii) What are different underground sources of water supply?

   iii) Enlist different types of water demand.

   iv) Differentiate between wet intake tower and dry intake tower.

   v) What are facultative bacteria? Explain.

   vi) What are the various physical characteristics those need to be examined for ascertaining the quality of drinking water?

   vii) Draw a neat sketch of grid iron system used for the distribution of water supply.

   viii) What is pH range required for using alum as a coagulant?

   ix) Discuss briefly water aeration

   x) What are different types of distribution reservoirs?





### SECTION

2. What are different types of well screen

3. Describe briefly the various constitue plant.

4. What is meant by disinfection in treati importance?

5. What is a mass curve? How it is prepa

6. Describe an artesian well. How it is fo

### SECTION

7. Given the following data, calculat 2000 A.D. by incremental increase me

| Year | 1880 | 1890 | 1900 |
|---|---|---|---|
| Population | 25000 | 27500 | 34100 |

8. What are common impurities found explain their effects upon quality of wa

9. Design sedimentation tank with con 60000 persons with a daily per capi Make suitable assumptions where need