

5th Sem Water Supply & Waste water engineering

1. 2 Marks questions

- a. Explain the term per capita demand?
- b. What is the yield of a well?
- c. Define specific yield?
- d. What is self cleaning velocity?
- e. What are the different methods for calculating population growth?
- f. What is sewage?
- g. What do you mean by hardness of water?
- h. Mention different types of traps in sewage system?
- i. What is screening?
- j. Define sewage farming.

2. 5 Marks Questions

- a. Explain the type of water demand.
- b. Explain break point chlorination.
- c. Differentiate between slow sand filter and rapid sand filter?
- d. What are the preventive measures to avoid sewage sickness?
- e. Determine the velocity of flow in a circular sewer of diameter 150cm. Laid on slope of 1 in 500 while running full by using Chezy's formula. The value of $C = 70$.
- f. Explain manhole with sketch?
- g. Discuss roof top rain water harvesting with figure.

10 Marks Questions

3. The population of 5 decade from 1930 to 1970 are given below. Find out the population after one, two and three decade beyond the last known decade, by using arithmetic increase method.

Year	1930	1940	1950	1960	1970
Polutation	25000	28000	34000	42000	47000

4. Sketch and describe in details the working of slow sand filter.
5. Describe about the factors affecting per capita demand?
6. Describe the process of primary treatment of sewage with help of flow diagram.
7. Write down various types of sewer appurtenance.