

S. B. Roll. No.....

WATER SUPPLY AND WASTE WATER ENGINEERING
4th Exam/Civil/4519/Nov'24
(For 2018 Batch Onwards)

Duration: 3Hrs.

M.Marks:75

SECTION-A

Q1. Do as directed.

15x1=15

- a. What is design period?
- b. What is per capita demand?
- c. Define runoff.
- d. The instrument used for testing of odour is called_____.
- e. Name any water borne disease.
- f. Define disinfection.
- g. What is dry weather flow?
- h. Define anaerobic bacteria.
- i. Define filtration.
- j. Alum is used for_____.
- k. Slow sand filter requires_____.
- l. Define sewer.
- m. What is invert?
- n. The leakage of sewage from sewers into soil is called_____.
- o. What is full form of COD?

SECTION-B

Q2. Attempt any six questions.

6x5=30

- i. Define population forecasting and list factors affecting population forecasting?
- ii. What are the requirements of wholesome water?
- iii. Write a short note on reservoir intake.
- iv. What are advantage and disadvantage of pressure filter?
- v. What are the advantages of metering?
- vi. What is the importance of sanitary engineering?
- vii. What is the requirement of good sewer joint?
- viii. Write a note on Trickling filter.
- ix. Write a short note on BOD.

SECTION-C

Q3. Attempt any three questions.

3x10=30

- a. What is per capita demand? Explain various factors affecting per capita demand.
- b. What are various Physical tests in analysis of water? Explain tests in detail.
- c. Explain Grid iron and dead end system of water distribution with its advantage and disadvantages?
- d. What is difference between slow sand filter and rapid sand filter?
- e. Give the difference between separate and combined sewerage system.
- f. What is trap and requirement of good trap? Explain water seal and causes of breaking of water seal & its prevention.