

2021

WATER SUPPLY AND SANITARY ENGINEERING

Full Marks: 60

Time: Two hours

The figures in the margin indicate full marks for the questions.

A. Multiple Choice Questions

1 x 20=20

1. Two sets of sewers are laid in _____ system
 - a. separate
 - b. combine
 - c. Partially combined
 - d. All of these
2. The precipitation occur due to topographical barriers:
 - a. Convective precipitation
 - b. Orographic precipitation
 - c. Cyclonic precipitation
 - d. All of the above
3. What is the body of permeable rock which can contain or transmit groundwater called?
 - a. Bore well
 - b. Aquifer
 - c. Canal
 - d. Water table
4. The type of rain gauge, which is installed at hilly and inaccessible areas is
 - a. Tipping bucket type
 - b. Weighing type
 - c. Float type
 - d. none of these

5. The pipe through which liquid waste carrying human excreta flows, is called
 - a. Waste pipe
 - b. anti- siphonage pipe
 - c. soil pipe
 - d. vent pipe
6. The water supply consists of a connection point from where the fire fighters can tap water and is called as _____
 - a. Fire hydrant
 - b. Fire point
 - c. Water towers
 - d. ditches
7. The water tap at your house is known as
 - a. Sluice tap
 - b. Stop cock
 - c. Bib cock
 - d. ferrule
8. The devices installed for drawing water from different water sources are called
 - a. Intake
 - b. Filter
 - c. Outlet
 - d. inlet
9. A city supplies includes
 - a. Domestic water demand
 - b. Industrial and commercial water demand
 - c. Demand for public uses and fire
 - d. All of the above
10. Which of the following is an advantage of separate sewers?
 - a. Rivers are polluted
 - b. Nuisance potential is reduced
 - c. Size of the sewers are small

- d. It proves economical
11. What is the shape of the septic tank?
- a. Square
 - b. Rectangle
 - c. Oval
 - d. circular
12. The most widely used type of a tube well in India is:
- a. Cavity well
 - b. Strainer well
 - c. Dug well
 - d. Ranney well
13. A drop manhole is provided if
- a. A sewer drop from a height
 - b. a branch sewer discharges into the main sewer at higher level
 - c. both (a) and (b)
 - d. none of these
14. Asbestos pipes are made of
- a. Cement
 - b. Silica and asbestos
 - c. Asbestos cement
 - d. None of these
15. Check valve is also called as _____
- a. Non return valve
 - b. Gate valve
 - c. Knife valve
 - d. Choke valve
16. What are the structures that are constructed at suitable intervals along the sewerage system called?
- a. manholes
 - b. Catch basin
 - c. pumps

- d. Sewer appurtenances
17. A masonry or R.C.C. chamber constructed at suitable intervals along the sewer lines, for providing access into them is called _____
 - a. manhole
 - b. Inverted siphons
 - c. Flushing tank
 - d. Clean outs
 18. _____ is constructed outside the building to carry wastewater discharge.
 - a. Gully trap
 - b. S trap
 - c. P trap
 - d. Floor trap
 19. At the last main hole of building sewerage, _____ is provided.
 - a. Grease trap
 - b. Gully trap
 - c. Intercepting trap
 - d. Nahini trap
 20. What is the device used to prevent sewer gases from entering the buildings?
 - a. Filters
 - b. traps
 - c. ventilators
 - d. Vacuum pumps

B. Very Short Questions

2*6=12

1. What should be the characteristics of materials to be used for sewers?
2. Mention various types of joints used in sewer line
3. Mention various types of fitting used in pipe
4. Mentions various types of pumps
5. Compare the continuous and intermittent systems of water
6. Mention various sources of water

C Short Questions

4*7=28

1. Describe the procedure for laying and testing of sewer

2. Describe with the neat sketch, the working of reciprocating pump
3. Describe in brief various types of water carriage system
4. Explain the working of manhole with the help of neat diagram
5. Briefly explain various types of valves in water work practice
6. Explain various types of distribution system
7. Explain in brief effect and preventive measures of pipe corrosion