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Roll No.....

180742/170742/30742

**4th Sem / CIVIL  
Subject : Water Supply & W.W. Engg./Public  
Health Engg.**

Time : 3 Hrs.

M.M. : 100

**SECTION-A**

**Note :** Multiple choice types questions. All questions are compulsory. (10x1=10)

Q.1 The process used for the removal of dissolved carbon dioxide from the supply water is. (CO-4)

- a) Coagulation
- b) Agitation

- c) Aeration
- d) Sedimentation

Q.2 The type of joint generally used in cast iron pipes is (CO-5)

- a) Flanged joint
- b) Flexible joint

- C) Dresser coupling joint
- d) Socket & spigot joint

Q.3 For joining the sewers at different levels the devices or appliances used is called. (CO-7)

- a) Drop manhole
- b) Man-hole

- c) Both A Or B
- d) None of these

Q.4 Testing of sewer line may be done by (CO-10)

- a) Boning Rod
- b) Straight road

- c) Rolling Ball
- d) All of above

Q.5 The dissolved oxygen content in sewage can be determined by (CO-11)

- a) Potentiometer
- b) Colour of sewage

- c) Winkler's method
- d) Odour of seaware.

Q.6 The process of self purification depends upon(CO-12)

- a) Sunlight

- b) Velocity of water

- c) Temperature of sewage

- d) All of above

Q.7 In the oxidation ditch, the excess studge is taken to (CO-13)

- a) Anaerobic digester
- b) Aerobic digester

- c) Drying beds
- d) Incinerator

Q.8 the colour of water is measured on. (CO-3)

- a) Turbidity scale
- b) Silical scale

- c) Platinum cobalt scale
- d) Threshold scale

Q.9 Per capita consumption decreases when. (CO-2)

- a) Use of metering system is adopted

- b) Hot climate persists is supplied

- c) Good quality water is

- d) All the above

Q.10 Pump commonly used for lifting water in water supply mains is : (CO-5)

- a) Axial flow pump
- b) Centrifugal pump

- c) Reciprocating pump
- d) Rotary type pump

**SECTION-B**

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Give examples of suspended impurities. (CO-3)

Q.12 Back filling of trench is done by \_\_\_\_\_.(CO-10)

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- Q.13 The chamber used to collect the rain water free from suspended particles is called. (CO-9)
- Q.14 The system in which different types of waste collected manually is called \_\_\_\_\_. (CO-9)
- Q.15 The velocity of flow of water in a sedimentation tank may normally be kept between \_\_\_\_\_. (CO-4)
- Q.16 The safe and most reliable system in distribution of water is \_\_\_\_\_. (CO-5)
- Q.17 Air relief valves in water supply pipe lines are provided at \_\_\_\_\_. (CO-9)
- Q.18 DWF means \_\_\_\_\_. (CO-9)
- Q.19 the bacteria which can flourish in the absence of oxygen is called \_\_\_\_\_. (CO-12)
- Q.20 \_\_\_\_\_ sludge is a sludge which remains for a larger period in the tank before removal. (Raw/Septic) (CO-13)

### SECTION-C

- Note:** Short answer type questions. Attempt any Twelve question put of fifteen questions. (12x5=60)
- Q.21 Write a short note on continuous system. (CO-5)
- Q.22 What do you mean by Coagulants? Give examples? (CO-4)
- Q.23 How PH-Value of water is determined by calorimetric method (CO-3)
- Q.24 What are the factors responsible for the losses of water? (CO-2)
- Q.25 what is Hydrological cycle? (CO-1)

- Q.26 What are the requirement of good building drainage? (CO-14)
- Q.27 Write the factors which affect self-purification of streams. (CO-13)
- Q.28 Explain the concept of B.O.D. and its importance. (CO-12)
- Q.29 Write the comparison between water carriage system and conservancy system. (CO-9)
- Q.30 How do we mark the alignment of pipes? (CO-6)
- Q.31 What are the points which should be kept in mind in order to maintain a building drainage system. (CO-14)
- Q.32 Write short note on sludge disposal. (CO-13)
- Q.33 What do you understand by Population Forecasting? (CO-2)
- Q.34 What are the advantages of Radial system? (CO-4)
- Q.35 What is sedimentation? None its various types. (CO-4)

### SECTION-D

- Note:** Long answer type questions. Attempt any Two question out of three questions. (2x10=20)
- Q.36 Explain laying and Jointing of sewers. (CO-10)
- Q.37 Explain different categories of variation in rate of demand. (CO-3)
- Q.38 What is chlorination? Explain its types. (CO-4)