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END SEMESTER EXAMINATION, 2021

(New Syllabus)

Semester:6th (Civil)

Subject code: CV-603

Subject: Environmental Engineering & Pollution control

Full Marks: - 56

Duration: 2 hours 30 minutes

Instructions:

1. Questions of Part A are compulsory

PART A (10X1=10 Marks)		
Q. No.	Choose the correct answer	Marks
1.	Under normal conditions, the average domestic consumption in india per person per day in litres is A) 150 lpcd B) 225 lpcd C) 100 lpcd D) 135 lpcd	1
2.	The horizontal tunnel constructed to intercept the flowing ground water near a river or a lake is called _____ A) Infiltration gallery B) Spring C) Wells D) Reservoirs	1
3.	The devices which are installed for drawing water from the sources are called _____ A) Subsurface devices B) Intake structures C) Water Drawer D) Sedimentation tank	1

4.	Turbidity is measured on  a) Standard cobalt scale b) Standard silica scale c) Standard platinum scale d) d) none of the above	1
5.	The Maximum permissible limit for Fluoride in drinking water is  a) 0.1 mg/l b) 1.5 mg/l c) 5 mg/l d) 10 mg/l	1
6.	Disinfection of drinking water means removal of  A) Turbidity B) Colour C) Odour D) Bacteria	1
7.	Biochemical Oxygen Demand (B.O.D.) of safe drinking water must be  A) nil B) 5 C) 10 D) 15	1
8.	Period of cleaning of slow sand filters is about (A) 24 - 48 hours (B) 10 - 12 days (C) 2 - 3 months (D) 1 - 2 year	1
9.	Green House effect is caused by  A) Green plants B) Ultraviolet rays. C) Infrared rays D) X- rays	1
10.	A good way of dealing with the solid waste problem is  A) Landfilling B) Discharged into water bodies. 1 C) Recycling D) None of the above	1

**PART-B, MARKS-46**

Questions no.	Questions	Marks
	Answer the following questions :	
1.	What are the Various types of water demand of a city or town ?	3
2.	What are the factors affecting the rate of water demand? Discuss the variation of water demand.  <b>OR</b>  Mention different methods of forecasting the future population of a given town. Describe in detail any one of the methods.	5
3.	Define Intake structure. Explain river intake with neat sketch showing all the components.	1+3=4
4.	Write the difference between slow sand and rapid sand filter.	3
5.	What are the different methods of disinfection.	3
6.	Explain briefly the different layout of water distribution system with neat sketches.  <b>OR</b> What is aeration? Write the objectives of aeration. Also, Write the different methods of aeration.	5
7.	Write the different types of sewers and system of sewerage	3
8.	Define Manhole. Write down its component parts.	1+2=3
9.	Draw a complete flow diagram of water treatment plant and describe the function of each unit.  <b>OR</b> What are traps in plumbing? Write the different types of traps. Also, Write the qualities of a good trap.	5
10.	Write down the Sources, effects and control of air pollution.	4
11.	Write the methods of treatment and disposal of solid waste.	4
12.	What are the different types of Hazardous waste?	4

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