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B.Tech DEGREE EXAMINATION, DECEMBER 2023

Fifth to Seventh Semester

18CEO405T - WATER POLLUTION AND ITS MANAGEMENT

(For the candidates admitted during the academic year (2020-2021 & 2021-20222))

Note:

i. Part - A should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.
 ii. Part - B and Part - C should be answered in answer booklet.

Time: 3 Hours		Max. Marks: 100			
PART - A (20 × 1 = 20 Marks) Answer all Questions			Marks BL		CO
1.	Depletion of the DO, will be a serious prefalls below	oblem for aquatic life, if the the DO level	1	1	1
	(A) 10 mg/L (C) 5 mg/L	(B) 6 mg/L (D) 4 mg/L			
2.	An inland lake experiences high growth o of the lake due to the process? (A) Oligotrpohic (C) Eutrophic	f algal blooms, what is the resultant status (B) Mesotrophic (D) Hypotrophic	1	2	1
3.	Which among the following is a organic po (A) Acid (C) Pesticides	ollutant? (B) Toxic metals (D) Heavy metals	1	2	1 ,
4.	'Sullage' is a term used for denoting the w (A) Household activities (C) Industrial activities	astewater released from (B) Minning activities (D) Storm water discarge	1	2	1
5.	Unit of electrical conductivity is (A) μS/m (C) mS/m	(B) mS/cm (D) μS/cm	1	1	2
6.	Platinum Cobalt is used as a standard for m (A) Colour (C) Turbidity	neasuring in water (B) Odour (D) pH	1	1	2
7.	During confirmed test for identifying e-col (A) 24 @ 25 °C (C) 48 @ 25 °C	(B) 24 @ 37 °C (D) 48 @ 37 °C	1	2	2
8.	Poor lathering of soaps is caused due to his (A) Sulphate (C) Alkalinity	gh amount of (B) Hardness (D) Chlorine	1	2	2
9.	Piper plot is used to identify the of (A) Type (C) Contamination	(B) Character (D) Turbidity	1	1	3
10.	Grit chamber is employed in sta (A) Preliminary (C) Secondary	ge in water treatment plant (B) Dewatering (D) Disinfectant	1	2	3
11.	In class B category of water the concentrate (A) <50MPN/100ml (C) <5000MPN/100ml	tion of total coliform is (B) <500MPN/100ml (D) <10000MPN/100ml	1	3	3

	PART - C ($5 \times 12 = 0$ Answer all Ques	•	Mark	is BL	CO
27.	Differentiate between macro and micro leve	el rainwater harvesting.	4	3	5
26.	State the major objectives of conjunctive use of water.		4	2	4
25.	Write short notes on role of CPCB.		4	2	4
24.	Write the actions involved in the self purification of river streams.		4	1	3
23.	Write about chemically oxygen demand.		4	2	3
22.	Write the physical characteristics of wastewater.		4	1	2
21.	Distinguish between point source of pollution	on and non-point source of pollution.	4	2	1
	PART - B ($5 \times 4 = 2$ Answer any 5 Qu	,	Mari	ks BL	CO
	(A) Collection area x Rainfall depth x Collection efficiency (C) Rainfall depth /Collection efficiency	(B) Collection area / Collection efficiency(D) (Collection area x Rainfall depth) / Collection efficiency			
20.	The rainwater collected using rooftop rain expression	nwater harvesting is evaluated using the	1	3	5
19.	TWAD Board is vested with the responsibility of providing (A) Water Supply & Sewerage facilities (B) Only water suppy (C) Only sewerage facility (D) Water quality to be followed in the state		1	2	5.
	The day when a city's taps dry out and peo quota of water is termed as (A) No water day (C) Water crisis day	(B) Water absence day (D) Zero water day	1	2	5
	World environment day is celebrated on (A) 5 th May (C) 5 th July	(B) 5 th june (D) 5 th August	1	1	5
16.	Among the following which is not a ground (A) Interbasin transfer of groundwater (C) Interbasin transfer of water	lwater management technique? (B) Artificial groundwater recharge (D) Recharge through rainwater harvesting	1	2	4
15.	Among the following which is not a biodive (A) Species of national interest (C) Nutrients in freshwater	ersity indicator? (B) Species diversity (D) Genera diversity	1	2	4
14.	Soil and water conservation is done to (A) Increase Infiltration (C) Stop Infiltration	(B) Decrease Infiltration (D) Avoid infiltration	1	2	4
13.	The CPCB is empowered by section Pollution) Act, 1974 to give directions to the (A) 16 (C) 18	of Water (Prevention and Control of the state pollution Control boards. (B) 17 (D) 19	:1	1	4
12.	stage (A) Clear (C) Recovery	(B) Septic (D) Decomposition	1	2	3
12.	In self purification of rivers the sequen-	ce of Decomposition stage comes after	1	2	3

28.	(a) Write in detail about various types of water pollutants. (OR)	12	3	1
	(b) Write in detail about various water sampling methods.			
29.	 (a) Explain in detail about waterborne diseases and its impact. (OR) (b) Explain about Baylis and Hellige Turbidity meter. 	12	3	2
30.	 (a) Write in detail about the treatment of industrial waste water. (OR) (b) Write in detail about self purification of river stream. 	12	3	3
31.	 (a) Explain in detail about various types of environmental indicators. (OR) (b) Explain in detail about public participation in reducing water pollution and 	12	3	4
20	its conservation.	10		
32.	(a) Explain in detail about various awareness programme for water management and its sustainable development?	12	3	5
	(OR)			
	(b) Explain in detail various components of rainwater harvesting.			

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