

Reg. No.

**B.Tech. DEGREE EXAMINATION, NOVEMBER 2022**

Sixth/ Seventh Semester

**18CEO405T – WATER POLLUTION AND ITS MANAGEMENT***(For the candidates admitted from the academic year 2018-2019 to 2019-2020)***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 40<sup>th</sup> minute.
- (ii) **Part - B** should be answered in answer booklet.

Time: 2½ Hours

Max. Marks: 75

**PART – A (25 × 1 = 25 Marks)**Answer **ALL** Questions

	Marks	BL	CO	PO
1. According to BIS standards that allowable limit of TDS is? (A) Less than 250 mg/L (B) Less than 0.3 mg/L (C) Less than 500 mg/L (D) Less than 50 mg/L	1	1	1	1
2. _____ bacteria which is harmful to human health? (A) Algae (B) Pseudomonas (C) Comamonas (D) Pathogenic	1	1	1	1
3. _____ can lead to high concentration of unwanted algae growth? (A) Calcium (B) Nutrients (C) Lead (D) Zinc	1	1	1	1
4. Heavy organic pollution can lead to (A) Dead zone (B) Pollution zone (C) Live zone (D) Organic zone	1	2	1	3
5. Amocliasis is also called as (A) Typhoid (B) Hepatitis (C) Poliomyelitis (D) Dysentery	1	2	1	1
6. Determination of steam increment is utilized for the observing of (A) Sea pollution (B) River pollution (C) Lake pollution (D) Tank pollution	1	2	2	1
7. River monitoring framework can be carried out by using (A) Motors (B) Automatic sensors (C) Automatic motors (D) Turbines	1	2	2	1
8. During dry season, control of river contamination should be giving the extra (A) Water (B) Nitrogen (C) Carbon-di-oxide (D) Oxygen	1	2	2	1
9. Which is the major source of water used by the industries in India? (A) Rain water (B) Municipal water (C) Ground water (D) Surface water	1	2	2	1

10. Water is available easily for \_\_\_\_\_ % of industries.  
 (A) 25% (B) 77%  
 (C) 17% (D) 40%
11. \_\_\_\_\_ is the essential element of FICCI water mission.  
 (A) Zero discharge (B) Easy available water  
 (C) Access to safe water (D) Public health
12. A process for the ultimate removal of nitrogen from waste water is called  
 (A) Nitrification (B) Denitrification  
 (C) Ammonification (D) Reduction
13. Industrial waste water does not consist of the following types?  
 (A) Process waste water (B) Vented waste water  
 (C) Runoff waste water (D) Hot waste water
14. The surface water quality is affected by runoff and \_\_\_\_\_ from rainfall.  
 (A) Precipitation (B) Infiltration  
 (C) Farming (D) Wetlands
15. Sedimentation using \_\_\_\_\_ has been implied mainly to pre-treatment of industrial wastewater.  
 (A) Bio flocculent (B) Salts  
 (C) Chemical coagulation (D) Chlorine
16. By pass of effluent discharge comes under which stage of water pollution act  
 (A) Stage 1 (B) Stage 2  
 (C) Stage 3 (D) Stage 4
17. Enterprises shall adopt emergency response measure based on \_\_\_\_\_.  
 (A) Article 5 (B) Article 3  
 (C) Article 4 (D) Article 2
18. According to water pollution and control act chapter 4 deals with  
 (A) Storage (B) Marine discharge  
 (C) Soil treatment (D) Recycling
19. Which is the first protection act announced in India?  
 (A) Environmental act (B) Water act  
 (C) Air act (D) Noise act
20. Number of subdivisions in water act  
 (A) 60 sections (B) 64 sections  
 (C) 62 sections (D) 68 sections
21. Which of the option is integrated as sustainable development factors?  
 (A) Restoration (B) Storage  
 (C) Carrying capacity (D) Reduction

22. Ground water can get naturally recharged through  
 (A) Precipitation (B) Climate change  
 (C) Evaporation (D) Percolation
23. The pipe transporting rainwater should be resistance to  
 (A) X ray (B) UV ray  
 (C) IR ray (D) Thermal ray
24. CPCB under Water (Prevention and control of pollution) Act aims to promote  
 (A) Cleanliness of streams (B) Zero discharge  
 (C) Industrial role (D) Public health
25. The first and foremost functions of CMWSSB are  
 (A) Water quality (B) Public health  
 (C) Industrial control (D) Water storage

**PART – B (5 × 10 = 50 Marks)**

Answer ALL Questions

Marks BL CO PO

26. a. Demonstrate the sources, types and the effects of water pollution. 10 4 1 1
- (OR)
- b. Illustrate the methods of sampling and its procedure of collection and storage to assess the water quality standards. 10 4 1 1
27. a. Develop the methods to detect the physical quality of drinking water and formulate the basic physical properties. 10 5 2 1
- (OR)
- b. How will you analyse the impact on effluent in ground water? Explain in brief the effects of ground water pollution. 10 3 2 1
28. a. Compare and contrast the effluent treatment methods and technologies adopted in tannery industries. 10 4 3 1
- (OR)
- b. With evidences explain the adverse effects of thermal pollution on the environment. 10 4 3 1
29. a. Justify the effective role of MoEF in controlling the water pollution. 10 6 4 2
- (OR)
- b. Discuss about the Water (prevention and control of pollution) Act 1974. 10 2 4 2
30. a. With a suitable sketches, explain the various methods of rain water harvesting system. 10 4 5 1
- (OR)
- b. With a case study, critically uprise the effective water management system for an urban area. 10 6 5 1

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