



Regulation R18

Subject code: 2P6AA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, February 2024

Environmental Engineering (Civil Engineering)

Maximum Marks: 70

Date: 15.02.2024 Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10X2M=20 Marks)

CO	Bloom Tx
1	L1
1	L1
2	L1
2	L1
3	L1
3	L1
4	L1
4	L1
5	L1
5	L1

- 1 Mention the types of water demand.
- 2 Illustrate the fire demand formulae.
- 3 Define sedimentation and coagulation.
- 4 Draw a neat sketch of slow sand filter.
- 5 What is meant by sewage and sullage?
- 6 List out type of sewer appurtenances.
- 7 Write notes on grit chamber.
- 8 What is ASP give the advantages and disadvantages.
- 9 List out the sources of air pollution.
- 10 What are the effects of air pollution on human?

Part-B

Answer All the following questions.

(5X10M = 50 Marks)

- 11 a) Differentiate confined and unconfined aquifers. (5)
b) Explain the basic functioning of the hydrological cycle. (5) 1 L2
- OR
- 12 Explain the various types of chlorination and various forms of chlorines. (10) 1 L2
 - 13 Elaborate the various methods used for supply of water to the city with neat sketch. (10) 2 L2
- OR
- 14 Discuss the merits and demerits of different layouts of water distribution network. (10) 2 L2
 - 15 Discuss the following terms: (3+3+2+2) 3 L1
 - a) Conservancy system,
 - b) Water carriage system,
 - c) Separate sewerage system
 - d) Combined sewerage system
- OR
- 16 What are the characteristics of sewage explain any two in detail. (10) 3 L1

17 Explain briefly about the primary, secondary and tertiary treatment of waste water. (10) 4 L2

OR

18 Describe the aerobic and anaerobic sludge digestion process. (10) 4 L2

19 Discuss in detail various air pollution control methods. (10) 5 L2

OR

20 Discuss in detail effects of air pollution on human, animals, plants, and materials. (10) 5 L2