

Uka Tarsadia University (Diwaliba Polytechnic)
Diploma in Environmental Engineering
Assignment ((ES – EV1001)

Unit 1 Elements of water pollution

1. Write a short note on the physical and chemical parameter of water pollution.
2. What are health effect of living organism due to water pollution?
3. Enlist types of laboratory wares and explain any 4 laboratory wares uses.
4. Give a list of the instrument used in the environmental engineering field.
5. What are the causes of environmental pollution?
6. Write a note on water pollution
7. Enlist chemical water quality parameters.
8. Define following terms:(i) Air pollution (ii) Water pollution.
9. Enlist the test conducted to determine the physical parameters.
10. Write a note on Causes of environmental pollution.

Unit 2 Familiarization of Laboratory wares and instruments

1. How to clean laboratory wares?
2. What is the full form of GLP and SOP?
3. Write a note on the importance of instrument.
4. What is calibration and how to calibrate instrument?
5. How to cleaning solution?
6. What is Normality?
7. Which are the primary standard solution?
8. Prove $PV=NRT$ formula.
9. Enlist instrument used in environmental engineering field?
10. What is calibration?
11. Enlist 5 types of laboratory wares and uses of laboratory wares.
12. Write a method of cleaning laboratory glassware in detail.
13. Explain the uses of an instrument in engineering field.

Unit 3 Preparation of Reagent water

1. Define following terms: (i)Distilled water (ii)Demineralized water.
2. Write difference between distilled water and demineralize water.
3. How to prepare distilled water?

4. Explain the method of preparing a standard solution.
5. What is eutrophication?
6. How to prepare a standard solution?

Unit 4 Testing of Physical parameters of wastewater

1. Which instrument used for the measurement of turbidity and total dissolved solids.
2. Give permissible and desirable limit of color in drinking water as per Indian Standard 10500.
3. As per Indian Standard, What is the permissible and desirable limit of total dissolved solids?
4. Explain the method of measurement of total solids in wastewater.
5. Write a note on the procedure of measurement of turbidity.

Unit 5 Testing of Chemical parameters of wastewater

1. Write a permissible and desirable limit of oil and grease in wastewater as per Indian standard norms.
2. Which instrument used for measurement of COD and Fluorides?
3. Write a procedure for determination of COD in wastewater.
4. Explain method for the determination of oil and grease in wastewater.
5. Write down procedure for the determination of alkalinity in water.

Unit 6 Testing of Biological parameters of wastewater

1. Define the following terms: (i) Dissolved oxygen (ii) Biochemical oxygen demand
2. In Most Probable Number test which reagent and instrument are used?
3. Write a process of measurement of Biochemical oxygen demand.
4. Write down method of testing coliform bacteria in water.