

SECTION A: ANSWER ALL QUESTIONS (30 MARKS)

1. Explain any three physical characteristics of wastewater (3marks).
2. What is an appurtenance and name any three types of appurtenances involved in wastewater management (3marks).
3. State THREE advantages of two pipe system (3 marks)
4. Explain the difference between industrial waste water and Residential waste water (3 marks)
5. What is the importance of water seal inside a trap (3 marks)
6. List the different types of Liquid wastes (4 marks?)
7. Explain the difference between Black/soil water and Grey water (3 marks)
8. Explain any four factors that determine the quantity and type of waste water from a source (4 marks?)
9. Differentiate Biochemical Oxygen demand from chemical oxygen demand (4 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

1. Discuss in detail the factors to be considered when designing of wastewater drainage system(20 marks)
2. Discuss the public health and environmental impacts of improper management of liquid wastes (wastewater). (20 Marks)
3. The Environment Management and Control Act as well as the Public Health Act require the County Governments (Local Authorities) to manage Liquid wastes. Explain their role and why the Law puts the obligation on them (20 marks)
4. Escherichia Coli is an indicator organism. Explain the statement and its implication in waste water treatment (10 Marks)
(b) With examples, describe any conventional waste water treatment method (10 Marks)