



**SECTION A Answer all questions.**

1. Define (a)Epidemiology, b)Agent , c)Host d)Environment. (3 marks)
2. Differentiate between Passive and Active Surveillance. (3 marks)
3. Name three patterns of disease occurrence. (3 marks)
4. Define the following; Risk, Ratio and Proportion. (3 marks)
5. One of the features of good public health surveillance is to collect only useful data, using a simple data collection method. Mention the rest. (3 marks)
6. What is mixed surveillance? (3 marks)
7. Ministry of Health (MOH 362) is one of the health registers used in health facilities to capture data on HIV/AIDS as far as counseling and testing is concerned. Give 3 other health registers and their functions. (3 marks)
8. Define sample and give two probability sampling methods. (3 marks)
9. What are the main sources of surveillance data? (3 marks)
10. Differentiate between propagated and common source. (3 marks)

**SECTION B Answer any two questions.**

1. A disease outbreak or epidemic is a public health emergency requiring appropriate and timely action. Effective control of disease outbreaks depends on adequate investigation proper planning, execution of intervention and effective follow up to prevent reoccurrences. Mention and explain the stepwise process involved in disease outbreak investigation. (20 marks)
2. Communicable diseases display characteristic patterns of occurrences. The pattern displayed depends upon disease agent, its transmission and host immunity. Discuss into details the following.  
(a) Endemic (b) Epidemic (c) Pandemic (d) Sporadic (e) Exotic. (20 marks)
3. Draw and explain a figure showing how surveillance activities are information loops that start with data collection and end with appropriate disease control measures. (20 marks)
4. Define and discuss the following;  
(a) Incidence (b) Prevalence  
(c) Incubation period (d) Disease outbreak