

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES –

KISII LEARNING CENTER

HMP 5134: COMMUNICABLE DISEASE EPIDEMIOLOGY AND CONTROL

Answer question 1 and any Other THREE Questions

1. Tuberculosis (TB) can be described as a slow disease exhibiting long and variable latency period distribution. It has a short and relatively narrow infectious period distribution owing to interventions. Explain the parameters you would consider in describing its transmission dynamics in the general population, given that individuals are at risk of infections from close contacts. [15 marks]
2. The effective reproductive number (R) and infection rate (I) are important epidemiologic concepts in understanding and designing strategies to prevent and control infectious diseases. Discuss. [15 marks]
3. Using the concept of communicable disease transmission chain, discuss the public health control intervention measures you would apply to control tapeworm infection in the population. [15 marks]
4. Explain the value of sentinel surveillance and the considerations for setting up such sites to monitor STIs in your County. [15 marks]
5. Discuss the importance of Epi-curves as a method of monitoring disease outbreaks [15 marks]
6. Explain in detail the factors that shape the HIV epidemic in Kenya. [15 marks]