



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF HEALTH SCIENCES

DEPARTMENT OF PUBLIC AND COMMUNITY HEALTH

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF PUBLIC HEALTH

HPH 306: COMMUNICABLE DISEASES

DATE: 12/8/2021

TIME: 2:00 – 4:00 PM

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## INSTRUCTIONS:

This paper consists of two sections A and B

### SECTION A

#### Specific Instructions

- This section has one question
- The question is **COMPULSORY**
- The question is 30 Marks

#### QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Identify two (2) conditions that develop due to poor personal hygiene (2 marks)
- b) *Mycobacterium bovis* can be transmitted from cattle to humans in raw milk and cause a type of tuberculosis. In this example, identify the infectious agent, the infected host and the reservoir (3 marks)
- c) In a certain rainy season, a doctor diagnosed malaria in several people who came seeking treatment. Which factor in the chain of disease transmission was targeted with each of the measures (3 marks)
- Treated each patient with the appropriate drug.
  - Mobilized the community to eradicate breeding sites of mosquitoes
  - Gave health education on the proper use of bed nets.
- d) Highlight the challenges faced by people seeking screening and treatment for STIs in Kenya (3 marks)

- e) Differentiate
- i) Isolation and Quarantine (2 marks)
  - ii) Cleaning and Sanitizing (2 marks)
- f) Explain how severity of malaria is dependent on the species of plasmodium (3 marks)
- g) Explain prevention strategies of hepatitis A, hepatitis B and hepatitis C (3 marks)
- h) Identify Kenyan systems that can be used to detect and characterize disease out breaks (3 marks)
- i) Explain how presence of HIV can increase the risk of transmission of other STIs and vice versa (3 marks)
- j) Explain the physical diagnosis for amoebic dysentery (3 marks)
- k) Identify two childhood diseases that are immunizable at six (6), ten (10) and fourteen (14) weeks (2 marks)

## SECTION B:

### Specific Instructions

- This section has four (4) questions
- Answer any two (2) questions

Each question is 20 Marks

### QUESTION TWO (20 MARKS)

- a) Despite public health efforts, HIV/AIDS is still a significant cause of morbidity and mortality worldwide. Discuss (10 marks)
- b) After visits and examination by a doctor Grace was diagnosed with cholera. Discuss the signs and symptoms she may have exhibited (10 marks)

### QUESTION THREE (20 MARKS)

- a) Explain the importance of interprofessional team strategies to aid in diagnosis, treatment and prevention of dengue fever. (10 marks)
- b) Discuss the various public health measures on place to eliminate
- i) Malaria (5 marks)
  - ii) Tuberculosis (5 marks)

### QUESTION FOUR (20 MARKS)

- a) Discuss the limitations in case identification and contact tracing influencing spread of covid-19 (10 marks)
- b) Describe the lifecycle of *Schistosoma* worms in the human body (10 marks)

### QUESTION FIVE (20 MARKS)

- a) Describe the precaution measures by health care personnel when handling infectious dead bodies (10 marks)
- b) In reference to a relevant example, explain the three levels of disease prevention. (10 marks)