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University Examinations 2024/2025

SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF CLINICAL MEDICINE AND COMMUNITY HEALTH DEVELOPMENT

HPC 3213: MEDICAL ENTOMOLOGY AND PARASITOLOGY

DATE: JANUARY 2025   TIME: 3 HOURS

INSTRUCTIONS:
Answer *question One and any other Two questions*

SECTION A: Question ONE (Short answer questions - 30 marks)

Answer all questions

1. Discuss the following concepts of medical entomology   (5 marks)

    a) Vector biology

    b) Transmission

    c) Control

    d) Public health entomology

    e) Veterinary entomology

2. List five categories of arthropods affecting man and highlight their effects on human health   (5 marks).

3. Discuss five diseases transmitted through direct mechanical transmission by arthropods

                                                                                                    (5 marks)

4. Discuss the vectors implicated in the transmission of specific neglected tropical diseases
                                                                                                    (5 marks)

5. Describe with examples the role of arthropods in human health   (5 marks).

6. Indicate the vectors involved in the transmission of the following diseases (5 marks).

   a) Malaria

   b) Dengue fever

   c) Chagas disease

   d) Yellow fever

   e) Chikungunya

SECTION B: Question 2, 3 and 4 (Long answer questions - 20 marks each)

Choose any two questions in this section

QUESTION TWO (20 MARKS)

Describe the life cycle of Plasmodium falciparum and highlight the measures that can be used to control malaria at each of the stages of development of the parasite   (20 marks)

QUESTION THREE (20 MARKS)

Explain the transmission of yellow fever virus from the forest to the city while highlighting the implicated species of mosquitoes and indicating the appropriate disease control strategies

(20 marks)

QUESTION FOUR (20 MARKS)

Discuss approaches to controlling vector-borne diseases by giving examples of implicated vectors and justifying the choice of the approaches   (20 marks).