UNIVERSITI KUALA LUMPUR
INSTITUTE OF MEDICAL SCIENCE TECHNOLOGY

FINAL EXAMINATION

MARCH 2025 SEMESTER

COURSE CODE	:	HGD20203
COURSE TITLE	:	PEST & VECTOR MANAGEMENT
PROGRAMME NAME	:	DIPLOMA IN ENVIRONMENTAL HEALTH
DATE	:	01 JULY 2025
TIME	:	2:00PM - 5:00PM
DURATION	:	3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
2. This question paper is printed on both sides of the paper.
3. This question paper consist of TWO sections.
4. Section A consist total of 60 marks. Answer ALL questions.
5. Section B consist of three questions. Answer TWO (2) questions only.
6. Please write your answer on the answer booklet provided.
7. Please answer all questions in English only.
8. Refer to the attached Formula/ Appendies. ☐ *Tick if applicable*

SECTION A (Total: 60 marks)

Answer ALL questions.

Please use the answer booklet provided.

Question 1

Explain the role of different mosquito genera (Aedes, Anopheles, and Culex) in the transmission of vector-borne diseases. Support your answer with examples of diseases and their respective pathogen types for each genera.

(20 marks)

Question 2

Answer the following questions.

(a) Determine the use and purpose of rat guards in vector control.

(6 marks)

(b) Outline the legal framework used in Malaysia for the control of disease-bearing rodents.

(6 marks)

(c) Explain why rodent control is vital in urban and port areas, citing at least four reasons.

(8 marks)

Question 3

You are part of a district health team in a tropical region experiencing a rise in vector-borne diseases such as dengue and malaria. Apply the Intergrated Vector Management decision-making process to address this situation.

(a) Describe the steps involved in assessing the disease situation, including epidemiological and vector assessment.

(8 marks)

(b) Explain how stratification can assist in determining high-risk areas for intervention.

(6 marks)

(c) Outline how you would identify, map, and tackle disease determinants in the area.

(6 marks)

SECTION B (Total: 40 marks)

Answer TWO (2) questions only.

Please use the answer booklet provided.

Question 1

Outline a community education program to reduce the transmission of parasitic vector-borne diseases. In your answer you should mention at least three different vectors and associated diseases.

(20 marks)

Question 2

You are reviewing an ongoing Intergrated Vector Management program.

(a) Discuss how timing and geographical targeting influence the effectiveness of vector control interventions.

(6 marks)

(b) Evaluate the roles of stakeholders in implementing, promoting, and monitoring vector control strategies.

(8 marks)

(c) Propose improvements to enhance accountability and coordination in IVM implementation.

(6 marks)

Question 3

You are an Environmental Health Officer who has received a complaint about a residential property suspected of harboring disease-bearing insects. Upon investigation, you find multiple containers with stagnant water, uncovered drains, and poor sanitation.

(a) Based on Section 5 and Section 6 of the Destruction of Disease Bearing Insect Act 1975, explain the procedures and powers available to you to enter and inspect the premises, and any actions you may take.

(10 marks)

(b) Determine the legal steps you may take if the owner is not present during the inspection? Refer to relevant sections of the Destruction of Disease Bearing Insect Act 1975.

(5 marks)

(c) Determine the role and duty of the occupier in assisting you during this inspection as stated in the Destruction of Disease Bearing Insect Act 1975.

(5 marks)

END OF EXAMINATION PAPER