



UNIVERSITI KUALA LUMPUR
INSTITUTE OF MEDICAL SCIENCE TECHNOLOGY

FINAL EXAMINATION
OCTOBER 2025 SEMESTER

COURSE CODE : HGB20404
COURSE TITLE : COMMUNICABLE AND NON COMMUNICABLE DISEASES
PROGRAMME NAME : BACHELOR OF ENVIRONMENTAL HEALTH (HONS)
DATE : 31 JANUARY 2026
TIME : 9:00AM - 12:00PM
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. Answer ALL questions for Section A.
5. Section B consist of four questions. Answer THREE (3) questions only.
6. Please write your answer on the answer booklet provided.
7. Please answer all questions in English only.
8. Please answer MCQ/EMQ questions using OMR sheet. *Tick if applicable*
9. Refer to the attached Formula/ Appendies. *Tick if applicable*

THERE ARE 4 PAGES OF QUESTIONS INCLUDING THIS PAGE

SECTION A (Total: 40 marks)

Answer ALL questions.

Please use the answer booklet provided.

Question 1

Describe FIVE (5) key preventive measures that individuals can take to reduce their risk of contracting cholera.

(10 marks)

Question 2

Discuss FIVE (5) significant risk factors that contribute to the transmission and spread of communicable diseases.

(10 marks)

Question 3

Discuss FIVE (5) risk factors known to contribute to the development of non-communicable disease (NCDs).

(10 marks)

Question 4

Identify FIVE (5) portals of entry and provide one example of a microorganism that uses each route.

(10 marks)

SECTION B (Total: 60 marks)

Answer THREE (3) questions only.

Please use the answer booklet provided.

Question 1

Illustrate the "chain of infection" in detail with a disease of your choice, describing each link and its significance in controlling infectious diseases.

(20 marks)

Question 2

Examine the mechanism by which vaccines provide immunity to infectious diseases by indicating the three common types of vaccine.

(20 marks)

Question 3

Demonstrate the key characteristics that make a biological agent a potential bio-weapon, using one biological agent as an example to illustrate your answer.

(20 marks)

Question 4

Dengue is an endemic disease in Malaysia.

- (a) Demonstrate the infection process of dengue fever, and implement key measures used to control its transmission.

(15 marks)

- (b) Assess briefly the challenges in the management of dengue.

(5 marks)

END OF EXAMINATION PAPER

