



UNIVERSITI KUALA LUMPUR
INSTITUTE OF MEDICAL SCIENCE TECHNOLOGY

FINAL EXAMINATION
OCTOBER 2025 SEMESTER

COURSE CODE : HGD20103
COURSE TITLE : COMMUNICABLE & NON COMMUNICABLE DISEASES
PROGRAMME NAME : DIPLOMA IN ENVIRONMENTAL HEALTH
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. Section A consist 25 MCQ or EMQ questions. Answer ALL questions.
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/ Appendices. *Tick if applicable*

THERE ARE 10 PAGES OF QUESTIONS INCLUDING THIS PAGE

SECTION A (Total: 25 marks)

Answer ALL questions.

Please use the objective answer sheet provided.

1. Which type of plague causes the highest mortality?
 - A. Systemic plague
 - B. Bionic plague
 - C. Bubonic plague
 - D. Pneumonic plague

2. The following stages are natural history of a specific disease, except:
 - A. Etiology
 - B. Subclinical disease
 - C. Exposure
 - D. Clinical signs and symptoms

3. Stroke occurs when the _____.
 - A. arteries are blocked by plague
 - B. chambers are blocked by plague
 - C. blood flow to the brain is interrupted
 - D. blood flow to the heart is interrupted

4. Communicable disease _____.
 - A. appears a long time after infection
 - B. has no cure
 - C. is transmitted from one host to another
 - D. develops rapidly and become chronic

5. Morbidity is also known as _____.
- A. a disease that has a rapid, often severe onset
 - B. the possibility of a specific disease-causing contagious the contact
 - C. the possibility of a specific disease-causing death
 - D. a disease that causes disability or restricts the activity of the patient or individual
6. Which of the following is not a reservoir for a disease?
- A. Water
 - B. Blood
 - C. Human
 - D. Monkey
7. Administration of antigenic material to stimulate an individual's immune system is known as _____.
- A. injection
 - B. vaccination
 - C. duration
 - D. administration
8. Which of the following statement is correct regarding osteoporosis?
- A. It can be treated.
 - B. Smoking increases the risk.
 - C. It causes bone mass to increase.
 - D. It is not age-related disease.

9. Which of the following personnel is considered as a first responder during a bioterrorism attack?
- A. Air traffic controller
 - B. Firefighters
 - C. Policeman
 - D. Primary care physician
10. The time between infection and the appearance of signs and symptoms is called _____ period.
- A. incubation
 - B. prodromal
 - C. invasive
 - D. decline
11. Which of the following is the risk factor of Type 2 diabetes?
- A. High sodium diet.
 - B. Pancreatic cancer.
 - C. Age more than 40 years.
 - D. High sugar diet during childhood.
12. Herpes virus can cause the following diseases, except:
- A. Urethritis
 - B. Genital herpes
 - C. Neonatal herpes
 - D. Cold sores

13. Syphilis is caused by _____
- A. *Treponema pallidum*
 - B. *Toxoplasma gondi*
 - C. *Plasmodium vivax*
 - D. *Neisseria gonorhea*
14. The _____ of a disease is its likely outcome which can vary considerably between different diseases and be influenced by treatment.
- A. complication
 - B. feedback
 - C. prognosis
 - D. chances
15. In managing the outbreak of disease in certain areas, Environmental Health Officer needs to understand the pattern of specific diseases and the way of transmission. This is related to the field of _____.
- A. epidemiology
 - B. pathophysiology
 - C. biology of disease
 - D. disease transmission
16. The infection of the _____ that protects the brain, and spinal cord can cause severe complications if it is not treated properly.
- A. blood-brain barrier
 - B. ganglia
 - C. meninges
 - D. cerebrospinal fluid

17. The substances such as chemical and radiation are examples of _____ etiology that can harm the human body.
- A. idiopathic
 - B. endogenous
 - C. exogenous
 - D. iatrogenic
18. Bacille Calmette Guierin (BCG) vaccine contains a live attenuated strain of_____.
- A. *Salmonella typhi*
 - B. *Bacillus cereus*
 - C. *Mycobacterium bovis*
 - D. *Mycobacterium tuberculosis*
19. Which of the following statement regarding heart beat terms is incorrectly matched?
- A. Tachycardia- racing heart beats
 - B. Arrhythmias- loud heart beats
 - C. Angina-slow heart beats
 - D. Bradycardia-irregular heart beats
20. The diarrhea caused by cholera looks like _____.
- A. clear water
 - B. milk tea
 - C. orange juice
 - D. cloudy rice water

21. Type 2 diabetes is also known as_____.
- A. juvenile diabetes
 - B. genetic disorder
 - C. autoimmune disorder
 - D. metabolic disorder
22. A key feature for biologic agents used as bio-weapons is_____.
- A. low morbidity
 - B. low mortality
 - C. environmental stability
 - D. no person-to-person spread
23. Which of the following bacteria is classified in Class A Bioterrorism agent?
- A. *Shigella* spp
 - B. *Bacillus anthracis*
 - C. *Salmonella typhi*
 - D. *E. coli*
24. Malaria is transmitted via _____vector.
- A. direct contact
 - B. mechanical
 - C. biological
 - D. vehicle transmission

25. Widespread infection in the body through blood and lymph system is called _____ infection.
- A. acute
 - B. chronic
 - C. primary
 - D. systemic

SECTION B (Total: 75 marks)

Answer THREE (3) questions only.

Please use the answer booklet provided.

Question 1

Choose any disease of your choice and describe it through the infectious disease process links.

(25 marks)

Question 2

Non-Communicable diseases (NCDs) are primarily preventable. They pose not only as a health challenge but impact global development as well.

(a) Give four examples of non communicable diseases.

(4 marks)

(b) What are the effects of NCDs on today's society?

(6 marks)

(c) Explain five risk factors of NCDs.

(15 marks)

Question 3

Many diseases are preventable by vaccination.

- (a) Describe three (3) types of vaccine preparations, outlining the advantages and disadvantages of each.

(15 marks)

- (c) Identify the disease associated with Tuberculosis (TB), with a specific focus on co-infection, and provide a justification.

(4 marks)

- (d) What diseases are DPT vaccine for?

(6 marks)

Question 4

Diabetes is a non-communicable disease that can affect many people.

- (a) Describe TWO (2) types of diabetes.

(15 marks)

- (b) Describe FIVE (5) complications of diabetes.

(10 marks)

END OF EXAMINATION PAPER

