



**UNIVERSITI KUALA LUMPUR**  
**ROYAL COLLEGE OF MEDICINE PERAK**

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**FINAL EXAMINATION**  
**MARCH 2026 SEMESTER**

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**COURSE CODE** : RFD14203  
**COURSE NAME** : PATHOLOGY  
**PROGRAMME NAME** : DIPLOMA IN PHYSIOTHERAPY  
**DATE** : 26 JUNE 2026  
**TIME** : 9.00 AM – 11.00 AM  
**DURATION** : 2 HOURS

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**INSTRUCTIONS TO CANDIDATES**

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1. Please read **CAREFULLY** the instructions given in the question paper.
2. This question paper has information printed on both sides of the paper.
3. This question paper consists of **TWO (2)** sections; Section A and Section B.
4. Answer **ALL** questions in Section A and **THREE (3)** questions in Section B.
5. Please mark/write your answers in the OMR answer script and answer booklet provided.
6. Answer all questions in English language **ONLY**.

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**THERE ARE 7 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.**

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## SECTION A: MULTIPLE CHOICE QUESTIONS (Total: 20 marks)

**INSTRUCTION: Answer ALL questions.**

**Please use the OMR sheet provided.**

1. 

|                                                               |
|---------------------------------------------------------------|
| The word 'pathology' is derived from the Greek word 'PATHOS'. |
|---------------------------------------------------------------|

  
Which of the following refers to the meaning of PATHOS?
  - A. Study.
  - B. Change.
  - C. Disease.
  - D. Science.
  
2. Identify the type of gangrene specifically caused by the bacteria *Clostridium perfringens*.
  - A. Dry gangrene.
  - B. Wet gangrene.
  - C. Gas gangrene.
  - D. Fibrinoid gangrene.
  
3. What is a zoonosis?
  - A. A hospital-acquired infection.
  - B. A disease only found in plants.
  - C. A disease caused by a lack of sleep.
  - D. An infectious disease is transmitted from animals to humans.
  
4. **'A mosquito carries malaria from one person to another.'**  
Identify the mode of transmission for mosquitoes.
  - A. Direct.
  - B. Vector.
  - C. Indirect.
  - D. Waterborne.

5. Select the type of chemical mediator that is responsible for vasodilatation in inflammation.
- A. Cytokines.
  - B. Histamine.
  - C. Bradykinin.
  - D. Prostaglandins.
6. **"This feeling is the first sign that someone is unwell."**  
Identify the clinical manifestation of inflammation that is related to the above statement.
- A. Malaise.
  - B. Swelling.
  - C. Anorexia.
  - D. Redness.
7. **"The dissolution and breaking up of chromophil material such as chromatin of a cell, and especially a nerve cell."**  
Select the term that refers to the above statement.
- A. Plasticity.
  - B. Chromatolysis.
  - C. Tube formation.
  - D. Wallerian degeneration.
8. Which cell undergoes mitosis to repair peripheral nerve injury?
- A. Microglia.
  - B. Astrocytes.
  - C. Satellite cell.
  - D. Schwann cell.
9. Identify the third stage of wound healing.
- A. Maturation.
  - B. Hemostasis.
  - C. Proliferation.
  - D. Inflammation.

Questions 10 and 11 refer to picture 1.0 below.

|       |           |         |
|-------|-----------|---------|
|       | $X^B$     | $Y$     |
| $X^B$ | $X^B X^B$ |         |
| $X^b$ | $X^B X^b$ | $X^b Y$ |

Picture 1.0: Punnett square for Duchenne muscular dystrophy disorder.

10. Which of the following genotypes belongs in the empty box in the Punnett square?
- $X^B Y$ .
  - $X^b Y$ .
  - $X^B X^B$ .
  - $X^b X^b$ .
11. Identify the percentage of male offspring who will have the disorder.
- 0%.
  - 25%.
  - 50%.
  - 75%.
12. Select the type of cell that is responsible for producing antibodies.
- B-cell.
  - T-cell.
  - Neutrophils.
  - Natural killer cells.
13. Which immunoglobulin (antibody) is the only one capable of crossing the placenta?
- IgA.
  - IgM.
  - IgG.
  - IgE.

14. Which of the following is an autoimmune disease?
- A. Urolithiasis.
  - B. Hypertension.
  - C. Endometriosis.
  - D. Rheumatoid arthritis.
15. Identify an arterial circulation disorder.
- A. Phlebitis.
  - B. Aneurysm.
  - C. Thrombophlebitis.
  - D. Phlebothrombosis.
16. Select the risk factor of arteriosclerosis.
- A. Obesity.
  - B. Young age.
  - C. Low blood pressure.
  - D. Family history of kidney failure.
17. Identify the synonym of essential hypertension.
- A. Primary hypertension.
  - B. Tertiary hypertension.
  - C. Secondary hypertension.
  - D. Gestational hypertension.
18. **“Uremia is a condition characterized by the buildup of Y substance in the blood.”**  
Select Y.
- A. Urea.
  - B. Glucose.
  - C. Calcium.
  - D. Phosphate.

19. Which of the following structures is involved in transmitting syphilis from the mother to the fetus?
- A. Vagina.
  - B. Placenta.
  - C. Digestive tract.
  - D. Respiratory tract.
20. Find the proteins that are lacking or lost in the eczema patient.
- A. Elastin.
  - B. Keratin.
  - C. Collagen.
  - D. Filaggrin.

**SECTION B: MODIFIED ESSAY QUESTIONS (Total: 60 marks)****INSTRUCTION: This section consists of FOUR (4) questions.****Answer THREE (3) questions in the answer booklet provided.****Question 1**

- (a) List **FIVE (5)** factors causing cell injury. (5 marks)
- (b) State **FIVE (5)** types of necrosis. (5 marks)
- (c) Explain the portal of entry in the chain of infection. (6 marks)
- (d) Describe bacteria. (4 marks)

**Question 2**

- (a) List **THREE (3)** local effects of acute inflammation. (3 marks)
- (b) List **FIVE (5)** systemic effects of inflammation. (5 marks)
- (c) Describe **TWO (2)** types of wounds. (4 marks)
- (d) Explain **FOUR (4)** systemic factors that delay wound healing. (8 marks)

## Question 3

- (a) Explain the multifactorial inheritance. (7 marks)
- (b) List **THREE (3)** types of Down syndrome. (3 marks)
- (c) Describe **TWO (2)** shapes of aneurysm. (4 marks)
- (d) Explain **THREE (3)** functions of lymph nodes in the lymphatic system. (6 marks)

## Question 4

- (a) List **FIVE (5)** risk factors of type II diabetes mellitus. (5 marks)
- (b) State **FIVE (5)** symptoms of gonorrhea in women. (5 marks)
- (c) Describe **TWO (2)** patterns of vitiligo. (4 marks)
- (d) List **THREE (3)** organs involved in the immune system. (3 marks)
- (e) Explain **THREE (3)** causes of arteriosclerosis. (3 marks)

END OF EXAMINATION PAPER