



AMREF INTERNATIONAL UNIVERSITY

SCHOOL OF MEDICAL SCIENCE

DEPARTMENT OF REHABILITATION MEDICINE

BACHELOR OF SCIENCE IN PHYSIOTHERAPY

END OF MAY-AUGUST 2026 TRIMESTER EXAMINATIONS

UNIT CODE: PHT 217 UNIT NAME: General medicine (main exam)

DATE: 5th/ AUGUST 2026

TIME: TWO HOURS

START: 6PM STOP: 8PM

INSTRUCTIONS (physical exams)

- 1. Do not write on this question paper**

(Marks and questions distribution as per program curriculum.)

INSTRUCTIONS (Online examinations)

1. This exam is marked out of 70 marks
2. This Examination comprises 3 Sections
3. This online exam shall take 2 Hours
4. Late submission of the answers will not be accepted
5. Ensure your web-camera is on at all times during the examination period
6. No movement is allowed during the examination
7. Idling of your machine for 5 min or more will lead to lock out from the exam
8. The Learning Management System (LMS) has inbuilt integrity checks to detect cheating
9. Any aspect of cheating detected during and or after the exam administration will lead to nullification of your exam

10. In case you have any questions call the invigilator for this exam on Tel. 0705833434 and or the Head of Department on Tel 0720491032
11. For adverse incidences please write an email to: amiu.examinations@amref.ac.ke

SECTION A: Multiple choice questions. 30 Marks

1. Which of the following interventions most effectively eliminates the reservoir in a hospital also receiving Ebola patients. (1 mark)
 - a. Wearing gloves
 - b. Isolation of infected
 - c. Vaccination
 - d. Antibiotic prophylaxis
2. Which of the following best distinguishes colonization from infection. (1 mark)
 - a. Colonization always causes fever
 - b. Infection involves tissue invasion and host response
 - c. Colonization always requires antibiotics
 - d. Infection occurs without microorganisms
3. A patient with pulmonary tuberculosis coughs in a crowded bus infecting several passengers. Which of the following components of chain of infection is represented by coughing. (1 mark)
 - a. Reservoir
 - b. Portal of exit
 - c. Susceptible host
 - d. Portal of entry
4. A child vaccinated against measles develops long-lasting protection because vaccination stimulates. (1 mark)
 - a. Plasma cells
 - b. Only T- helper cells
 - c. Memory and T lymphocytes
 - d. Neutrophils
5. Which of the following statements best explains herd immunity. (1 mark)
 - a. Every vaccinated individual develops antibody
 - b. Unvaccinated individuals are protected because transmission is interrupted
 - c. Vaccines eliminate all pathogens
 - d. Passive antibodies are transferred between people

6. A hospital outbreak of klebsiella occurs due to contaminated ventilator tubing. This is best described as. (1 mark)
- Vector transmission
 - Fomite-based nosocomial infection
 - Airborne spread
 - Endogenous infection
7. A patient with bronchiectasis develops massive hemoptysis. The bleeding most likely originates from: (1 mark)
- Pulmonary veins
 - Pulmonary arteries
 - Bronchial artery
 - Capillaries
8. Copious foul-smelling sputum production is a characteristic of: (1 mark)
- Asthma
 - Bronchiectasis
 - Emphysema
 - Tuberculosis
9. A 57-year-old smoker presents with a chronic productive cough lasting more than 3 months per year for 2 consecutive years. What is the most likely diagnosis. (1 mark)
- Asthma
 - Emphysema
 - Chronic bronchitis
 - Bronchiectasis
10. Why would a patient with hyperparathyroidism with an elevated serum calcium experience abrupt fracture while exercising hard on a static bicycle. (1 mark)
- Hypercalcemia
 - Bone resorption due to serum hypocalcemia
 - All of the above
 - None of the above
11. Which of the following hormones is deficient in type 1 diabetes mellitus. (1 mark)
- Glucagon
 - Cortisol
 - Insulin
 - Growth hormone
12. Which of the following laboratory findings is characteristic of primary adrenal insufficiency. (1 mark)
- High cortisol, low ACTH
 - Low cortisol, high ACTH

- c. High cortisol, high ACTH
- d. Normal cortisol, low ACTH

13. Four patients ingest the same amount of poison.

Patient	condition
1	healthy adult
2	severe liver disease
3	severe renal disease
4	liver and renal disease

Which of the following patients is most likely to experience prolonged and severe toxicity. (1 mark)

- a. 1
- b. 2
- c. 3
- d. 4

14. A patient with chronic kidney disease ingests a renally excreted toxin. Which of the following factors most directly increases toxicity. (1 mark)

- a. Reduced distribution
- b. Increased metabolism
- c. Reduced elimination causing toxin accumulation
- d. Increased protein synthesis

15. Which of the following scenarios best illustrates the principle that "the dose makes the poison"

- a. Cyanide is harmless at all doses
- b. Oxygen can become toxic at very high concentrations despite being essential for life
- c. Toxicity depends only on genetics
- d. All chemicals are toxic at the same dose

16. Which of the following poisons is classified as corrosive. (1 mark)

- a. Sulfuric acid
- b. Morphine
- c. Lead
- d. Cyanide

17. A 2-year-old child and a 70 kg adult accidentally ingests the same amount of iron tablets.

Why is the child more likely to develop severe poisoning. (1 mark)

- a. Children metabolize toxins in all situations
- b. The dose per kilogram body weight is much higher in the child
- c. Adults absorb more iron
- d. Iron is harmless in adults

18. Toxicodynamics primarily describes: (1 mark)

- a. What the body does to the poison
 - b. How poison is transported in blood
 - c. What the poison does to the body
 - d. Poison elimination
19. The most appropriate first step in managing any poisoning patient is: (1 mark)
- a. Antidote administration immediately
 - b. Vomit induction
 - c. Gastric lavage
 - d. Assess ABC's
20. A patient has ECG showing ST depression during exercise stress test. This suggests. (1 mark)
- a. Transmural infarction
 - b. Subendocardial ischemia
 - c. Pericarditis
 - d. Ventricular rupture
21. Which of the following is the antidote for opioid overdose. (1 mark)
- a. atropine
 - b. n-acetylsteine
 - c. naloxone
 - d. Flumazenil
22. Which of the following features most strongly suggests right-sided heart failure. (1 mark)
- a. Pulmonary edema
 - b. Orthopnea
 - c. Raised JVP and peripheral edema
 - d. Hemoptysis
23. Which of the following ECG waves represents atrial repolarization. (1 mark)
- a. P wave
 - b. PR interval
 - c. QRS complex
 - d. T wave
24. Which of the following heart sounds is produced when the mitral valve closes. (1 mark)
- a. Split sound
 - b. S3
 - c. Opening snap
 - d. S1
25. Which of the following findings is most suggestive of infective endocarditis. (1 mark)
- a. Xanthelasma
 - b. Splinter hemorrhages

- c. Arcus senilis
 - d. Malar flush
26. Which of the following symptoms is most characteristic of left-sided heart failure. (1 mark)
- a. Ascites
 - b. Peripheral edema
 - c. Orthopnea
 - d. Hepatomegaly
27. A patient with infective endocarditis is most likely to have. (1 mark)
- a. Janeway lesions
 - b. Butterfly rash
 - c. Tophi
 - d. Rheumatoid nodules
28. A patient has elevated serum calcium, kidney stones and bone pain. Which of the following endocrine disorders is most likely. (1 mark)
- a. Hypoparathyroidism
 - b. Hyperparathyroidism
 - c. Hypothyroidism
 - d. SIADH
29. Which of the following is the strongest risk factor for reactivation of tuberculosis. (1 mark)
- a. Hypertension
 - b. Diabetes mellitus
 - c. HIV infection
 - d. Hyperlipidemia
30. Vector-borne transmission involves. (1 mark)
- a. Direct contact only
 - b. Mechanical or biological carriers
 - c. Air droplets only
 - d. Food contamination only

SECTION B

31. State and explain factors that influence toxicity. (4 marks)
32. State 2 cholinergic toxidromes. (2 marks)
33. Which hormones are produced in the posterior pituitary gland. (2 marks)
34. What is the difference between acromegaly and gigantism. (2 marks)

35. What is the physiology behind the role of a primary care physiotherapist attending to a diabetic patient. (3 marks)
36. Which 3 disorders will develop as a result of adrenocortical hyperfunction. (3 marks)
37. A chronic smoker is undergoing subjective assessment. Which formula did the practitioner use to calculate pack years. (2 marks)
38. State 2 types of emphysema. (2 marks)

SECTION C

39. A. Outline the components of electrocardiography. (5 marks)
b. Outline the pathophysiology of pericarditis. (5 marks)
40. Outline the pathophysiology of tuberculosis. (10 marks)
41. A. Outline the components of chain of infection. (5 marks)
b. what are local and systemic immune responses of someone said to have infection (5 marks)