



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF REHABILITATION MEDICINE
BACHELOR OF SCIENCE IN PHYSIOTHERAPY**

END OF TRIMESTER EXAMINATIONS JANUARY TO APRIL 2025

UNIT CODE: PHT 217

UNIT NAME: General medicine (Special)

DATE: 10th APRIL 2025

TIME: 6pm-8pm

INSTRUCTIONS

- 1. All students will have two (2) hours to complete the examination**
- 2. This is an online exam, Attempt all questions as per the instruction**
- 3. It is the student's responsibility to report any page and number missing in this paper.**
- 4. Check that the paper is complete**
- 5. Total number of pages is 7 including the cover.**
- 6. Read through the paper quickly before you start.**
- 7. Upon finishing the exam paper, on submission, the message 'Your examination has been submitted' will appear.**

TOTAL: _____/70

PERCENT: _____/100%

POINTS EARNED TOWARDS FINAL GRADE _____/70

Section A. Multiple choice questions. Answer all the question (30 Marks)

1. Which of the following is NOT a component of metabolic syndrome?
 - A) Insulin resistance
 - B) Hypertension
 - C) Central obesity
 - D) Hyperthyroidism
2. Obstructive sleep apnea (OSA) in obesity is caused by:
 - A) Increased muscle tone in the airway
 - B) Fat deposits around the airway causing intermittent obstruction
 - C) Hyperventilation
 - D) Decreased lung compliance
3. A fasting plasma glucose (FPG) level of ____ mg/dL or higher is diagnostic for diabetes mellitus.
 - A) 100
 - B) 110
 - C) 126
 - D) 140
4. Which of the following is NOT a classical symptom of diabetes mellitus?
 - A) Polyuria
 - B) Polydipsia
 - C) Weight gain
 - D) Polyphagia
5. Which gene is commonly associated with polygenic obesity?
 - A) MC4R
 - B) BRCA1
 - C) FTO
 - D) P53

6. Which of the following is NOT a component of metabolic syndrome?
- A) Insulin resistance
 - B) Hypertension
 - C) Central obesity
 - D) Hyperthyroidism
7. Which bariatric surgery involves removing part of the stomach to limit food intake?
- A) Roux-en-Y gastric bypass
 - B) Sleeve gastrectomy
 - C) Duodenal switch
 - D) Adjustable gastric banding
8. Which drug class is the first-line treatment for peptic ulcer disease?
- A. NSAIDs
 - B. Proton pump inhibitors (PPIs)
 - C. Antibiotics alone
 - D. H2 blockers
9. Zollinger-Ellison syndrome causes ulcers due to:
- A. Gastrin-secreting tumors
 - B. H. Pylori infection
 - C. Autoimmune response
 - D. Excess mucus production
10. Cullen's sign in pancreatitis is described as:
- A. Bluish discoloration around the umbilicus
 - B. Bruising on the flanks
 - C. Yellowish skin discoloration
 - D. Red spots on the palms
11. Chronic hepatitis B is diagnosed when HBsAg persists for:
- A. 1 month
 - B. 3 months
 - C. 6 months
 - D. 1 year

12. Which of the following is an example of a fat-soluble vitamin?
- A. Vitamin C
 - B. Vitamin B12
 - C. Vitamin D
 - D. Folic acid
13. Which of the following is a serious complication of ulcerative colitis?
- A. Toxic megacolon
 - B. Esophageal varices
 - C. Gallstones
 - D. Pancreatitis
14. Which IBD is most commonly associated with primary sclerosing cholangitis?
- A. Ulcerative colitis
 - B. Crohn's disease
 - C. Peptic ulcer disease
 - D. Viral hepatitis
15. Janeway lesions are characterized as:
- A. Painful nodules
 - B. Non-tender hemorrhagic macules
 - C. Petechiae on the lower limbs
 - D. Urticarial rashes
16. What is the most common viral cause of acute pericarditis?
- A. Epstein-Barr virus
 - B. Coxsackie virus
 - C. Hepatitis C virus
 - D. Varicella-zoster virus
17. What is the hallmark symptom of acute pericarditis?
- A. Sudden sharp chest pain that worsens with lying down
 - B. Productive cough
 - C. Hemoptysis
 - D. Jaundice
18. Which of the following is a classic sign of cardiac tamponade?
- A. Beck's triad
 - B. Janeway lesions
 - C. Grey-Turner's sign

D. Cullen's sign

19. Which of the following findings is most characteristic of megaloblastic anemia?

- A. Koilonychia
- B. Peripheral neuropathy
- C. Hepatosplenomegaly
- D. Hemoglobin electrophoresis abnormalities

20. Which dietary habit can worsen GERD symptoms?

- A) Eating small frequent meals
- B) Avoiding spicy food
- C) Lying down immediately after eating
- D) Drinking plenty of water

21. What is the most common site of peptic ulcer formation?

- A) Lower esophagus
- B) Duodenum
- C) Cecum
- D) Rectum

22. A 55-year-old man with chronic GERD is diagnosed with Barrett's esophagus. What is the next step in management?

- A) Immediate esophagectomy
- B) Proton pump inhibitors and surveillance endoscopy
- C) Antibiotic therapy
- D) Chemotherapy

23. The Gram stain differentiates bacteria based on their:

- A) Shape
- B) Oxygen requirement
- C) Cell wall composition
- D) Method of reproduction

24. Which diagnostic test is most reliable for Clostridium difficile infection?

- A) Blood culture
- B) Stool ELISA for toxins A/B
- C) Skin biopsy
- D) MRI scan

25. Which heart sound is associated with the closure of the mitral and tricuspid valves?

- A) S1
 - B) S2
 - C) S3
 - D) S4
26. Which of the following laboratory findings is most indicative of Type 1 Diabetes Mellitus?
- A) Elevated C-peptide levels
 - B) Absent C-peptide levels
 - C) Hyperinsulinemia
 - D) Low fasting blood glucose
27. The gold standard for diagnosing celiac disease is:
- A. Blood test
 - B. Biopsy of the small intestine
 - C. MRI
 - D. Fecal fat test
28. Which of the following is a characteristic feature of ulcerative colitis (UC)?
- A. Skip lesions
 - B. Continuous colonic involvement
 - C. Transmural inflammation
 - D. Presence of granulomas
29. A patient presents with a right upper quadrant pain with a positive murphy sign on examination. What is the likely diagnosis
- A. Cholecystitis
 - B. Appendicitis
 - C. Urinary tract infection
 - D. Pancreatitis
30. Esophageal cancer
- A. Its a malignant tumor with poor prognosis
 - B. Squamous cell carcinoma is the most common type of Esophageal cancer
 - C. The most common cause of Adenocarcinoma is alcohol and smoking
 - D. Endoscopy and biopsy is used to confirm the diagnosis.

Section B. Short Structured questions. Answer all the questions (20 Marks)

1. Why do males have a higher risk of hemophilia than females? (2 marks)
2. What is Levine's sign, and why is it significant? (2 marks)

3. Mention the first-line treatment for mild GERD and give examples? (3 marks)
4. Explain what Jod basedon phenomenon is and give its significance (4 marks)
5. What is the most effective treatment for recurrent C. Difficile infection? (2 marks)
6. Discuss the difference between ulcerative colitis and crohns disease (3 marks)
7. Complications of diabetes mellites (4 marks)

Section C. Long Essay Question. Answer all the questions (20marks)

1. A 14-year-old boy presents with increased thirst, frequent urination, weight loss, and fatigue for three weeks. His teacher noticed that he drinks water excessively and uses the restroom frequently. He has no past medical history.

Examination:

Weight: 45 kg (previously 50 kg), Blood Pressure: 110/70 mmHg, Fasting Blood Glucose: 15.5 mmol/L, Urinalysis: Glucose and ketones positive

- A)What is the most likely diagnosis? justify!
- B)What pathophysiology explains the polyuria and polydipsia?
- C)What tests would confirm the diagnosis?

2. A 55-year-old male, chronic smoker and occasional alcohol consumer, presents to the emergency department with severe epigastric pain radiating to the back. He reports a history of intermittent epigastric pain for the past six months, which improves with meals but worsens at night. Over the past two days, the pain has intensified, and he develop daches. On examination, he appears pale, has a blood pressure of 100/60 mmHg, pulse rate of 110 bpm, and mild epigastric tenderness.

- A) Most probable diagnosis
- B) Complications that may arise