



**AMREF INTERNATIONAL UNIVERSITY  
SCHOOL OF MEDICAL SCIENCE  
DEPARTMENT OF REHABILITATION MEDICINE  
BACHELOR OF SCIENCE IN PHYSIOTHERAPY  
END OF SEPT-DECEMBER 2024 TRIMESTER EXAMINATIONS**

**UNIT CODE: PHT 217                      UNIT NAME: General Medicine (Main exam)**  
**DATE:                      Monday/ 9th/ December**  
**TIME:                      TWO HOURS**  
**START:                      2pm                                      STOP : 4pm**

**INSTRUCTIONS (physical exams)**

**Do not write on this question paper**

(Marks and questions distribution as per program curriculum.)

1. This exam is marked out of 70 marks
2. This Examination comprises 3 Sections
3. This exam shall take 2 Hours

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

1. Addison's disease is characterized by the following except
  - a. Increased level of ACTH, decreased level of aldosterone, cortisol, androgens.

- b. Infections are the most common cause worldwide
  - c. Pituitary suppression is one of the causes
  - d. Leads to loss of renal function
2. Symptoms of food poisoning typically involve?
- a. Fever cough body aches
  - b. Headaches nausea, memory loss,
  - c. Nausea, vomiting, diarrhea, and abdominal pain.
  - d. Skin rash and itching.
3. What disease causes malabsorption syndrome with a normal D-Xylose test
- a. Celiac disease
  - b. Chronic pancreatitis
  - c. Blind loop syndrome
  - d. Cirrhosis
4. What is the most effective treatment of severe GERD?
- a. Proton pump inhibitors
  - b. H2 blocker
  - c. Anticholinergic drug
  - d. Aspirin
5. All of the following are causes of upper gastrointestinal bleeding EXCEPT
- a. Chronic duodenal ulcer
  - b. Esophageal varices
  - c. Acute hemorrhagic pancreatitis
  - d. Gastric erosions
6. Ulcerative colitis
- a. Can affect any part of the ileum
  - b. Causes transmural ulcers
  - c. Always involves the rectum
  - d. All of the above

7. What is the primary causative agent of Rheumatic fever
  - a. Staphylococcus aureus
  - b. Escherichia Coli
  - c. Streptococcus Pneumonia
  - d. Streptococcus pyogenes
  
8. Rheumatic fever is most commonly seen in which age group?
  - a. Newborns
  - b. School age 5=15 years
  - c. Adolescents 16=20
  - d. Adults
  
9. A patient with pericarditis develops hypotension, jugular venous distention, and muffled heart sounds. What is the most likely diagnosis?
  - a. Pulmonary embolism
  - b. Acute myocardial infarction
  - c. Cardiac tamponade
  - d. Aortic dissection
  
10. Which of the following is a common complication of acute pericarditis
  - a. Pericardial effusion
  - b. Atrial fibrillation
  - c. Myocardial infarction
  - d. Pulmonary embolism
  
11. The following statements are true except
  - a. Colonic cancer is a complication of peptic ulcer disease
  - b. Acute peritonitis is the most common complication of perforated peptic ulcer
  - c. Food intake is not a relieving factor of gastritis
  - d. Endoscopy is the best initial diagnostic test in a patient suspected with PUD
  
12. Which of the following is a classic presentation of diabetic neuropathy?
  - a. Severe headaches
  - b. Numbness, tingling, and pain in the extremities
  - c. Vision changes
  - d. Polyuria and polydipsia
  
13. Which of the following is a complication of poorly controlled diabetes mellitus?
  - a. Hypertension
  - b. Retinopathy
  - c. Hyperthyroidism
  - d. Osteoporosis

13. Which of the following is a diagnostic feature of thalassemia on hemoglobin electrophoresis?
- Decreased hemoglobin A<sub>2</sub>
  - Presence of hemoglobin S
  - Presence of hemoglobin F
  - Increased reticulocyte count
14. One of the following is a characteristic of vitamin B<sub>12</sub> deficiency
- A potential complication of untreated vit B<sub>12</sub> deficiency is megaloblastic anemia
  - Excessive alcohol consumption is a common cause
  - Microcytic anemia is usually observed
  - Jaundice is a common symptom observed.
15. Which of the following hepatitis viruses can be prevented with a vaccine?
- Hepatitis A and B
  - Hepatitis C and E
  - Hepatitis B and D
  - Hepatitis A, B, and C
16. The most common bacterial cause of infective endocarditis is
- Group B strep
  - Staph aureus
  - E. Coli
  - Hemophilus influenza.
17. Which of the following hepatitis viruses does NOT have a chronic phase of infection?
- Hepatitis A
  - Hepatitis B
  - Hepatitis C
  - Hepatitis D
18. Which of the following is not associated with coronary artery disease
- Chest pain
  - Shortness of breath
  - Sudden weight loss
  - Fatigue

19. The term Ortner's syndrome in mitral stenosis refers to:
- Severe chest pain
  - Difficulty breathing at rest
  - Hoarseness due to recurrent laryngeal nerve compression
  - Swelling in the abdomen
20. What is the function of CD4 cells in the immune system.
- To produce antibodies
  - To regulate blood pressure
  - To trigger immune response
  - To absorb nutrients
21. Dukes criteria
- Used in the diagnosis of a infective endocarditis
  - Used in the diagnosis of rheumatic heart disease
  - Presence of Roth spots makes part of major criteria
  - Predisposing cardiac lesion is a minor criteria
22. Which of the following is a risk factor unique to women for developing coronary artery disease
- Smoking
  - Hypertension
  - Early menopause
  - Family history of heart disease
23. Which of the following is a potential complication of chronic hepatitis B infection?
- Fulminant liver failure
  - Hepatocellular carcinoma (liver cancer)
  - Cirrhosis
  - All of the above

24. The most common type of gall stone is

- a. Cholesterol stones
- b. Pigment stones
- c. Mixed stones
- d. Calcium carbonate stones

25. Rheumatic fever (RF) is an autoimmune inflammatory disease that can follow an untreated or inadequately treated group A streptococcal (GAS) throat infection. RF primarily affects children and young adults, and it can lead to severe complications, including rheumatic heart disease (RHD). The diagnosis of RF is made using the Jones Criteria, which includes both major and minor criteria. Understanding the pathophysiology, clinical presentation, diagnostic criteria, complications, and management strategies is critical for clinicians to prevent long-term complications.

Which of the following statements regarding rheumatic fever is/are correct?

- a) The most common valve involved in rheumatic heart disease is the aortic valve.
  - b) The primary pathogenic mechanism of rheumatic fever is the direct cytotoxic effect of the group A streptococcal bacteria.
  - c) The Jones Criteria includes carditis, polyarthritits, chorea, erythema marginatum, and subcutaneous nodules as major criteria.
  - d) Rheumatic fever can develop after a pharyngeal infection with group A Streptococcus, and it is not commonly seen following skin infections with GAS.
  - e) Secondary prevention of rheumatic fever involves the use of long-term antibiotic prophylaxis to prevent further episodes in individuals with a history of RF or RHD.
  - f) The ASO (antistreptolysin O) titer is useful in confirming a recent group A Streptococcus infection but is not diagnostic for rheumatic fever.
  - g) Cardiac involvement in rheumatic fever can include pericarditis, myocarditis, and valvulitis, but coronary artery involvement is not typical
- a. All of the statements above are correct.
  - b. Only statements a, c, and e are correct.
  - c. Only statements b, d, and f are correct.
  - d. Only statements c, d, and g are correct.
  - e. Only statements a, f, and g are correct.

27. A child with bloated abdomen, thin limbs and patchy skin discoloration is likely suffering from ?

- a. Scurvy
- b. Marasmus
- c. Kwashiorkor
- d. Rickets

28. The primary goal of Antiretroviral therapy is ....
- a. To cure HIV
  - b. To kill all HIV cells
  - c. To prevent HIV from entering the body
  - d. To reduce the viral load and prevent disease progression
29. What are the components of mental exam
- a. Appearance
  - b. Thought process
  - c. Cognition and behavior
  - d. All of the above
30. Treatment of obesity and metabolic syndrome involves the following
- a. Sleeve gastrectomy
  - b. Lifestyle modifications
  - c. Gastric banding
  - d. All of the above

**Section B. Short structured question. Answer all the question. (20 Marks)**

31. List 3 common symptoms of heart failure (3marks)
32. What is the difference between systolic and diastolic heart failure? (4marks)
33. What is the primary cause of rheumatic fever? (1 mark)
34. Mention 3 local complications of acute pancreatitis (3 marks)
35. Diagnostic test of choice in cholecystitis? (1mark)
36. Define cholelithiasis and mention 4 risk factors (5 marks)
37. What is the difference between diabetic ketoacidosis and hyperosmolar hyperglycemic state (3marks)

**Section C. Long structured answers. Answer all the questions (20 Marks)**

38. A client presents to you with a history of shortness of breath, cough, fever, pleuritic chest pain, night sweats. On examination SPO<sub>2</sub> was 89%, WBC counts elevated (10 Marks).
  - a. What are the 2 main differential diagnosis?
  - b. What other information would you ask during history taking to help come up with a diagnosis
39. A client/ patient presents to you with complaints of an explained weight loss, insomnia, diarrhea, anxiety, tremors. On examination he has fever, tachycardia, increased blood pressure. Exophthalmosis, pretibial myxedema and a goiter (10 Marks).
  - a. What is your probable diagnosis
  - b. What's the most probable cause of your clients symptoms, justify!
  - c. How would you confirm your diagnosis
  - d. Mention 2 complications that can arise from having this disease