



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

SECOND YEAR SECOND TRIMESTER EXAMINATION

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN CLINICAL MEDICINE**

COURSE CODE: HCM 225

COURSE TITLE: CLINICAL PATHOLOGY 1

DATE: 14th April 2023

TIME: 8:00- 10:00

INSTRUCTIONS TO CANDIDATES

1. READ THE INSTRUCTIONS AT THE BEGIN OF EACH SECTION
2. DO NOT WRITE ON THE QUESTION PAPER.
3. NUMBER ALL QUESTIONS CORRECTLY.
4. THIS PAPER CONSIST OF:

Section A: Multiple Choice Questions (MCQ)	20 Marks.
Section B: Short Answer Questions (SAQ)	40 Marks.
Section C: Long Answer Question (LAQ)	40 Marks
5. NO MOBILE PHONE IS ALLOWED IN THE EXAMINATION ROOM

DURATION: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of SIX Printed Pages. Please Turn Over.

SECTION A (MCQS 20MKS). CHOOSE THE BEST SINGLE ANSWER

1. A middle-aged female comes to the doctor with complaints of a sudden painful, pulsating mass in the midline of her abdomen...upon further assessment, the presence of bruit is confirmed. Which of the following conditions is consistent with the findings?

- A. Aneurysm "Circle of Willis"
- B. Abdominal aorta aneurysm
- C. Abdominal aorta thrombus
- D. None of the above

2. Which of the following disorders would cause signs of intracranial pressure, such as decreased levels of consciousness, bradycardia, widened pulse pressure, small, sluggish pupils?

- A. Aneurysm- Circle of Willis
- B. Aneurysm-femoral popliteal artery
- C. Thrombus in Cerebral artery
- D. None of the above

3. Aneurysms with symptoms of ischemia are probably located in which of the following areas?

- A. Abdominal Aorta
- B. Thoracic Aorta
- C. Femoral and Popliteal Artery
- D. None of them

4. Which of the following diagnostic tools are used to confirm the presence of thrombi?

- A. Doppler ultrasonography
- B. MRI
- C. Angiography
- D. CT

5. A 23-year-old male comes to the doctor complaining of the tenderness of in his arm Upon assessment the nurse observes skin ulcerations, redness, thick and shiny skin, and thickened and malformed nails. Which of the following conditions is consistent with her findings?

- A. Thromboangilitis (Buerger Disease)
- B. Raynaud's phenomenon
- C. Raynaud's disease
- D. None of the above

6. Which of the following is a more common peripheral vascular disease usually associated with scleroderma or another connective tissue disease? Numbness, tingling of digits relieved by warmth, associated with white, blue, and red colors. Thickened fingertips and nails.

- A. Thromboangilitis (Buerger's Disease)
- B. Raynaud's phenomenon
- C. Raynaud's disease
- D. None of the above

7. Which of the following are used as a treatment for thrombi?

- A. Heparin
- B. Beta blockers
- C. Warfain
- D. Thrombolytics

8. Which of the following terms refers to soft deposits of intra-arterial fat and fibrin in the vessel walls that hardens over time?

- A. Arteriosclerosis
- B. Atherosclerosis
- C. Atherosclerotic disease

- D. Arteriosclero Byfunction
9. The trachea and bronchi are held open by
- A. Epiglottis
 - B. Glottis
 - C. Cartilage
 - D. None of the above
10. Which structure connects to the alveoli
- A. Trachea
 - B. Bronchioles
 - C. Bronchus
 - D. None of the above
11. The formal name of the air sacs is the
- A. Alveoli
 - B. Capillaries
 - C. Corpuscles
 - D. None of the above
12. Which structure is part of the upper respiratory airway
- A. Alveoli
 - B. Bronchioles
 - C. Pharynx
 - D. None of the above
13. Allergic rhinitis is associated with the _____ immunoglobulin
- A. IgG
 - B. IgE
 - C. IgM
 - D. IgA
14. Sinusitis would not affect this area of the face
- A. Maxillary
 - B. Ethmoid
 - C. Lacrimal
 - D. None of the above
15. Which condition below is a medical emergency
- A. Epiglottitis
 - B. Laryngitis
 - C. Pharyngitis
 - D. None of the above
16. Mononucleosis, the kissing disease, is caused by which virus
- A. Influenza
 - B. Epstein barr
 - C. Hpv
 - D. None of the above
17. Pneumonia is a common complication of
- A. Tuberculosis
 - B. Influenza
 - C. Corynza
 - D. None of the above
18. Which condition below would most likely cause Legionnaire's disease
- A. Contaminated steamy water

- B. Gastric aspiration
 - C. Below zero conditions
 - D. None of the above
19. Which of the following is true?
- A. Bilirubin is a sensitive and specific indicator for intrinsic liver disease
 - B. Albumin is sensitive for detecting acute hepatic decompensation
 - C. INR is a better indicator of synthetic function than albumin
 - D. CTP system can be used in patients with steatosis
20. Which of the following is true?
- A. All CTP A patients can tolerate major hepatectomy
 - B. Thrombocytopenia is used as surrogate marker of Portal hypertension in CTP A class patients
 - C. MELD score of 11 predicts good outcome after hepatectomy
 - D. MELD is reliable in noncirrhotic patients

SECTION B (SHORT STRUCTURED 40MKS)

1. List five pathological clinical findings of a typical community acquired pneumonia(5mks)
2. What is the pathogenesis of extrinsic asthma(5mks)
3. State the pulmonary function tests and arterial blood gasses findings of the chronic bronchitis (5mks)
4. Briefly discuss the differences between chrohn's disease and ulcerative colitis (5mks)
5. List five causes of the liver cirrhosis (5mks)
6. Briefly discuss the pathological differences between acute and chronic pancreatitis (5mks)
7. List five causes of true aneurysm(5mks)
8. What are the laboratory findings of myocardial infarction(5mks)

SECTION C (LONG STRUCTURED 40MKS)

1. Discuss the summary of ten (10) respiratory microbial pathogen, associating them with disease they cause and their specific treatments (20mks)
2. Discuss role of the following in the pathogenesis of the atherosclerosis.
 - A. Role of lipids (7mks)
 - B. Role of monocyte, macrophages and platelets (7mks)
 - C. Role of smooth muscles (6mks)