



(University of Choice)

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

SCHOOL OF NURSING MIDWIFERY AND PARAMEDICAL SCIENCES

MAIN CAMPUS

END OF TRIMESTER EXAMS

2023/2024 ACADEMIC YEAR

**FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING
(TRAUMA AND EMERGENCY)**

COURSE CODE: NCT 8212

COURSE TITLE: CHEST TRAUMA

DATE: 13 / 12 / 2023

TIME: 11.30 A.M- 2.30 PM

INSTRUCTIONS TO CANDIDATES

**ALL QUESTIONS IN THE THREE SECTIONS (A, B AND C) ARE COMPULSORY
DURATION: 3 HOURS**

MMUST OBSERVES ZERO TOLERANCE TO EXAMINATION CHEATING

Chest Trauma

Instructions: Answer all questions (60 marks)

1. An adult male patient is brought to the emergency department by paramedics having been involved in a 2-car motor vehicle crash with head on collision. At the scene patient was found at the driver's seat unrestrained with noted steering wheel deformity. The patient is alert and oriented but appears restless and agitated. There is a marked abrasion to left anterior chest.
 - a. Explain the pathophysiology in the development of this injury (7 marks)
 - b. Describe the interventions undertaken in stabilizing the patient (8 marks)
 - c. State the possible complications of this injury to the patient (5 marks)

2. Mr K is rushed to emergency department having been stabbed in the chest by an assailant. Patient is holding his chest in distress, a slight amount of bright red blood in the lateral mid chest. He states that his chest feels like there is a burning sensation and is in respiratory distress. No penetrating objects remain.
 - a. Explain the chest injury the patient has based on this presentation and mechanism of injury (5 marks)
 - b. Outline the classic clinical findings of this injury on primary assessment (5 marks)
 - c. Describe the immediate life saving treatment of this patient (10 marks)

3. A patient is brought to the emergency department following a gunshot injury to the chest. On examination, an open chest wound is visualized.
 - a. Describe the pathophysiology of open pneumothorax (6 marks)
 - b. State the assessment findings in a patient with open pneumothorax (4 marks)
 - c. Describe the emergency interventions for this patient (10 marks)

4. A police officer is involved in a terrorist event and exposed to a projectile in an explosive. He is brought to the emergency department by paramedics. The patient is diagnosed with pericardial tamponade.

- a. State the specific assessment findings in the patient that support this diagnosis (6 marks)
 - b. Describe the pathogenesis of pericardial tamponade (8 marks)
 - c. Explain the immediate interventions for this patient (6 marks)
5. Pleural or chest drainage is an essential aspect of the management of the post-thoracotomy patient or the critically ill patient in the intensive care unit or accident and emergency department. Discuss the pleural drainage systems and their working principles in management of chest injuries (20 marks)

END