



*(University of Choice)*

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

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2021/2022 ACADEMIC YEAR  
FOURTH YEAR FIRST TRIMESTER EXAMINATIONS  
FOR THE DEGREE OF BACHELOR OF SCIENCE IN  
NURSING**

**COURSE CODE: NCD 235**

**COURSE TITLE: EMERGENCY AND TRAUMA NURSING**

**DATE: 21/04/2022**

**TIME: 8:00AM-11:00AM**

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**INSTRUCTIONS TO CANDIDATES**

Answer all questions in this examination paper in the answer booklet provided.

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

Emergency and Trauma Nursing

## SECTION A: MULTIPLE CHOICE QUESTIONS (MCQs) 20 Marks

Answer ALL questions in this section

1. The type of blood group which can be given in any form of emergency for women is:
  - a) O Positive
  - b) O Negative
  - c) A Positive
  - d) AB
  
2. A young male adult patient is brought to the accident and Emergency department with a complete closed fracture tibia fibula. The patient is extremely uncooperative and has been ambulating on the fractured leg after the receiving nurse applied a splint and administered pain medication. An acute complication of fractures that the Nurse must anticipate in this patient is \_\_\_\_\_
  - a) Malunion
  - b) Hemorrhage
  - c) The fracture worsening to become an open fracture
  - d) Fat Embolism
  
3. A patient is brought to the accident and emergency unit after being bitten by a snake. On arrival the patient is unable to articulate speech, is drooling and has ptosis. The emergency nurse notes two puncture marks at the site of the bite. From the patient presentation the nurse prepares for emergency \_\_\_\_\_ to \_\_\_\_\_ as the venom from the bite appears to be predominantly \_\_\_\_\_
  - a) Hemodialysis, clear venom from circulation, cytotoxic
  - b) Administration of antivenin, counter effects of venom, spread all over the body
  - c) Fluid resuscitation and transfusion of fresh blood, support circulatory and hematologic function, hematotoxic
  - d) Intubation and ventilation, support respiratory function, neurotoxic
  
4. The most appropriate action to be taken by a triage nurse who encounters a client with complains of midsternal chest pain, dizziness and diaphoresis is:
  - a) Complete history taking
  - b) Put the client an ECG monitoring
  - c) Notify the physician
  - d) Administer oxygen via non-re -breather mask

5. The most important measure to be undertaken by a nurse who encounters a victim of gas bomb that was set in the house being brought to emergency department will be:
  - a) Direct the client to the decontamination area
  - b) Direct the client to the cold or clean zone for immediate treatment
  - c) Measure vital signs and auscultate lung sounds
  - d) Immediately remove other clients and visitors from the area
6. The type of injury that will receive the first priority in mass accident is:
  - a) Abdominal evisceration
  - b) Open fracture of the right fore arm
  - c) Sprained ankle
  - d) Sucking chest wound
7. The type of breath sounds you will hear on auscultation for a patient with pneumothorax will be:
  - a) Low breath sounds
  - b) Diminished or absent breath sounds
  - c) Paradoxical breath sounds
  - d) Adventitious breath sounds
8. The initial treatment to be given to a child who has been brought to emergency department with ingestion of half bottle of acetylsalicylic acid (aspirin) is:
  - a) The administration of syrup ipecac
  - b) Administration of sodium bicarbonate
  - c) Administration of vitamin K
  - d) dialysis
9. The principle of nursing ethics behind obtaining a consent from a patient before theatre is:
  - a) Veracity
  - b) Non maleficence
  - c) Confidentiality
  - d) Respect of autonomy
10. The correct ration for performing CPR for two rescuers is:
  - a) 15:2
  - b) 30:2
  - c) 15:5
  - d) 5:2

11. Which measure can be taken for a patient with deep laceration on the lower leg which has failed to stop bleeding?
- a) Place a tourniquet proximal to the laceration
  - b) Elevate the leg above the level of the heart
  - c) Lower the laceration and apply cold compress
  - d) Apply pressure to the femoral artery
12. Which measure can be used to assess organ perfusion?
- a) Urinary output
  - b) Skin color and temperature
  - c) Respiratory rate
  - d) Pulse rate and character
13. In defibrillation, the pads are placed:
- a) Below the right clavicle at the sternal border
  - b) Below left clavicle at the sternal edge
  - c) Over the cardiac apex, in middle axillary line
  - d) A and C only
14. The most effective intervention in decreasing absorption of an ingested poison is:
- a) Hemodialysis
  - b) Milk dilution
  - c) Gastric lavage
  - d) Activated charcoal
15. The following are indications for emergency endotracheal intubation (crash airway) of patients in the accident and emergency unit.
- a) Patients with severe asthma
  - b) Unconscious apneic patients with no gag reflex
  - c) Total upper Airway obstruction
  - d) Total loss of facial and oropharyngeal landmarks
16. According to "the rule of nines," a man burned extensively on the entire face and frontal aspect of his head, chest and both upper limbs has burns on \_\_\_\_\_ percent of his body.
- a) 31.5%
  - b) 40.5%
  - c) 35%
  - d) 22%

17. The definitive signs of base of skull fracture include:
- a) Rhinorrhoea, depression on patient's skull, and labile blood pressures
  - b) Labile heart rate, blood pressure and leaking CSF from ear and nose
  - c) Mastoid bruising, raccoon eyes, Leaking CSF from ear and nose
  - d) Unstable fracture of the maxilla, leaking CSF from ear nose and Throat, Mastoid bruising.
18. A nursing diagnostic statement INAPPROPRIATE for a patient with severe traumatic brain injury who has just been brought into the Emergency Department is:
- a) Ineffective cerebral tissue perfusion
  - b) Ineffective airway maintenance
  - c) High risk for aspiration
  - d) Altered thought process
19. When assessing pedal pulses in a patient who has sustained fracture of hip, the characteristic of most importance is:
- a) Contractility and rate
  - b) Color of skin and rhythm
  - c) Amplitude and symmetry
  - d) Local temperature and visible pulsations
20. Regarding Triage during a mass casualty incident ,the only interventions carried out during the initial Simple Triage And Rapid Treatment are:
- a) Open airway and stabilize cervical spine
  - b) Open Airway and stop excessive bleeding
  - c) Asking the walking wounded to move to a designated area
  - d) Tagging patients as per their respective category and opening the airway

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SECTION B: SHORT ANSWER QUESTIONS (SAQs) (40marks)

Answer ALL questions in this section

1. Outline the roles of a trauma program manager in the accident and emergency unit. (8 Marks).
2. Describe the adult chain of survival objectives used to improve outcomes when performing cardiopulmonary resuscitation to a patient (8 marks)
3. Describe the pathophysiology of shock (8 marks)
4. A Nurse is giving a patient an intravenous crystalline Penicillin stat dose. The patient suddenly starts having an anaphylactic reaction. Describe the emergency management of this patient (8 Marks).
5. List four (4) emergency drugs used in accident and emergency units and indicate the mode of actions for each (8 Marks).

SECTION C: LONG ANSWER QUESTIONS (LAQs) (40 marks)

Answer ALL questions in this section

1. Mr. K is brought to emergency department unconscious, blood glucose of 600mg/dl, dry mucous membrane, and loss of skin turgor. A diagnosis of Diabetic Ketoacidosis (DKA) is made.
  - a) Define diabetic ketoacidosis (DKA). (1 Mark)
  - b) Explain the pathophysiology of diabetes ketoacidosis. (6 Marks)
  - c) State three (3) specific causes of DKA. (3 Marks)
  - d) Describe the management of the patient with DKA in emergency department. (10 Marks)
2. Mrs J was involved in a road and traffic accident that involved a matatu being hit by a truck which lost direction. She sustained back injury and was brought to emergency department unconscious.
  - a) Describe mechanism of injury for spinal injury. (5 Marks)
  - b) State three (3) assessment findings the patient will present with. (3 Marks)
  - c) Describe the emergency management of the patient with spinal injury. (12 Marks)