



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

MAIN CAMPUS
SCHOOL OF NURSING MIDWIFERY AND PARAMEDICAL SCIENCES

UNIVERSITY EXAMINATIONS
SECOND SEMESTER 2023/2024 ACADEMIC YEAR

FOR THE DEGREE OF BACHELOR OF PARAMEDIC SCIENCE

COURSE CODE: NPP 226
COURSE TITLE: ADVANCE TRAUMA BURNS

DATE: 8TH APRIL 2024

TIME: 3PM – 6PM

INSTRUCTIONS TO CANDIDATES

All questions in the three sections (A, B and C) are compulsory.

DURATION: 3 Hours

Answer all questions in the booklet provided.

MMUST observes ZERO tolerance for examination cheating.

SECTION A - MULTIPLE CHOICE QUESTIONS

(20 Marks)

Instructions: Choose the most appropriate answer

1. In children, all burns whose BSA is above 10% should be admitted because:
 - A. Are likely to die
 - B. May need intravenous fluids
 - C. May need analgesics
 - D. Are likely to get infected
2. What is the Total Burnt Surface Area (TBSA) of an adult patient with a thermal burn on the skin that has affected the entire upper trunk both front and back:
 - A. 18%
 - B. 14%
 - C. 36%
 - D. 48%
3. When using the Wallace rule of nines to assess the Total Burnt Surface Area(TBSA) in children the head and neck represent:
 - A. 14%
 - B. 28%
 - C. 18%
 - D. 7%
4. Late complications of burns include the following EXCEPT:
 - A. Keloids
 - B. Hypertrophic scar
 - C. Hypothermia
 - D. Marjolins ulcer
5. What distinguishes a third-degree burn from other burns?
 - A. Blanchs with pressure
 - B. Results in red, blistered skin
 - C. Appearance is white or black/brown.
 - D. Presence of weeping fluid
6. How can a fourth-degree burn be identified?
 - A. Red, blistered skin with pain
 - B. Yellow, charred skin that blanches
 - C. Leathery, inelastic appearance
 - D. Partial involvement of muscle and fat only
7. Which is the most accurate measurement in calculating the total burnt surface area of a victim:

- A. Wallace Rule of nines
 - B. Rule of palms
 - C. Lund and Browder chart
 - D. Any of the above
8. Which of the following is NOT an objective measure:
- A. Pain Intensity Assessment
 - B. Burn Outcome Measures
 - C. Inhalation Assessment
 - D. History of the client
9. Long-term goals of burn assessment and management aims at:
- A. Preventing respiratory complications
 - B. Maintaining Joint Range of Motion
 - C. Maintaining Strength
 - D. Functional Independence
10. Which of the following location in burns is regarded as a high-impact area that may require specialized treatment
- A. Hands
 - B. Face
 - C. Perineum
 - D. All the above
11. A 6-year-old baby accidentally trips and falls on hot water and sustains a burn on the left arm. Which pain intensity tool will be most appropriate to use to assess the level of pain:
- A. Visual Analogue Scale
 - B. Wong-baker Scale
 - C. FLACC (Face, Legs, Activity, Cry, Consolability) scale
 - D. Any of the above
12. The following is true of superficial 1st degree burns EXCEPT:
- A. Blister formation
 - B. Involves superficial epidermis only
 - C. Blanching erythema present
 - D. Analgesia is all that is required
13. In superficial partial skin thickness burns the following is true EXCEPT:
- A. Blanching erythema present
 - B. Involves the depth of deep dermis
 - C. Blistering and pain present
 - D. Healing takes approx. 3 weeks with appropriate treatment

14. Deep dermal burns mean:
- A. Damage to sweat glands and hair follicles
 - B. No blistering
 - C. No skin grafting is required
 - D. Hypertrophic scar never occurs
15. Full skin thickness burns mean the following EXCEPT:
- A. blanching erythema present
 - B. brown leathery appearance
 - C. healing is by secondary intention
 - D. skin grafting is required
16. In first aid of burns, the following should be avoided:
- A. Pouring cold water on the affected site
 - B. Tight circumferential cover
 - C. Removal from smoke
 - D. Removal of clothes
17. Inhalation of smoke in facial burns causes the following EXCEPT:
- A. Injury to the subglottic airway
 - B. Systemic toxicity of carbon monoxide
 - C. Toxicity of hydrogen cyanide
 - D. hypostatic pneumonia
18. The following are reasons for admitting facial burns, EXCEPT:
- A. Supraglottic burns can swell and cause airway obstruction
 - B. Eyelid burns can lead to entropion
 - C. Facial burns can cause corneal ulceration
 - D. Facial burns can lead to blindness as a late complication
19. The reason why you admit adults with BSA (Burnt Surface Area) of 10% is:
- A. May need I.V. fluids
 - B. Are likely to die
 - C. May develop hypothermia
 - D. May develop contractures
20. Prevention of contractures in burns includes the following EXCEPT:
- A. Skin grafting
 - B. Physiotherapy
 - C. Intravenous fluids
 - D. Splintage

SECTION B: SHORT ANSWER QUESTIONS**(40 Marks)****Instructions: Answer all Questions**

1. Outline the distinguishing features between: (8 Marks)
 - a. First-degree and second-degree thermal burns
 - b. Second-degree superficial burns and second-degree deep partial-thickness burns
2. Explain the three types of airway injuries (6 Marks)
3. When using Wallace's rule of nines, outline the distinguishing features between pediatric and adult assessment (6 Marks)
4. Outline the management of a patient with chemical burns on the eyes (5 Marks)
5. State the techniques used for airway management and ventilation support of the burn patient (5 Marks)
6. A 9-year-old child of approximately 32kgs and 110 cm of height sustained burns on the posterior aspect of the head and the entire legs
 - a. Using the Wallace rule of nine calculate the total burnt surface area (5 Marks)
 - b. Calculate the fluid resuscitation that should be given (5 Marks)

SECTION C: LONG ANSWER QUESTIONS**(40 Marks)****Instructions: Answer all questions**

You are deployed to work as a paramedic assistant in an ambulance serving the Lurambi sub-county. You have been called to respond to a fire outbreak in the area. On arrival, you find an adult male coughing, with a soot-stained sputum, singed nasal and facial hair with a circumferential facial burn and signs of oedema, on assessment you see burns on the anterior trunk to his waist and the anterior surface of his left arm

1. Describe how you will conduct the specific assessment of the client (10 Marks)

2. Describe the prehospital management of the client (10 Marks)
3. State the potential complications that you should be cognizant of while transporting the patient (5 Marks)
4. As you transfer the client to a healthcare facility, you realise that the patient goes into shock.
 - a. Outline the signs and symptoms of shock (5 Marks)
 - b. Describe the Emergency medical care you will give to this client (10 Marks)