



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.  
Tel: +254(0) 799 529 958, +254(0) 799 529 959, +254 (0)712 524 293  
Website: [www.must.ac.ke](http://www.must.ac.ke) Email: [info@mucst.ac.ke](mailto:info@mucst.ac.ke)

---

## UNIVERSITY EXAMINATIONS 2022/2023

FOURTH YEAR, SECOND SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION  
FOR DEGREE OF BACHELOR OF SCIENCE IN NURSING

**NND 3423: RENAL AND CRITICAL CARE NURSING**

**DATE: FEBRUARY 2024**

**TIME: 2 HOURS**

---

**INSTRUCTIONS:** *Answer all questions in the booklet provided*

Ensure that all your answers are properly numbered

Section A: Multiple Choice Questions (MCQs): Write the correct answer on the space provided in the answer booklet.

Section B: Short Answer Questions-Answer questions following each other on the answer booklet

Section C: Long Answer Questions-Answer the questions on the answer booklet.

---

### SECTION A (MULTIPLE CHOICE QUESTIONS (20 MARKS))

1. The most suitable oxygen delivery device for a patient with severe respiratory distress is.
  - a) Nasal cannula
  - b) Simple face mask
  - c) Venturi mask
  - d) Mask with a reservoir
2. The normal blood PH range is:-
  - a) 7.25 – 7.35
  - b) 7.35 – 7.45



MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

- c) 7.45 – 7.55  
d) 7.55 – 7.65
3. A patient with head injury who has eye opening to speech, no verbal responses and withdrawal motor responses would have a Glasgucses coma scale of
- a) 4  
b) 8  
c) 6  
d) 7
4. Indication for dialysis include the following except:
- a) Hyperkalemia  
b) Acidosis  
c) Increasing araemia  
d) Ketoacidosis
5. The best patient nurse ratio in ICU is.
- a) 1:1  
b) 1:2  
c) 1:3  
d) 1:4
6. An early sign of acute respiratory failure is
- a) Coma  
b) Cyanosis  
c) Restlessness  
d) Paradoxic breathing
7. A patient brought at the ICU after a motorbike accident develops otorrhea. What is the best management of the patient:-
- a) Apply pressure at the area  
b) Do gentle suction  
c) Assesst drainage for glucose  
d) Paul the ear with sterile dressing.
8. A patient develops mild hypoglycemia, what is the best management the CCU nurse will do.
- a) Give IV glucose start



- b) Do blood glucose level
  - c) Determine time cast dose of insulin was administered
  - d) Determine last oral intake
9. In critical care, standards of nursing practice are best defined as.
- a) Statement that determines the nurses role in providing care.
  - b) Guidelines for ethical practice
  - c) Authoritative statement describing the nurses accountability and responsibility
  - d) Guidelines that ensures the nursing outcome are the same
10. Nursing interventions following cardiac catheterization are effective when
- a) Pain at the puncture site is decreased
  - b) No bleeding at puncture site
  - c) Vitae and within normal range
  - d) Patient is able to take adequate oral fluid.
11. The following are nursing responsibilities in endotracheal intubation except?
- a) Place patient in supine position with chin flexed towards the chest
  - b) Secure endotracheal tube in position
  - c) Suctioning patient before intubation
  - d) Auscultase lungs before and after intubation
12. Cause of urinary tract infection in ICU clients include: -
- a) Lack of fluid intake
  - b) Immunosuppression
  - c) Inadequate perineal care
  - d) Invasive procedures
13. To perform cardiac compression, the nurse should place their hands: -
- a) Halfway between the sternae notch and xiphoid
  - b) Over the xiphoid
  - c) Two fingers above the xiphoid
  - d) Two fingers below the xiphoid
14. Impaired blood supply to kidneys may cause
- a) Peri-renal failure
  - b) Pre-renal failure
  - c) Intra renal failure



- d) Post renal failure
15. A patient has the following arterial blood gases.  $\text{HCO}_3^-$  38; PH 7.50,  $\text{Paco}_2$  50. Which of the signs may the patient exhibit as a compensatory mechanism:
- a) Hyperventilation
  - b) Hyperkalemia
  - c) Bradypnea
  - d) Constipation
16. Respiratory alkalosis may be caused by:-
- a) Hyperventilation
  - b) Chronic vomiting
  - c) Diet
  - d) Emphysema
17. One of the chemical buffers that regulate acidity and is produced by the kidney is
- a) Chime
  - b) Bicarbonate
  - c) Blood
  - d) Testosterone
18. Which moral theory believes that consequence counts and not intention.
- a) Utilitarianism
  - b) Deontology
  - c) Casuistry
  - d) Principlism
19. Factors that reduce success of defibrillation include all the following except?
- a) Acidosis
  - b) Hypoxia
  - c) Hypothermia
  - d) None of the above
20. Severe derangement of the heart rhythm is called:-
- a) Myocardial ischemia
  - b) Ventricular fibrillation
  - c) Arteria fibrillation
  - d) Ventricular block



## **SECTION B (SHORT ANSWER QUESTIONS (30 MARKS))**

1. State four goals of critical care nursing. (4 Marks)
2. State four aims of hemodynamic monitoring in critical care setting. (4 Marks)
3. Explain the nursing management for a patient on endotracheal tube. (5 Marks)
4. Explain two classification of positive pressure ventilation. (4 Marks)
5. State five pre renal cause of Renal failure. (5 Marks)
6. List eight assessment findings for a patient with increased intracranial pressure. (4 Marks)
7. State four way of preventing infection in a critical care unit. (4 Marks)

## **SECTION C (LONG ANSWER QUESTIONS (20 MARKS))**

A patient is brought to hospital with a diagnosis of Acute Kidney injury. Patient is scheduled for hemodialysis.

- a) Explain eight specific nursing tasks in regard to hemodialysis (8 Marks)
- b) State six complications related to hemodialysis. (6 Marks)
- c) Explain three phases of peritoneal dialysis. (6 Marks)

