



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
End of Semester August 2025 Examinations**

COURSE CODE AND TITLE: ACN 120: Essentials of Critical Care Nursing

**DATE: Monday 4th August 2025
2025**

Duration: 2 HOURS

Start: 9:00 AM

Finish: 11:00 PM

INSTRUCTIONS

1. This exam is out of 70 marks
2. This Examination comprises three Section. Section I: Multiple Choice Questions (20 marks) Short Answer questions (30marks) and long answer question (20marks)
3. Answer ALL Questions.
4. Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

SECTION 1: MULTIPLE CHOICE QUESTIONS 20 MARKS

1. A patient with thirty-year history of smoking and dyslipidaemia presents with dyspnoea causing them to awaken at night, inability to lie down without struggling to breathe, intense fatigue and peripheral oedema. What do you expect on auscultation of the patient's lung bases?
 - A. crackles
 - B. Wheeze
 - C. Stridor
 - D. Absent breath sounds
2. The patient has a notable previous history of thyrotoxicosis. Of which class of heart failure aetiology is the patient related to?
 - A. Coronary Artery Disease
 - B. Conduction arrhythmia
 - C. Valvular defect
 - D. Increased Cardiac Output
3. Patient K on Cor pulmonale management has been admitted in the ward where you have been placed. Which of the following clinical finding is associated with development of Cor pulmonale:-
 - A. Hypoglycaemia
 - B. Hypotension
 - C. Hypoalbuminemia
 - D. Hypoxemia
4. The following are objectives for conservative management in arteriosclerosis except:
 - A. Protecting the extremity from trauma
 - B. Slowing the progression of arteriosclerosis
 - C. To increase coagulation
 - D. Improving collateral circulation
5. The following are aetiological causes of thrombophlebitis:
 - A. Stasis of venous flow
 - B. Hypocoagulability of the blood
 - C. Liver disease
 - D. Kidney transplant
6. The following is a non modifiable risk factor for coronary heart disease:
 - A. Age
 - B. Hypertension
 - C. Obesity
 - D. Smoking
7. The common complications of rheumatic heart diseases are:
 - A. Carditis, cardiac infarction, cirrhosis
 - B. Stenosis, carditis, cirrhosis
 - C. Carditis, stenosis, cardiac infarction
 - D. Carditis, ventricular failure
8. The following best describe the definition of an embolus:
 - A. A mass of material carried in the blood (moving clot).
 - B. Tissue death because of interrupted blood supply.
 - C. Atheromatous plaque patchy changes that develop in the tunica intima of arteries.
 - D. A Varicose vein.
9. The following is a possible causative organism of rheumatic heart disease:
 - A. Staphylococci aureas.

- B. A beta haemolytic rheumatic streptococcal pharyngitis.
 - C. Clostridium difficile.
 - D. Pneumococci caranii.
10. The following are clinical manifestation of right sided heart failure;-
 - A. Distended jugular vein
 - B. Elevated capillary wedge pressure
 - C. Cyanosis
 - D. Blood tinged sputum
 11. The following is a complication of congestive cardiac failure;-
 - A. Pulmonary oedema
 - B. Pleural effusion
 - C. Diabetes
 - D. Increased intracranial pressure
 12. The following are types of chronic valvular disease :
 - A. Mitral valve disease
 - B. Ventricular valve disease
 - C. Aortic enlargement
 - D. Mitral sufficiency
 13. The recommended compression-to-ventilation ratio for adult CPR with two rescuers is;-
 - A. 15:2
 - B. 30:2
 - C. 20:2
 - D. 25:2
 14. The recommended depth of chest compressions for an adult during CPR is;-
 - A. At least 1 inch
 - B. At least 2 inches
 - C. At least 3 inches
 - D. As deep as possible
 15. The correct rate of chest compressions during adult CPR is;-
 - A. 80–100 compressions per minute
 - B. 100–120 compressions per minute
 - C. 120–140 compressions per minute
 - D. 60–80 compressions per minute
 16. The correct site to check for a pulse in an unresponsive adult is;-
 - A. Radial pulse
 - B. Brachial pulse
 - C. Carotid pulse
 - D. Femoral pulse
 17. The first step in the BLS sequence for an unresponsive patient is;-
 - A. Start chest compressions
 - B. Open the airway
 - C. Check for responsiveness
 - D. Deliver rescue breaths
 18. Rescuers should switch roles during two-rescuer CPR;-
 - A. Every 1 minute
 - B. Every 2 minutes
 - C. Every 5 minutes
 - D. After every 10 cycles
 19. The recommended compression depth for infants during CPR is;-

- A. At least 1/3 the depth of the chest
 - B. At least 1 inch
 - C. At least 2 inches
 - D. At least 3 inches
20. Cerebrospinal Fluid (CSF) is obtained by performing;
- A. Lumbar puncture
 - B. Biopsy
 - C. Endoscopy
 - D. Bronchoscopy

SECTION II : SHORT ANSWER QUESTIONS – 30 MARKS

1. Outline four (4) modifiable risk factors of coronary heart disease (4 marks)
2. State four (4) clinical manifestations of pulmonary embolism (4 marks)
3. State five (5) roles of a team leader in a resuscitation team (5 marks)
4. State five (5) nursing interventions of a patient with a external ventricular drain (5 marks)
5. State five (5) roles of a nurse during weaning of a patient from a ventilator (5 marks)
6. State two (2) predisposing factors of varicose veins. (2 Marks)
7. State five (5) clinical presentations of stroke (5 marks)

SECTION III: LONG ANSWER QUESTIONS-20 MARKS

1. Patient J has been diagnosed with acute respiratory failure in the critical care unit. You are assigned to take care of this patient during the shift.
 - a. State the difference between respiratory failure type I and respiratory failure type II. (2 marks)
 - b. Outline three (3) features of respiratory failure. (3marks)
 - c. Explain five nursing interventions you will implement for the above patient (10 marks)
 - d. Outline five (5) causes of respiratory failure (5 marks)