

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES
FINAL EXAMINATION - DECEMBER 2019

TITLE OF PAPER : ADVANCED MEDICAL /SURGICAL NURSING III
COURSE : NUR 510
DURATION : 2 HOURS
TOTAL MARKS : 75
NUMBER OF PAGE: 9 PAGES INCLUDING THE COVER PAGE

INSTRUCTIONS:

- 1. THERE ARE THREE QUESTIONS IN THIS PAPER**
- 2. ANSWER ALL THREE (3) QUESTIONS.**
- 3. EACH QUESTION IS ALLOCATED 25 MARKS.**
- 4. EACH CORRECT POINT/FACT/STATEMENT IS WORTH 1 MARK UNLESS INDICATED OTHERWISE IN THE QUESTION.**
- 5. ANSWER EACH QUESTION ON A SEPARATE SHEET OF PAPER.**

DO NOT OPEN THIS PAPER UNTIL THE INVIGILATOR HAS GRANTED PERMISSION.

QUESTION 1

For each of the following multiple-choice questions or statements, write the correct letter that corresponds to each of them, E.g. 1. F

- 1) A nurse is caring for a critically ill patient who has identified an unrelated friend as his closest relative. What is the nurse's most appropriate action in this situation?
 - A. Treat the friend as the patient's family.
 - B. Do not allow the friend to visit as he is not family.
 - C. Adhere to the legal definition of next of kin.
 - D. Identify the next-closest-related family member.

- 2) A 56-year-old male was admitted to ICU following a history of severe crushing chest pain that radiates from the left arm to the back, shoulder and jaw and unexplained shortness of breath. An ECG revealed a non-elevated ST-segment. The client was admitted to ICU to rule out which condition?
 - A. Angina pectoris
 - B. Myocardium infarction
 - C. Atherosclerosis
 - D. Arteriosclerosis

- 3) A woman is admitted to ICU after delivery of a retained demised fetus from abruptio placentae. The patient develops disseminated intravascular coagulation (DIC). What findings are present in DIC?
 - A. Diminished platelets and elevated partial thromboplastin time
 - B. Elevated white blood cell count and elevated immature neutrophils
 - C. Diminished clotting time and prothrombin time
 - D. Elevated fibrinogen and diminished fibrinogen split products

- 4) To validate the suspicion that a married male client has sleep apnea the nurse first:
 - A. Asks the client if he experiences apnea in the middle of the night
 - B. Questions the spouse if her husband's snoring awakens her
 - C. Places the client on a continuous positive airway pressure (CPAP) device
 - D. Schedules the client for a sleep test

- 5) The most important outcome of effective communication is to:
- A. Demonstrate caring practices to family members.
 - B. Ensure that patient teaching is done.
 - C. Meet the diverse needs of patients.
 - D. Reduce patient errors.
- 6) In the critical care unit, a combination of intravenous and sublingual nitroglycerin is used for managing patients with angina. What is the indication for using nitrates?
- A. Nitrates vasoconstrict the coronary arteries and decrease pain
 - B. Nitrates have shown to reduce mortality and decrease pain
 - C. Nitrates vasodilate the coronary arteries and decrease pain
 - D. Nitrates have shown to reduce anxiety, fear and decrease pain
- 7) A first-day postoperative client on patient-controlled analgesia (PCA) pump reports that pain control is inadequate. What is the first action you should take?
- A. Try non-pharmacological comfort measures.
 - B. Assess the pain for location, quality, and intensity
 - C. Deliver the bolus dose per standing order.
 - D. Contact the physician to increase the dose.
- 8) The nurse understands that the most vivid dreaming occurs during;
- A. REM sleep
 - B. Stage 1 NREM
 - C. Stage 4 NREM
 - D. The transition period from NREM to REM sleep
- 9) The family members of a critically ill, 90-year-old patient bring in a copy of the patient's Living-Will to the hospital, which identifies the patient's wishes regarding health care. You discuss the contents of the Living-Will with the patient's physician. This is an example of implementation of which of the AACN Standards of Professional Performance?
- A. Acquires and maintains current knowledge of the practice
 - B. Acts ethically on behalf of the patient and family
 - C. Considers factors related to safe patient care
 - D. Uses clinical inquiry and integrates research findings in practice

- 10) On the ECG, the zone of infarction on the cardiac surface is seen as;
- A. New pathologic Q-waves
 - B. Non-pathologic Q-waves
 - C. Non-elevated ST segment
 - D. T-wave inversion
- 11) When titrating an analgesic to manage pain, what is the priority goal?
- A. Administer the smallest dose that provides relief with the fewest side effects.
 - B. Titrate upward until the client is pain-free.
 - C. Titrate downwards to prevent toxicity.
 - D. Ensure that the drug is adequate to meet the client's needs.
- 12) Which of the following conditions characterises rapid eye movement (REM) sleep?
- A. Disorientation and disorganised thinking
 - B. Jerky limb movements and position changes
 - C. Pulse rate slowed by 5 to 10 beats/minute
 - D. Highly active brain and physiological activity levels
- 13) A patient in the Intensive Care Unit has entered a coma state, and someone must decide on whether to continue life-supporting measures for the patient. No living will exist for this patient. Who is the person legally authorised to make this decision?
- A. The patient's wife, who is the executor of his estate
 - B. The patient's brother, who is his designated health care proxy
 - C. The patient's physician, who has been managing his care from admittance
 - D. The patient's nurse, who has been assigned to him daily
- 14) A critical care nurse who recognises the uniqueness of each patient's preferences, physiologic condition and psychosocial status when planning care is said to be:
- A. Providing culture-sensitive care
 - B. Providing individualised care
 - C. Providing case-based care
 - D. Caring

- 15) During a patient's cesarean section delivery of twin girls, the patient had a sudden onset of dyspnea and cyanosis with a drop-in blood pressure and then developed cardiac arrest. Based on these clinical events, the nurse suspects what complication?
- A. Disseminated intravascular coagulation
 - B. Uterine prolapse
 - C. Amniotic fluid embolism
 - D. Massive myocardial infarction
- 16) Reduced left ventricular filling is noted by the presence of which heart sound.
- A. Second heart sound (S2).
 - B. First heart sound (S1).
 - C. Third heart sound (S3)
 - D. Fourth heart sound (S4)
- 17) The nurse is monitoring a pregnant woman who is at high risk for the development of disseminated intravascular coagulation (DIC). What physical assessment findings would indicate DIC?
- A. Urine clear without sediment at 40 mL/hour
 - B. Oozing blood from all intravenous sites
 - C. All vital signs within expected parameters for pregnancy
 - D. Absence of elevated protein in urine or serum
- 18) When analgesics are ordered for a client with obstructive sleep apnea (OSA) following surgery, the nurse is most concerned about:
- A. Nonsteroidal anti-inflammatory drugs (NSAIDs)
 - B. Anticonvulsants
 - C. Antidepressants
 - D. Opioids
- 19) On assessment, the nurse knows that a patient who reports no symptoms of heart failure at rest but is symptomatic with increased physical activity would have a heart failure classification of:
- A. Stage I
 - B. Stage II
 - C. Stage III
 - D. Stage IV

- 20) Which route of administration is preferred if immediate analgesia and rapid titration are necessary?
- A. Intraspinial
 - B. Patient-controlled analgesia (PCA)
 - C. Intravenous (IV)
 - D. Sublingual
- 21) Which of the following warning signs suggest an airway obstruction immediately after administering an opioid drug.
- A. Snoring
 - B. Cyanosis
 - C. Decreased level of consciousness
 - D. Dyspnea
- 22) Which of the following is the best example of moral distress?
- A. A patient's family has decided to end the mechanical ventilation of the patient, but the nurse has trouble implementing their decision.
 - B. A patient's family has decided to continue mechanical ventilation for the patient, but the nurse disagrees and discontinues the ventilation on her own initiative.
 - C. A patient's family has decided to end the mechanical ventilation of the patient, and the nurse implements their decision but later feels guilty.
 - D. A patient's family has decided to continue mechanical ventilation for the patient, and the nurse implements their decision, although she disagrees with it
- 23) A patient who is rated +4 on the sedation and agitation scale (SAS) is said to be:
- A. Agitated
 - B. Mildly agitated
 - C. Dangerously agitated
 - D. Moderately agitated

- 24) The nurse caring for a critically ill patient implements several components of care. What component is an example of the use of evidence-based practice?
- A. Use of a protocol for admission of a patient to the unit
 - B. Application of an insulin sliding scale method from research
 - C. Checking the patient's armband before giving a medication
 - D. Limiting visits to immediate family only for 2 hours a day
- 25) Which nursing diagnosis is appropriate for a patient who has received a sedative-hypnotic agent?
- A. Alteration in tissue perfusion
 - B. Fluid volume excess
 - C. Risk for injury
 - D. Risk for infection

SUBTOTAL 25 MARKS

Question 2

Scenario: Mr Shongwe is a 54-year-old male who is admitted to the intensive care unit (ICU) due to acute respiratory failure. He presented with a history of excessive production of mucus, fatigue and shortness of breath. Mr Shongwe smokes 20 cigarettes per day. On examination; he is dyspnoeic, uses accessory muscles to breathe, has a barrel chest, diminished breath sounds, and a productive cough. Vital signs: Temperature-36.8°C, pulse-105 beats/ minute, Respiratory rate- 10 breaths/min, blood pressure- 145/90 mmHg. Arterial blood gases (ABGs); pH-7.24; partial pressure of oxygen (PaO₂) 40 mmHg; partial pressure of carbon dioxide (PaCO₂) 50 mmHg; bicarbonate (HCO₃⁻) 22 mEq/L; oxygen saturation (SpO₂) 80%.

- (i) What is the possible medical diagnosis of Mr Shongwe? **(1 mark)**
- (ii) What diagnostic tests can confirm the diagnosis in (i)? **(2 marks)**
- (iii) Interpret Mr Shongwe's arterial blood gases (ABGs) results. **(8 marks)**
- (iv) Based on your interpretation in (iii), what is Mr Shongwe's acid-based imbalance disorder? **(2 marks)**
- (v) Develop three (3) nursing diagnoses for Mr Shongwe's condition. **(3 marks)**
- (vi) Discuss the nursing management with rationale you would provide to Mr Shongwe based on the three nursing diagnoses. **(9 marks)**

SUBTOTAL 25 MARKS

Question 3

- A. Advancing age has many effects on the cardiovascular system. Identify the age-related **structural** alterations with a rationale that occur in an older person's cardiovascular system. **(8 marks)**
- B. Joana, a 55 years old female, is diagnosed with coronary artery disease and angina, she has been under your care since admission. Discuss how you would manage Joana under these nursing intervention strategies;
- (i) Recognition of myocardial ischemia **(3 marks)**
 - (ii) Relieving chest pain **(4 marks)**
 - (iii) Maintaining a calm environment **(2 marks)**
- C. Critical care units are described as complex environments, filled with several stressors that can affect the critically ill patient. Explain how you could assist a critically ill patient in coping with the following stressors? **(8 marks)**
- (i) Physical pain and discomfort
 - (ii) Loss of autonomy
 - (iii) Lack of sleep
 - (iv) Threat of death

Subtotal 25 marks