

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES
MAIN EXAMINATION – MAY 2021

TITLE OF PAPER: **ADVANCED MEDICAL /SURGICAL NURSING III**
COURSE: **NUR 510**
DURATION: **2 HOURS**
TOTAL: **75MARKS**

INSTRUCTIONS:

- 1. DO NOT OPEN THIS PAPER UNTIL THE INVIGILATOR HAS GRANTED PERMISSION.**
- 2. ANSWER ALL THREE (3) QUESTIONS.**
- 3. QUESTION 1 IS A MULTIPLE CHOICE AND HAS 25 MARKS.**
- 4. QUESTION 2 AND 3 ARE SHORT AND LONG ESSAY QUESTIONS, AND THEY CARRY MARKS AS INDICATED.**
- 5. EACH QUESTION IS TO BE ANSWERED ON A SEPARATE SHEET OF PAPER.**

Question 1

Instruction: In your answer booklet, write the correct letter that corresponds to the question or statement. E.g. 1. F

1. A patient who is near the end of his life is to be extubated, according to the wishes of his family. Which of the following would be the best action for the nurse to take to support the patient?
 - A. Ask the family to leave the room during the extubation.
 - B. Hold a family conference to ask the family to reconsider their decision.
 - C. Administer opioids to the patient to reduce pain and discomfort.
 - D. Administer antibiotics to the patient to prevent infection.

2. The nurse consistently applies guidelines for safe administration of medications during patient care. This practice is an example of the application of what ethical principle?
 - A. Justice
 - B. Veracity
 - C. Beneficence
 - D. Paternalism

3. 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.

4. The nurse is caring for a patient who is dying. The patient has persistent full depression. What is the most appropriate nursing action?
- A. Understand that depression is normal at the end of life.
 - B. Facilitate the use of antidepressant medications.
 - C. Encourage the patient to discuss life achievements.
 - D. Increase family visiting time and frequency.
5. The nurse is caring for a patient approaching the end of life. What symptom common at the end of life, would the nurse most expect?
- A. Diminished pain
 - B. Hypotension
 - C. Tachycardia
 - D. Dyspnea
6. A patient in the intensive care unit has ovarian cancer that has metastasised to her stomach and other organs. The physician believes the patient only has days to survive. Which of the following would be a realistic goal for the care of the patient that the nurse could suggest to the family?
- A. Eliminate the cancer cells by starting the patient on chemotherapy.
 - B. Slow the rate of growth of cancer by starting the patient on radiation therapy.
 - C. Keep the patient free of pain by increasing the patient's pain medication.
 - D. Restore gastrointestinal function to the client via surgical intervention.

7. Before administering a new medication to a patient, the nurse explains to her the adverse effects she may experience as a result of the medication and asks whether the patient has any questions about the medication. When the patient indicates that she understands the risks involved, the nurse has her sign document and proceeds with the treatment. The nurse's action is an example of which of the following?
- A. Obtaining informed consent
 - B. Ensuring confidentiality
 - C. Observing the principle of nonmaleficence
 - D. Acting with fairness
8. A patient is at severe risk of forming life-threatening clots in his thoracic region following surgery. The physician has prescribed an anticoagulant medication. The patient has had a negative experience with anticoagulants in the past and refuses the medication. Which two ethical principles conflict with each other in this situation?
- A. Fidelity versus justice
 - B. Maleficence versus beneficence
 - C. Veracity versus autonomy
 - D. Beneficence versus autonomy
9. A nurse works in an intensive care unit in which she routinely sees physicians neglecting the care of patients who do not have money for settling the hospital bill. She feels angry about the unfairness of this situation but also powerless to do anything because she fears the loss of her job. Which of the following best describes what the nurse is experiencing?
- A. Medical futility
 - B. Nonmaleficence
 - C. Moral distress
 - D. Paternalism

10. Before a surgical procedure, the patient signs a document called an informed consent. What ethical principle is central to the use of informed consent?

- A. Autonomy
- B. Fidelity
- C. Nonmaleficence
- D. Beneficence

11. 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.

12. The nurse is caring for a critically ill patient. Which action by the nurse could most likely be considered malpractice?

- A. Assessing for allergies before administering medications
- B. Consistent failure to complete adequate hand hygiene
- C. Strict adherence to the visiting hours' policies of the unit
- D. Encouraging the patient to ask questions of the physician

13. The nurse caring for a sedated patient leaves the side rails down when leaving the room, and the patient falls, breaking her hip. Why is this considered to be malpractice by negligence?
- A. The patient had requested the side rails be left down.
 - B. The nurse assumed that the family would watch the patient.
 - C. This is a breach of duty resulting in patient harm.
 - D. There will probably be a suit brought by the family.
14. A pregnant woman has arrived at the intensive care unit with a blood pressure reading of 190/118 mmHg, pronounced oedema in her hands and feet, and proteinuria. Which condition does the woman most likely have?
- A. Severe preeclampsia
 - B. Preeclampsia
 - C. Disseminated intravascular coagulation
 - D. HELLP syndrome
15. A patient who experienced severe preeclampsia during her pregnancy has just delivered her baby in the intensive care unit. She has been receiving magnesium sulfate therapy to prevent seizures. Which of the following would be the correct nursing intervention in this situation?
- A. Discontinue magnesium sulfate therapy immediately.
 - B. Continue the magnesium sulfate therapy for 2 hours after delivery.
 - C. Continue the magnesium sulfate therapy for 24 hours after delivery.
 - D. Explain to the patient that she will have to remain on magnesium sulfate therapy for the rest of her life.

16. A patient with severe preeclampsia in the intensive care unit has recently had a seizure. She is currently receiving magnesium sulfate therapy. What intervention can the nurse make to reduce the risk of future seizures in this patient?

- A. Turn off the overhead lights in the room.
- B. Stop the magnesium sulfate therapy.
- C. Have the physician prescribe hydralazine to her.
- D. Place a wedge under the woman's right hip.

17. A pregnant woman with severe preeclampsia is being managed with intravenous magnesium sulfate. Which nursing assessment would indicate that the dose of magnesium sulfate would need to be increased?

- A. Increased frequency of seizures
- B. Hyporeflexia and diaphoresis
- C. Serum magnesium level of 16 mg/dL
- D. Increased drowsiness and flushed skin

18. A pregnant woman was admitted to the intensive care unit for monitoring after an elective surgical procedure. Arterial blood gases are as follows: pH 7.48, PaCO₂ 27, HCO₃ ion 21, PaO₂ 108, SaO₂ 100%. Respiratory rate is slightly elevated. The patient is receiving oxygen by mask at 40% and maintenance intravenous fluids. What is the most important nursing action?

- A. Reduce inhaled oxygen because the PaO₂ and SaO₂ are too high.
- B. Medicate for pain because the acid-base balance indicates respiratory alkalosis.
- C. Consider intubation and mechanical ventilation to support gas exchange.
- D. Continue the current plan of care, as results are within normal limits.

19. A pregnant woman has been admitted to the intensive care unit with disseminated intravascular coagulation (DIC). She exhibits tachycardia, tachypnea, temperature instability, increased cardiac output, and decreased peripheral resistance. What is the most likely underlying cause of DIC in this situation, and what is the best intervention?

- A. Preeclampsia; antihypertensive agents
- B. Sepsis; broad-spectrum antibiotics
- C. Amniotic fluid embolism; intubation and ventilation with 100% oxygen
- D. Abruptio placentae; prompt delivery of the fetus

20. A pregnant woman is admitted to the intensive care unit after a traumatic incident. The nurse is concerned that the patient may be having significant and unidentified blood loss. Which assessment findings could indicate significant blood loss?

- A. Slightly decreased haemoglobin and hematocrit
- B. Urine output less than 40 mL/hr
- C. Elevated creatinine and urea clearance rates
- D. Slightly low serum creatinine and blood urea nitrogen

21. A woman in her seventh month of pregnancy presents to the intensive care unit with hemolysis, elevated liver enzymes, and a low platelet count. Which condition does this woman most likely have, and what is a proper intervention?

- A. Severe preeclampsia; magnesium sulfate therapy
- B. Disseminated intravascular coagulation, broad-spectrum antibiotics
- C. Amniotic fluid embolism; intubation and ventilation with 100% oxygen
- D. HELLP syndrome; antihypertensive agents

22. 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. Amniotic fluid embolism
- C. Uterine prolapse
- D. Massive myocardial infarction

23. 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/hr
- 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

24. A woman is admitted to the intensive care unit 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

25. A pregnant woman with severe preeclampsia is receiving intravenous magnesium sulfate at 3 g/hr. Her serum magnesium level is 7 mg/dL. What is the most important nursing assessment?

- A. Decreased incidence and frequency of seizures
- B. Decreased respiratory rate and hyporeflexia
- C. Increased urine output greater than 40 mL/hr
- D. Flushing of skin and diaphoresis

Subtotal: 25marks

Question 2

2.1 Describe four (4) health professional barriers to pain assessment and management. (4 marks)

2.2 Research has proven that infants and children do feel pain. What are the physiologic effects of untreated pain in infants and children? (5 marks)

2.3 Discuss the general principles are applied to the management of pain in children (6 marks)

2.4 Nursing care of patients receiving enteral nutrition involves the prevention and management of complications associated with the use of feeding tubes. Below are common complications related to the use of feeding tubes. State the contributing factor(s) and explain how they can be prevented or corrected. (10 marks)

- a. Pulmonary aspiration (4 marks)
- b. Constipation (2 marks)
- c. Diarrhoea (4 marks)

Subtotal: 25marks

Question 3

3.1 Mr Nkosi is a 55-year-old male, admitted in the critical care unit. He was diagnosed with COVID 19. Patient history: Mr Nkosi does not have any comorbidities. Chief complaint: difficulty in breathing and fever and fatigue. Examination: patient looked severely agitated, dyspnoeic, increased use of accessory muscles, fine crackles heard on the chest, sweating profusely: Vital signs -temperature 39.9°C; BP100/60 mmHg, Pulse 60 mmHg, Respiration 30 breaths/min, oxygen saturation 60%, ABG: PaO₂ 38 mmHg PaCO₂ 48 mmHg pH 7.32.

COVID 19 is classified as an Acute Respiratory Distress Syndrome (ARDS)

- a. Define and describe the concept of acute respiratory distress syndrome (ARDS). **(2 marks)**
- b. Outline the changes that are observed in the arterial blood-gas analysis of a patient presenting with acute respiratory distress syndrome. **(3 marks)**
- c. Develop three (3) nursing diagnosis that you can use to manage Mr Nkosi's condition. **(3 marks)**
- d. What major outcomes do you expect to achieve for Mr Nkosi? Use the nursing diagnoses you identified in (iii) to respond to this question. For each nursing diagnosis state, at least two (2) expected outcomes. **(3 marks)**

- e. The nurse has a significant role in optimising oxygenation and ventilation, providing comfort, and maintaining surveillance for complications. Discuss the management you are going to implement in order to optimise Mr Nkosi's oxygenation and ventilation needs. **(9 marks)**

- 3.2 Illness or injury is the primary factor contributing to the development of malnutrition. Identify the other factors that contribute to the undernutrition of critically ill patients. **(5 marks)**

Subtotal: 25 marks