

UNIVERSITY OF SWAZILAND

FACULTY OF HEALTH SCIENCES

FINAL EXAMINATION PAPER, DECEMBER 2012

TITLE OF PAPER: ADVANCED MEDICAL-SURGICAL NURSING III

COURSE CODE: NUR 510

TIME ALLOWED: TWO (2) HOURS

MARKS: 75

INSTRUCTIONS:

- 1. THERE ARE THREE (3) QUESTIONS IN THIS PAPER.**
- 2. ANSWER ALL THREE QUESTIONS.**
- 3. EACH QUESTION IS ALLOCATED 25 MARKS.**
- 4. WRITE LEGIBLY.**

THIS PAPER IS NOT TO BE OPENED UNTIL THE INVIGILATOR HAS GRANTED PERMISSION.

QUESTION 1

Situation: Ms. Zandi who is 28-years of age is a known asthmatic client admitted to ICU because of acid-base imbalance disorder. She is presenting with severe shortness of breath, severe chest pain, increased pulse and hyperpnoea, headache, potassium excess, and progressive confusion.

- A. Identify the acid-base imbalance that Ms. Zandi is experiencing (1)
- B. Explain how the identified acid-base imbalance (in A) occurs (2)
- C. Which diagnostic findings will confirm Ms. Zandi's disorder (3)
- D. Describe the nursing interventions for Ms. Zandi. (8)

Situation: Mrs. Vezi is a 35 year old female admitted in the ICU in a critical condition with complications related to puerperium, following delivering a still birth two days ago. She is on a ventilator and receives 60% O₂, on auscultation her chest is moist. Her vital signs: T 39.9⁰ C, P 100 b/m, R 30 b/m, BP 80/50 mm Hg, PaO₂ 88. Some of her blood chemistry: leucocytes 30.000 μ l (mm³), creatinine 600 mg/dl, haemoglobin (HB) 8.0 mg/dl, pH 3.0, and a FBS 23 mmol/l. The Doctor expresses that Mrs. Vezi is experiencing septic shock.

C. Describe the possible scientific rationale (s) for these signs in Mrs Veli:

- (i) BP 80/50 mm Hg (2)
- (ii) HB 8.0 mg/dl (2)
- (iii) PaO₂ 88 (3)
- (iv) Creatinine 600 mg/dl (2)
- (v) FBS 23 mmol/l (2)

TOTAL 25 MARKS

QUESTION 2

Mr. Shito who is 65 years-old, is critically ill in the ICU, with hemiplegia. He is reported to have lost consciousness at home, was on antihypertensive therapy for a short period (five months back). His coma level is reported to be worsening with a Glasgow scale of 8/15. He is on a ventilator and monitor and has a foley catheter. His T 37.8^oC, R 35 b/m, P 100 b/m, oxygen saturation is 97%, BP 200/110 mm Hg, mean diastolic pressure 151 mm Hg, blood pH 6.0, and an intracranial pressure of 30 mm Hg. He is receiving: intravenous ringer lactate (83 ml/min) alternating with mannitol, feeds (21 ml/hr.), chlorpromazine 20mg 6 hourly, ranitidine 300 mg OD, dulcolax 20 mg nocte, and antihypertensives. In the past 24 hours he has had an intake of 1200 mls and an output of 800 mls. He has been diagnosed to have suffered massive cerebrovascular accident.

A. Describe each of following and the importance of receiving each of the following in Mr. Shito's condition:

- (i) Mannitol (3)
- (ii) Chlorpromazine (3)
- (iii) Dulcolax (3)
- (iv) Ranitidine (3)

B. Express your observations on Mr. Shito's:

- (i) Intake and output (3)
- (ii) BP (3)
- (iii) Intracranial pressure (3)
- (iv) Oxygen saturation (2)
- (v) Blood pH (2)

TOTAL 25 MARKS

QUESTION 3

INSTRUCTIONS: For each of the following questions / statements, select the most correct answer and write the letter that corresponds with it in your answer sheet e.g. 1. B

1. A nurse is caring for a client with diabetic ketoacidosis and documents that the patient is experiencing Kussmaul's respirations. Based on this documentation, which of the following did the nurse observe?
 - A. Respirations that cease for several seconds
 - B. Respirations that are regular but abnormally slow
 - C. Respirations that are labored and increased in depth and rate
 - D. Respirations that are abnormally deep, regular, and increased in rate

2. A patient is brought to the emergency room stating that he had accidentally been taking two times his prescribed dose of warfarin (Coumadin) for the past week. After noting that the patient has no evidence of obvious bleeding, the nurse plans to do which of the following next?
 - A. Prepare to administer an antidote
 - B. Draw a sample for type and cross match and transfuse the client
 - C. Draw a sample for an activated partial thromboplastin time (APTT)
 - D. Draw a sample for prothrombin (PT)

3. A nurse is reviewing laboratory results and notes that the patient's serum sodium level is 150 mEq/L. The nurse reports the serum sodium level to the physician and the physician prescribes dietary instructions based on the sodium level. Which food item does the nurse instruct the patient to avoid?
 - A. Peas
 - B. Cauliflower
 - C. Low-fat yoghurt
 - D. Processed oat cereal

4. A nurse is assessing a patient with a suspected diagnosis of hypocalcemia. Which of the following clinical manifestations would the nurse expect to note in the client?
- A. Twitching
 - B. Negative Trousseau's sign
 - C. Hypoactive bowel sounds
 - D. Hypoactive deep tendon reflexes
5. The nursing instructor provides a lecture to nursing students regarding the issue of patient's rights and asks a nursing student to identify a situation that represents an example of invasion of client privacy. Which of the following, if identified by the student, indicates an understanding of a violation of this patient's right?
- (i) Performing a procedure without consent
 - (ii) Threatening to give a patient medication
 - (iii) Telling the patient that he or she cannot leave the hospital
 - (iv) Observing care provided to the patient without the patient's permission
- A. iii and iv
 - B. i and ii
 - C. iii only
 - D. iv only
6. The nurse calls the physician regarding a new medication order because the dosage prescribed is higher than the recommended dosage. Then the nurse is unable to locate the physician and the medication is due to be administered. Which action should the nurse take?
- A. Contact the supervisor
 - B. Administer the dose prescribed
 - C. Hold the medication until the physician can be contacted
 - D. Administer the recommended dose until the physician can be located

7. The nurse gives an inaccurate dose of medication to the patient. Following assessment of the patient, the nurse completes an incident report. The nurse notifies the nursing supervisor of the medication error and calls the physician to report the occurrence. The nurse who administered the inaccurate medication dose understands that:
- A. The error will result in suspension
 - B. The incident will be reported to the Nurses Association
 - C. The incident will be documented in the personnel file
 - D. An incident report needs to be completed and is a method of promoting quality care
8. When communicating with a culturally diverse patient who speaks a different language, the best practice for the nurse is to:
- A. Speak loudly and slowly
 - B. Stand close to the client and speak loudly
 - C. Arrange for an interpreter when communicating with the patient
 - D. Speak to patient and family together to increase the chances that the topic will be understood
9. An emergency room nurse is performing an assessment on a child suspected of being sexually abused. Which assessment data obtained by the nurse most likely support this suspicion?
- (i) Poor hygiene
 - (ii) Fear of parents
 - (iii) Difficulty in walking
 - (iv) Bald spots on the scalp
- A. i and ii
 - B. iii and iv
 - C. ii only
 - D. iii only

Statement: Sleep is very important for patients who are critically ill because it promotes recovery. Several days without sleep may result in a psychotic behaviour and accumulation of stress-related hormones in the blood. However, you find that the routine in the ICU sometimes interfere with the patients' sleep.

Questions 10 – 12 relate to the above statement.

10. In which stage of sleep does tissue repair occurs?

- (i) Non rapid eye movement (NREM) stage I
 - (ii) Non rapid eye movement (NREM) stage II
 - (iii) Non rapid eye movement (NREM) stage III
 - (iv) Non rapid eye movement (NREM) stage IV
- A. i and ii
 - B. iii and iv
 - C. iv only
 - D. iii only

11. The gastrointestinal motility is decreased at this stage.

- (i) Rapid eye movement (REM) stage
 - (ii) Non rapid eye movement (NREM) stage II
 - (iii) Non rapid eye movement (NREM) stage III
 - (iv) Non rapid eye movement (NREM) stage IV
- A. i and ii
 - B. i only
 - C. iv only
 - D. iii and iv

12. The drifting sensation normally occurs in which stage?

- (i) Non rapid eye movement (NREM) stage I
 - (ii) Non rapid eye movement (NREM) stage II
 - (iii) Non rapid eye movement (NREM) stage III
 - (iv) Non rapid eye movement (NREM) stage IV
- A. i and ii
 - B. i only
 - C. ii only
 - D. iii and iv

13. Evidence-based nursing practice means:

- A. Conducting health systems research
- B. Knowing the research findings
- C. Performing nursing care that is supported by research
- D. Teaching nursing theory that is supported by research

14. Normally, as the age of the individual increases, the cardiac output:

- A. Remains the same
- B. increases
- C. decreases
- D. sometimes increases and sometimes decreases

15. Normally, as the person's grows older the cough reflex:

- A. Remains the same
- B. increases
- C. decreases
- D. varies

Situation: Mrs. Yellow is 85 years old, and is admitted to your ward complaining of challenges in the gastro-intestinal tract. Questions 9 - 14 relate to the above situation.

16. Mrs. Yellow's reduction in the ability to swallow results from all of the following, EXCEPT:

- A. ill-fitting dentures
- B. reduction in mucin
- C. fewer teeth
- D. reduced food lubrication

17. The reduced secretion of pepsin and hydrochloric acid in Mrs. Yellow's stomach is a consequence of:

- A. hypertrophy of the gastric mucosa
- B. atrophy of the gastric mucosa
- C. reduced acids in the diet
- D. recurrent vomiting

18. In a pregnant woman, which of the following is a result of the activity of progesterone?

- A. hyperpigmentation
- B. cervical softening
- C. constipation
- D. edema

19. 17. Benefits of quality patient and /or family education include all of the following, **EXCEPT:**

- A. increased performance of self-care activities
- B. increased readmissions
- C. reduced stress
- D. reduced anxiety

20. Quality patient / family education includes all of the following, **EXCEPT:**

- A. using long sentences
- B. answering questions openly
- C. answering questions honestly
- D. explaining procedures to be done

21. Old blood if transfused may cause _____.

- A. hyperkalemia
- B. hypercalcemia
- C. hypokalemia
- D. hypocalcemia

22. Mr. B who is hypertensive is on furosemide, Mr. B must be observed for _____.

- A. hyperkalemia
- B. hypercalcemia
- C. hypokalemia
- D. hypocalcemia

23. If a person has hyperkalemia, the ECG will demonstrate a _____.

- A. peaked T-wave
- B. inverted T-wave
- C. depressed ST-segment
- D. prolonged ST-segment

24. Bradycardia is present in both _____ and _____.

- A. hypokalemia and hypocalcemia
- B. hyperkalemia and hypercalcemia
- C. hypercalcemia and hypernatremia
- D. hypocalcemia and hyponatremia

25. S1 occurs when _____ and _____ valves close.

- A. mitral and aortic
- B. mitral and pulmonic
- C. pulmonic and aortic
- D. tricuspid and mitral

TOTAL 25 MARKS