

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES

FINAL EXAMINATION

MAY 2006

COURSE CODE : NUR 202
COURSE NAME : NURSING SCIENCES & ARTS I
TIME ALLOWED : 3 Hrs
MARKS ALLOCATED : 100

INSTRUCTIONS

1. Answer all 4 questions.
2. Each correct fact is worth 1 mark unless indicated otherwise

1. **Situation** : Mrs Simelane is a patient with a known history of hypertension and congestive cardiac failure(CHF). She is now admitted with recurrent symptoms of CHF. All the following would be expected symptoms of CHF *except*:
 - a. Rapid ,shallow, difficult respirations
 - b. Polyuria
 - c. Peripheral edema
 - d. Pulmonary congestion and rales

2. The physician has ordered Mrs. Simelane to receive 80mg furosemide (lasix) IV twice a day. The nurse observes that the client's potassium level is 3.0mmol/L (normal 3 – 5mmol/L). The nurse should:
 - a. Administer the drug as ordered
 - b. Administer half the dose of the drug.
 - c. Offer the client potassium rich foods and fluids after administering lasix 80mg
 - d. Withhold the drug and notify the physician of the serum potassium level.

3. Mrs. Simelane is placed on restricted fluids. Which of the following electrolyte minerals should likewise be restricted for her?
 - a. Calcium
 - b. Potassium
 - c. Sodium
 - d. Chloride

4. The nurse notes that Mrs. Simelane' s cardiac output (CO) is markedly reduced. Which of the following prescribed medications would *most* help to bring the CO to within normal range?
 - a. Nitroglycerin
 - b. Propranolol (inderal)
 - c. Digoxin
 - d. Panado

Situation: Mandla is a 32 year old male who has been married for 10 months. He and his wife are expecting their first child in 6 months. Prior to marrying his wife, Mandla was sexually active since age 18 and nonmonogamous. He is now complaining of persistent dry cough, night sweats and has a temperature of 38°C. Although Mandla is concerned about his weight and watches his diet, he has lost 8kg without even trying. Upon assessing Mandla, he admits to having had sexual intercourse with prostitutes during the last ten years. Questions 5-10 refer to this scenario.

5. Mandla's elevated temperature, night sweats and dry cough are probably related to
 - a. Alteration in tissue perfusion
 - b. An infectious process, aetiology unknown
 - c. Lack of knowledge about too frequent travel
 - d. Alteration in tissue oxygenation

6. Mandla undergoes a series of diagnostic tests. His testing reveals he is HIV positive. This means:
 - a. His body has been exposed to the virus and has started producing antibodies.
 - b. He has a definitive diagnosis of AIDS
 - c. He is experiencing an inflammatory response that can be cured with antibiotics.
 - d. This result is normal and requires no cause for concern.

7. What was the possible mode of transmission of the virus to Mandla?
 - a. Unprotected sexual intercourse with multiple partners
 - b. Sexual intercourse with his wife
 - c. Drinking alcohol with his friends
 - d. Being a blood donor

8. Mandla's wife is very concerned about their unborn child. Mandla asks what the risks are to his wife and unborn child. Your best response would be:
 - a. Viruses rarely cross the placenta
 - b. You should have thought about your lifestyle before you put innocent people at risk
 - c. It would be wise for your wife to be tested for exposure to the virus
 - d. There is no reason to worry until your wife develops symptoms of inflammation.

9. The following precautions should be taken when nursing Mandla except:
 - a. Handwashing
 - b. Wearing gloves
 - c. Wearing face masks
 - d. Putting a screen around his bed.

10. When Mandla is put on antiretroviral therapy education should emphasize the importance of:
- Compliance
 - Good nutrition
 - Safe sexual practices
 - All the above factors

Situation: Zodwa is admitted to the emergency department following a car accident. Trauma to the chest from the steering wheel is present. It is determined that she has fractured ribs. Questions 11-12 refer to this situation.

11. Which of the following should the nurse be particularly vigilant for?
- Haemothorax
 - Tracheobronchial tear
 - Flail chest
 - Asthma
12. Zodwa needs to be observed for impaired gas exchange due to ventilation/perfusion imbalance. The findings most indicative of this nursing diagnosis are:
- Chest pain and cough
 - Subjective improvement when oxygen therapy is initiated
 - Minor changes in the vital signs
 - Arterial blood gases
13. A nurse explaining to a patient that he has haemothorax will state that 'blood is accumulating in your:
- Chest wall
 - Bronchial tree
 - Pleural space
 - Thoracic cavity
14. You are nursing a patient who is haemorrhaging. You would expect:
- The heart stroke volume to increase
 - The heart rate to increase
 - The blood pressure to increase
 - The urinary output to increase
15. A patient's Mantoux skin test is found to be positive for a patient who comes to your clinic complaining of recurrent coughing and low grade fever. Which of the following tests would provide a most definitive diagnosis of pulmonary tuberculosis?
- Blood culture
 - Chest X-ray
 - Lung scan
 - Sputum culture

16. A 68 year old female is admitted with diagnosis of fractured left hip. X-rays of the left femur reveal 40% demineralization with decreased bone density. These findings are indicative of which following bone disorders?

- e. Osteoporosis
- f. Osteoarthritis
- g. Osteomalacia
- h. Osteomyelitis

17. Demineralisation of this patient's bone places her at risk for:

- a. Fracture
- b. Infection
- c. Haemorrhage
- d. Ankylosis

18. The patient is done open reduction. Which position should the patient be placed in postoperatively ?

- a. Supine with legs adducted
- b. Lateral with legs elevated
- c. Supine with legs abducted
- d. Sidelying with legs internally rotated

19. A patient who is unconscious should be nursed utilizing which Orem's nursing system?

- a. Wholly compensatory
- b. Supportive-educative
- c. Partially compensatory
- d. Primary health care

20. It is important for every nurse to be aware that individuals have needs. According to Maslow's hierarchy of needs which of the following are to be considered first?

- a. Need for safety and security
- b. Need for love and belonging
- c. Physiological needs
- d. Self esteem needs

21. When trying to measure pain intensity in children, which of the following is the best instrument to use?

- a. Categorical scale
- b. Visual analogue scale
- c. Faces scale
- d. No scale

22. When a patient is advised to use imagery in order to control pain which aspect is being taken care of?

- a. Affective -emotional
- b. Sensory - discriminative
- c. Cognitive - evaluative
- d. Affective-motivational

23. When nursing a patient with diarrhea the nurse has to be aware that the main complication to arise in this patient is :
- Loss of appetite
 - Nausea
 - Electrolyte imbalance
 - Fatigue
24. What specific nursing consideration has to be undertaken when giving digitalis?
- Counting the apical pulse and withholding the drug if rate is below 60.
 - Ensuring that the patient takes the drug with plenty water
 - Ensuring that the pulse is full and bounding
 - Ensuring that the drug is given at the right time
25. An example of cutaneous stimulation in pain management is :
- Massage
 - Application of hot electrodes to the painful area
 - Letting the patient watch a funny vide recording
 - Exercising the painful area

Question 2

Instruction : read the situation and answer the questions that follow in your answer book.

Situation

A 22 year old female patient presents with right lower quadrant pain accompanied by nausea and loss of appetite. Her vital signs are : Temperature = 37.9⁰C, Pulse 85 and BP 120/80mmHg. The doctor orders a complete blood count which reveals an increase in white blood cells.

Questions

- 2.1. What three (3) more questions can you ask her to help in diagnosing her condition ?
(3)
- 2.2. The doctor diagnoses acute appendicitis. Where is the point of tenderness located in this condition?
(1)
- 2.3. What is the major complication of this condition?
(1)
- 2.4. An appendectomy is scheduled for this patient. List the goals of nursing management for this patient
(5)
- 2.5 Discuss the pre and postoperative nursing management for her until discharge.
(15)
- TOTAL [25 marks]**

Question 3

Situation: You are teaching a group of secondary school children about fractures as part of their physical education. Questions 3.1 and 3.2 refer to this situation.

- 3.1 Explain 5 clinical manifestations of fractures. (10)
- 3.2 State 5 factors that enhance fracture healing. (5)
- 3.3 Define the following terms related to fractures
- i. Fracture reduction
 - ii. Impacted fracture
 - iii. Nonunion
 - iv. Traction
 - v. Spica cast (5)
- 3.4 State any five principles of effective traction. (5)
- TOTAL [25 marks]**

Question 4**Situation**

A patient is brought to the outpatient department with symptoms of cough, chest tightness, wheezing and dyspnoea which started after grass cutting at home.

Questions

- a) What is the possible diagnosis? (1)
- b) Describe the pathophysiology associated with the symptoms the patient presents with. (5)
- c) In teaching this patient what areas would you address regarding the triggers of the condition. (10)
- d) Discuss the nursing management of this patient during the acute stage. (9)

TOTAL [25marks]