

**UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF GENERAL NURSING**

FINAL EXAMINATION, DECEMBER 2017

TITLE: MEDICAL-SURGICAL NURSING I

COURSE CODE: GNS 211

TIME ALLOCATED: TWO (2) HOURS

MARKS ALLOCATED: 75

INSTRUCTION:

- **ANSWER ALL QUESTIONS**
- **THERE ARE SIX (6) PRINTED PAGES EXCLUDING COVER PAGE**
- - **SECTION A: OBJECTIVE QUESTIONS WORTH 25 MARKS**
 - **SECTION B: STRUCTURED QUESTIONS WORTH 50 MARKS**

**DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO
BY THE INVIGILATOR**

SECTION A: OBJECTIVE QUESTIONS (25 MARKS)

QUESTIONS 1

For each part-question, choose the most appropriate response and write in your answer booklet the corresponding letter only, in **capital letters**, e.g. 31

B. Each correct response carries 1 mark.

- 1.1. According to Orem's theory of nursing, a hypertensive client who has no any signs and symptoms would require _____
- A. No nursing care.
 - B. A wholly compensatory nursing system
 - C. A partially compensatory nursing system
 - D. A supportive nursing system
- 1.2. The pathophysiology of HIV involve _____
- A. Entrance of the viral envelope (coat) into the CD 4 cell
 - B. Attachment of P17 and P 24 to CD4 cell receptors
 - C. Production of viral proteins by the CD4 cell
 - D. Integration of the CD4 DNA into the viral RNA
- 1.3. The normal level of CD cell count is about _____ cells/ml
- A. 1000 and above
 - B. 500
 - C. 350
 - D. 200
- 1.4. Why is it difficult to come up with a cure for HIV? It is partly because _____
- (i). The virus is too small for drugs to penetrate
 - (ii). The structure of the virus is not clearly understood
 - (iii). It changes fast in its replication
 - (iv). It is not a living organism
- A. i & ii
 - B. iii & iv
 - C. ii & iii
 - D. iii only
- 1.5. Which of the following is correct about sterilization and disinfection:
- A. Both sterilization and disinfection can only be done in a hospital setting
 - B. Disinfection is more effective than sterilization

- C. Washing a contaminated utensil with soap is a method of sterilization
- D. Both sterilization and disinfection can be effective against HIV

1.6. A client who has been taking anti-TB treatment for some time came back to the hospital worried and complaining that his urine and tears were now redish brown in colour. Which of the following would be the best intervention as nurse?

- A. Refer to the doctor immediately for a possible change of the treatment regiment
- B. Change the client to another treatment regimen
- C. Reassure the client that the problem is common among people on such treatment and it will clear off once he finishes the treatment course
- D. Adjust the dosage of the client's medication.

1.7. In tension pneumothorax _____

- A. Air is sucked on inspiration, & expelled on expiration
- B. Mediastinum swings
- C. Intrapleural pressure progressively builds up.
- D. A. and B

1.8. Which of the following best describes the relationship between HIV, STIs and Opportunistic infections?

- (i). A person with HIV is highly likely to develop any other STI
 - (ii). A person with any STIs is highly likely to acquire HIV
 - (iii). A person with HIV is likely to develop any opportunistic infection
 - (iv). A person with any opportunistic infection is HIV positive
- A. i & ii
 - B. iii & iv
 - C. ii & iii
 - D. i, ii, iii & iv

A client came at casualty, struggling to breath, following a stab on the chest with an iron rod by a rival in a fight. The rod has already been removed, leaving an open wound into the thoracic cavity. Questions 1.9 and 1.10 refer to this scenario.

1.9. Which of the following would be the most appropriate immediate action to take as a nurse?

- A. Do a thorough history taking and physical examination
- B. Perform a wound dressing, strictly observing principles of asepsis
- C. Close the wound with a sterile gauze

- D. Administer high flow oxygen per-face mask.
- 1.10. Which of the following interventions may also be necessary for this client?
- A. Underwater seal drain
 - B. Tracheotomy
 - C. Lumber puncture
 - D. Collection of a sputum specimen
- 1.11. To a client who has been scheduled for an abdominal surgery, as a nurse, which of the following would be a relevant pre-operative intervention to implement?
- (i). Teaching the client some breathing exercises
 - (ii). Administering an enema
 - (iii). Initiating an IV infusion
 - (iv). Initiate a blood transfusion
- A. i, ii & iii
 - B. ii, iii & iv
 - C. i & ii
 - D. i, ii, iii & iv
- 1.12. Precisely, what causes elephantiasis?
- (i). High blood pressure
 - (ii). A parasitic infection
 - (iii). Over-eating
 - (iv). Congenital malformation of the lymphatic system
- A. i & iii
 - B. ii & iv
 - C. iii only
 - D. i, ii, iii & iv
- 1.13. A chest X-ray revealed that a client has stage 1 lung cancer. Which of the following is correct about this client?
- A. All the cancer cells in the client are still of one type
 - B. Surgery is the preferred method of treatment
 - C. The tumors have moved to other lobes but still in one lung
 - D. This type of cancer will never spread
- 1.14. A barrel chest is usually an indication of _____
- A. Flail chest
 - B. Brochitis
 - C. Ephysema
 - D. Pneumonia

1.15. After some prolonged period of lying in bed, on the first attempt to get out of bed, a postoperative patient is likely to suffer from _____.

- A. Fractures or injuries
- B. Orthostatic hypotension
- C. Excessive bleeding
- D. Severe headache

State whether each of the following statements (1.16-1.18) is true (T) or false (F) and write the corresponding letter only.

- 1.16. Some forms of pneumonia have no cure
- 1.17. Majority of cases of hypertension are of unknown cause
- 1.18. Scrubbed hands are considered sterile in surgical asepsis

Match each of the disease conditions in column A with the most appropriate diagnostic test in column B

Column A – Disease Condition	Column B - Diagnostic test
1.19. Flail chest	A. Electrocardiography (ECG)
1.20. Angina pectoris	B. Biopsy
1.21. Common cold	C. Gene Xpert
	D. X-ray
	E. Electroencephalography (EEG)
	F. Arterial blood gasses
	G. None of the above

Match each of the disease conditions in column A with the most appropriate clinical manifestation in column B

Column A – Disease Condition	Column B - Clinical Manifestation
1.22. Deep vein thrombosis	A. Swollen legs
1.23. Tonsilitis	B. Productive cough
1.24. Elephantiasis	C. Fever
1.25. Angina pectoris	D. Usually asymptomatic
	E. Chest pains that worsen on exertion
	F. Hoarse voice
	G. None of the above

SECTION B: SHORT ESSAY QUESTIONS [50 Marks]

Answer the following questions as asked. Figures in brackets indicate marks allocated for each question.

Question 2 (25 Marks)

- (a) Give a brief explanation to each of the following
- (i). To an HIV – TB co-infected person, anti-TB treatment is initiated first, then wait for a while before initiating ART [2]
 - (ii). It is difficult to come up with a cure for HIV [2]
 - (iii). People with hypertension are advised to reduce their salt intake [2]
 - (iv). Anginal pain can be alleviated resting [2]
- (b) A 61 year old man who has just retired from the mine where he has been working over the past 15 years, came to the hospital presenting with productive cough and at times dyspneic for over a month now. Further examination showed that his finger nails were also clubbing, and wheezing breaths sounds were detected on auscultation. Vital were as follows: Temperature 36.9°C; BP 118/83; Respirations 28 breaths/min; Pulse 86 beats/min. Based on this scenario:
- (i). State the condition which this man is suffering from, justifying your answer by clearly distinguishing it from other similarly presenting conditions. [6]
 - (ii). State any three further investigations that can be used to confirm this condition [3]
 - (iii). Discuss the comprehensive management of this client from both the medical and nursing perspective [8]

Question 3 (25 Marks)

- (a) You have just started a shift at a clinic and a client came to collect her HIV test results from the blood specimen collected from her the previous week. You check and realize that ELISA test was performed and the results were negative. Interpret these results to the client, with explanations, and give appropriate recommendations [7]

- (b) Describe and explain the differences in clinical manifestation between right- and left-sided heart failure in terms of the pathophysiology and clinical manifestations [10]
- (c) Develop a nursing care plan for a client with left sided heart failure, based on any two priority nursing diagnosis [8]