

**UNIVERSITY OF SWAZILAND**  
**FACULTY OF HEALTH SCIENCES**  
**GENERAL NURSING SCIENCE DEPARTMENT**  
**SEMESTER 2**  
**FINAL EXAMINATION – MAY 2010**

**COURSE CODE : NUR 421**  
**COURSE TITLE : HEALTH ASSESSMENT**  
**TIME ALLOCATED: 2 HOURS**  
**MARKS ALLOCATED: 75**

**INSTRUCTIONS:**

- 1. ANSWER ALL THREE QUESTIONS.**
- 2. EACH QUESTION CONSISTS OF 25 MARKS.**
- 3. ONE MARK IS ALLOCATED FOR EACH CORRECT FACT UNLESS OTHERWISE INDICATED.**

***THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.***

## QUESTION I

**For each of the following multiple choice statements, select the most appropriate answer and write it in your answer book e.g. 1=A**

1. In epidemiological terms the total number of cases of a disease present in a given population during a particular time is known as which of the following?
  - A. Attributable risk
  - B. Incidence
  - C. Mortality rate
  - D. Prevalence
  - E. Relative risk ratio
  
2. Which of the following body fluids have been proven to transmit HIV infection?
  - A. Saliva, tears, serous fluid, and vaginal secretions
  - B. Saliva and cervical secretions
  - C. Blood, sweat and tears
  - D. Blood, semen, breast milk, vaginal and cervical secretions
  - E. Blood, semen and tears
  
3. HIV primarily infects which of the following cells?
  - A. B cells
  - B. CD4+ T-lymphocyte cells
  - C. CD8+ T-lymphocyte cells
  - D. Dendritic cells
  - E. Macrophages
  
4. HIV transmission has been most often associated with which of the following?
  - A. Blood transfusions
  - B. Injection drug use
  - C. Insect bites
  - D. Perinatal transmission
  - E. Unprotected sexual activities

5. Which of the following best predicts whether a patient with HIV will progress to AIDS?
- A. Age of HIV infection
  - B. CD4+ T-cell count + viral load
  - C. CD8 cell count + T cell count
  - D. Number of sexual partners
  - E. Viral load
6. Which of the following cells are responsible for killing HIV-infected cells (i.e., have a cytotoxic function)?
- A. B cells
  - B. CD4 cells
  - C. CD8 cells
  - D. Dendritic cells
  - E. Macrophages
7. An AIDS patient, who is being treated with multiple drugs, develops breast hypertrophy, central adiposity, hyperlipidemia, insulin resistance and nephrolithiasis. If these changes are related to his drug treatment, this drug belongs to which group of anti-retroviral drugs?
- A. Nucleoside Reverse Transcriptase Inhibitors (NRTIS)
  - B. Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIS)
  - C. Fusion Inhibitors
  - D. Protease Inhibitors
  - E. Integrase Inhibitors
8. A 35 year old HIV old male patient comes to the OPD with gonorrhoea. The nurse explains to the patient that treatment will include both ceftriaxone and doxycycline because:
- A. Most patients do not respond to ceftriaxone alone
  - B. Coverage with more than one antibiotic prevents re infection
  - C. No single agent successfully eradicates all strains of gonorrhoea
  - D. The high rate of coexisting Chlamydia and gonorrhoea indicates dual coverage
9. The cause of primary (essential) hypertension is:
- A. Kidney disease
  - B. Drugs
  - C. Pregnancy
  - D. Unknown
  - E. None of the above

10. Which of the following might be seen in patient of TB, who has regularly been injecting intramuscular injection of streptomycin?
- A. Depression
  - B. Sialorrhoea
  - C. Diarrhoea
  - D. Blindness
  - E. Deafness
11. A 25 year old male presents to OPD with complaint of cough and low grade fever since the last 3 months. Laboratory tests show sputum positive for acid fast bacteria. Which of the following combination of drugs is most likely to be administered at the start of this patient?
- A. Ethambutol, Isoniazid, Rifampicin and Pyrazinamide
  - B. PAS, Pyrazinamide and Rifampicin
  - C. Pyrazinamide, Ethambutol and Isoniazid
  - D. Streptomycin and Rifampicin
  - E. Streptomycin only
12. A 25 year old male has been given treatment for pulmonary tuberculosis for two (2) months as initial phase. Now he comes to the OPD for medication for the continuation phase. Which of the following drugs will he most likely be given for the continuation phase?
- A. Pyrazinamide and Isoniazid
  - B. Ethambutol and Streptomycin
  - C. Isoniazid and Rifampicin
  - D. Rifampicin and Streptomycin
  - E. Ethambutol and Pyrazinamide
13. A 35 year old female taking medications for TB and oral contraceptives comes to the gynaecology OPD with complaints of amenorrhoea. Laboratory tests show a positive pregnancy test. Which one of the following drugs most likely caused her to be pregnant?
- A. Rifampicin
  - B. Pyrazinamide
  - C. Streptomycin
  - D. Ethambutol
  - E. Isoniazid

14. Which of the following is/are cause(s) of urethral discharge in men?
- A. N. Gonorrhoea
  - B. C-trachomatis
  - C. T-vaginalis
  - D. All of the above
  - E. None of the above
15. Which of the following are limitations of sexually transmitted infections management using the syndromic approach?
- A. It misses double infections
  - B. It promotes development of resistance to antibiotics
  - C. It misses asymptomatic infections
  - D. All of the above
  - E. None of the above
16. Which of the following drugs is\are contra-indicated during pregnancy?
- A. Doxycyclin
  - B. Tetracyclin
  - C. Ciprofloxacin
  - D. A and B
  - E. All of the above
  - F. None of the above
17. A patient with Hepatitis A is in the prodromal (pre-icteric) phase. The nurse plans care for the patient based on the knowledge that:
- A. Pruritis is a common problem with jaundice in this phase
  - B. The patient is most likely to transmit the disease during this phase
  - C. Gastro-intestinal symptoms are not as severe as in hepatitis A as they are in hepatitis B.
  - D. Extra-hepatic manifestations of glomerulonephritis and polyarteries are common in this phase
18. A patient with hepatitis B is being discharged in 2 days. The nurse includes in the discharge teaching plan instructions to:
- A. Avoid alcohol for three (3) weeks
  - B. Use a condom during sexual intercourse
  - C. Have family members get an injection of immuno globulin
  - D. Follow a low protein, moderate carbohydrate and fat diet

19. An 18 year old is having a severe asthma exacerbation. Which of these physical findings may be absent during an asthma attack?
- A. Tachypnoea
  - B. Wheezing
  - C. Prolonged expiration
  - D. Tachycardia
20. The most appropriate activities to teach a client regarding self management of chronic heart failure would be to emphasise:
- A. Recording body weight daily and assessing symptoms on a daily basis
  - B. Recording body weight daily and measuring ventricular function regularly
  - C. Assessing symptoms of electrolyte imbalance on a regular basis
  - D. Checking potassium levels regularly and recording body weight daily
21. An abnormal finding by the nurse during endocrine assessment would be:
- A. Blood pressure of 100/70
  - B. Soft, formed stool every other day
  - C. Excessive facial hair on a woman
  - D. Two (2) kilogramme weight gain over last six (6) months
22. An appropriate technique to use during physical examination of the thyroid gland is:
- A. Asking the patient to hyper extend the neck during palpation
  - B. Percussing the neck for dullness to define the size of the thyroid
  - C. Having the patient swallow water during inspection and palpation of the gland
  - D. Using deep palpation to determine the extent of a visibly enlarged thyroid gland
23. The nurse assists the patient with nutritional therapy of diabetes with the knowledge that a "diabetic diet" is designed:
- A. To be used only for type 1 diabetes
  - B. For use during periods of high stress
  - C. To normalise blood glucose by eliminating sugar
  - D. To help normalise blood glucose through a balanced diet

24. The most effective intervention in decreasing absorption of an ingested poison is:
- A. Ipecac syrup
  - B. Milk dilution
  - C. Gastric lavage
  - D. Activated charcoal
25. An elderly man arrives in OPD emergency department disoriented and breathing rapidly. He has a hot dry skin. The priority for treatment at this point is to:
- A. Start oxygen administration and have the doctor see him
  - B. Assess his airway, breathing and circulation
  - C. Obtain a detailed medical history from his family
  - D. Determine if he can pay before treating him

**(Total = 25 marks)**

## **QUESTION 2**

A 35 year old man comes to a surgical ward with a human bite wound on the gastrocnemius muscle of the right leg. The lacerations look septic.

- 2.1 Mention 3 types of most common bacteria causing infection on human bite lacerations. [3]

Mr Thambo comes to your ward complaining of pain on the left ankle. On physical examination two fangs marks are noticed, where pain is. Medical diagnostic is "Snake bite"

- 2.2 Describe 4 neurologic symptoms Mr. Thambo may present following a snake bite. [4]

The ringworm (Tinea) is a fungal infection that affects many body parts eg. The head, the foot and the body.

- 2.3 Describe the ring worm of each of these body areas.

2.3.1. the head [6]

2.3.1. the foot [6]

- 2.4 Describe clinical manifestations of "Acute Otitis media" [6]

**TOTAL MARKS 25**

### **QUESTION 3**

Mrs Khulu (a 40 year old lady) comes to a medical ward complaining of impaired vision. She looks obese and the obesity is more marked abdominally. Her medical diagnosis is: Diabetes Mellitus”

- 3.1 Describe the pathophysiology of Type 2 diabetes mellitus. [10]
- 3.2 Describe the diagnostic measures of Type 2 diabetes mellitus as a collaborative care [9]  
Hypothyroidism occurs as a result of insufficient thyroid hormone circulation which is due to many abnormalities.
- 3.3 Mention abnormalities leading to insufficient thyroid hormone circulation. [6]

**TOTAL MARKS 25**