

**UNIVERSITY OF SWAZILAND**

**FACULTY OF HEALTH SCIENCES**

**FINAL EXAMINATION PAPER, DECEMBER 2010**

**TITLE OF PAPER: NURSING SCIENCE AND ARTS III**

**COURSE CODE: NUR 340**

**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. EACH CORRECT STATEMENT OR FACT WITH SCIENTIFIC RATIONALE CARRIES ONE (1) MARK.**
- 5. WRITE LEGIBLY.**

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

### QUESTION 1

Mr K, is 36 years of age is admitted to your ward after having first and second degree thermal burns of both arms, two weeks ago (he was unable to seek medical assistance), and utilized home remedies for burns. He complains of wounds, pain, and pus oozing from the wounds.

- A. Describe the pathophysiology on fluid and electrolyte shift. (7)
- B. Formulate three (3) nursing diagnoses for Mr. K's complaints (wounds, pain, and pus oozing) (3)
- C. Manage Mr K based on the diagnosis developed above (in B), also indicate the expected outcome for your interventions. (15)

**TOTAL 25 MARKS**

### QUESTION 2

- A. Following the circumcision campaign, Mayo, a 3<sup>rd</sup> Year University of Swaziland student decides to go for the circumcision procedure at the Mbabane Government Hospital. Develop relevant nursing diagnoses and render post-operative nursing care to Mayo. (12)
- B. Mrs Bingi who is 42 years old is admitted to your ward with history of drinking alcohol for the past 15 years. Now she presents with oedema of the lower extremities, ascites, and general malnutrition. Following the physical examination and several diagnostic tests she was diagnosed as suffering from liver cirrhosis.
- (i) Describe the pathophysiology of liver cirrhosis. (5)
- (ii) Describe the scientific rationale for each of the following clinical manifestations:
- a. Jaundice (2)
  - b. Anaemia (2)
  - c. Deficiency in Vitamins A,D, and K (2)
  - d. Pruritis (2)

**TOTAL 25 MARKS**

### QUESTION 3

Identify the letter of the choice that best completes the statement or answers the question e.g. 2. B

**SITUATION:** Mr. X, an 18 year old boy is admitted to the medical ward and is complaining of persistent flank pain. A physical examination and several diagnostic tests were conducted, and was eventually diagnosed to be suffering from chronic renal failure. Questions 1 – 9 relate to the above situation.

1. You will expect the blood urea nitrogen level (BUN) to be \_\_\_\_\_ in Mr. X.

- A. decreased
- B. elevated
- C. normal
- D. absent

2. The serum creatinine level in Mr. X will be \_\_\_\_\_.

- A. decreased
- B. elevated
- C. normal
- D. absent

3. The BUN test is more sensitive in diagnosing renal disease than the creatinine test.

- A. True
- B. False

4. Clinical manifestations of renal failure include all of the following **EXCEPT**:

- A. periorbital edema
- B. proteinuria
- C. lower abdominal pain
- D. retinal edema

5. The potential complication related to the accumulation of nitrogenous wastes in the body (azotemia) is \_\_\_\_\_.

- A. encephalopathy
- B. cardiac failure
- C. anaemia
- D. infection

6. The potential complication related to the inability of the produce erythropoietin is \_\_\_\_\_.

- A. encephalopathy
- B. cardiac failure
- C. anemia
- D. infection

7. The prevention of urinary tract infection includes all of the following EXCEPT:

- A. taking a shower
- B. taking a tub bath
- C. emptying the bladder as soon as there is the urge to do so
- D. wiping the perineum from the front to the back

8. The diet of Mr. X will be restricted in \_\_\_\_\_.

- A. vitamins
- B. calories
- C. proteins
- D. carbohydrates

9. 10. An elevation in blood urea nitrogen (BUN) level definitely indicates that

- A. renal disease is present
- B. liver disease is present
- C. overhydration exist
- D. protein intake is high

**SITUATION:** Ms Henwell who is 45 years old is admitted to the medical ward. She complains of urine frequency, polyphagia, and weight loss. Her mother who is 88 years of age suffers from diabetes mellitus.

Questions 10 - 16 relate to the above situation.

10. Ms Henwell is scheduled for a fasting blood sugar test tomorrow morning. She should therefore:

- A. take nothing per mouth (os) for 6 hours
- B. take nothing per mouth (os) for 12 hours
- C. take juice for 6 hours before the procedure
- D. take juice for 12 hours before the procedure

11. Patients with hypoglycemia are at risk for injury related to:

- A. oliguria and nephropathy
- B. polydipsia and polyphagia
- C. dizziness and weakness
- D. retinopathy and hypotension

12. The absence of endogenous insulin characterises

- A. Type 1 diabetes mellitus
- B. Type 1 diabetes mellitus
- C. Diabetes insipidus
- D. Insulin resistance

13. Tissue breakdown and burning of lean body mass send hunger signals to the hypothalamus; consequently, the patient experiences \_\_\_\_\_.

- A. polydipsia
- B. polyphagia
- C. weight loss
- D. polyuria

14. Which of the following represents normal fasting serum glucose levels?

- A. 30 – 50 mg/dl
- B. 80 – 120 mg/dl
- C. 150 – 200 mg/dl
- D. 205 – 300 mg/dl

15. Which injection site has the fastest rate of absorption for insulin?
- A. upper arm
  - B. upper buttocks
  - C. abdomen
  - D. thighs
16. To detect possible changes in the eyes associated with diabetes mellitus, the nurse enquires whether the patient has had, floaters, blurred vision, or:
- A. hemorrhage
  - B. infection
  - C. diplopia
  - D. conjunctivitis

**SITUATION:** Mr M is 55 years of age and presents with urine retention. A digital rectal examination revealed an enlarged prostate. Questions 17 – 19 relate to the above situation.

17. Malignant prostatic hyperplasia develops from the inner aspect of the prostate.
- A. True
  - B. False
18. Voiding symptoms of prostatic hyperplasia include all of the following EXCEPT:
- A. Incomplete bladder emptying
  - B. Dribbling
  - C. Incontinence
  - D. difficulty in initiating voiding
19. The prostate specific antigen is elevated in prostatitis.
- A. True
  - B. False
20. A Hydrocele is a tender and painless accumulation of interstitial fluid in the tunica vaginalis.
- A. True
  - B. False

**SITUATION:** Ms Y who is 23 years old presents with a vulval sore which developed in the past three (days). She has been experiencing recurrent sexually transmitted infections.

Questions 21 – 24 relate to the above situation.

21. Taking alcohol before the VDRL test will produce \_\_\_\_\_ results.

- A. false negative
- B. false positive
- C. highly reactive
- D. None of the above

22. At the \_\_\_\_\_ stage of syphilis the VDRL is not able to detect the treponema pallidum spirochete.

- A. primary
- B. secondary
- C. tertiary
- D. latent

23. The VDRL test is useful in detecting \_\_\_\_\_ syphilis

- A. primary
- B. secondary
- C. tertiary
- D. latent

24. The secondary stage of syphilis occurs in \_\_\_\_\_ years.

- A. 0 to 1
- B. 1 to 2
- C. 2 to 3
- D. 1 to 3

25. Women aged below 40 years and above require a Papanicolaou smear test every

- 
- A. year
  - B. 2 years
  - C. six months
  - D. 18 months

**TOTAL 25 MARKS.**