

UNIVERSITY OF SWAZILAND

FACULTY OF HEALTH SCIENCES

FINAL EXAMINATION

MAY 2015

COURSE TITLE : ADVANCED MEDICAL AND SURGICAL NURSING

COURSE CODE : NUR 511

TIME ALLOCATED: 2 (TWO) HOURS

MARKS ALLOCATED: 75

INSTRUCTIONS:

- 1. ANSWER ALL THREE QUESTIONS**
- 2. EACH QUESTION IS ALLOCATED 25 MARKS**
- 3. WRITE LEGIBLY**

QUESTION 1

MULTIPLE CHOICE

For each of the following statements/questions select the most appropriate response e.g. 1 = D

Questions 1 - 5 relates to diabetes mellitus

1. Polydipsia and polyuria related to diabetes mellitus are primarily due to:
 - A. The release of ketones from cells during fat metabolism
 - B. Fluid shift resulting from osmotic effect of hyperglycaemia
 - C. Damage to the kidneys from exposure to high level of glucose
 - D. Changes in oxygen consumption

2. Which statement by the patient with type 1 diabetes is accurate
 - A. "I am supposed to have a meal or snack if I drink alcohol"
 - B. "I am not allowed to eat any sweets because I am diabetic"
 - C. "I do not need to watch what I eat because my diabetes is not the bad kind"
 - D. The amount of fat in my diet is not important

3. What is the priority action for the nurse to take if the patient with type 1 diabetes complain of blurred vision and irritability
 - A. Call the physician
 - B. Administer insulin as ordered
 - C. Check the patient's blood glucose
 - D. Assess for neurologic symptoms

4. A diabetic patient has a serum glucose level of 824 mg/dl (4.57 mmol) and unresponsive. After assessing the patient, the nurse suspects diabetic ketoacidosis based on which of the following findings
 - A. Polyuria
 - B. Severe dehydration
 - C. Rapid, deep respirations
 - D. Decreased serum potassium

5. You are caring for a patient with newly diagnosed type 1 diabetes. What information is essential to include in your teaching before discharge
- Insulin administration
 - Elimination of sugar from diet
 - Need to reduce physical activity
- i, ii
 - ii and iii
 - ii only
 - i and iii
6. The patient with advanced cirrhosis asks why his abdomen is so swollen. The nurses response is based on knowledge that;
- A lack of clotting factors promotes the collection of blood in the abdominal cavity
 - Portal hypertension and albuminemia cause a fluid shift into the peritoneal space
 - Decreased peristalsis in the GI tract contributes to gas formation and distension of the bowel
 - Bile salts in the blood irritates the peritoneal membrane, causing oedema
7. Nursing management for patient with acute pancreatitis includes
- Checking for signs of hypoglycaemia
 - Providing a diet in low carbohydrates
 - Monitoring for infection
- i. only
 - i. and ii
 - ii. Only
 - i. and iii
8. Patients with chronic kidney disease experience cardiovascular diseases related to the following except;
- Hypertension
 - Vascular calcification
 - Genetic predisposition
 - dyslipidemia
9. To assess patency of a newly placed arteriovenous graft for dialysis, the nurse should do the following EXCEPT;
- Irrigate the graft daily with low dose heparin
 - Palpate the area of the graft to feel normal thrill
 - Listen with the stethoscope overgraft to detect bruit
 - Frequently monitor the pulse distal to the graft

10. The normal hormonal response to serum sodium level of 155 mEq/L is
- A. Secretion of aldosterone
 - B. Release of ACTH
 - C. Release of ADH
 - D. Release epinephrine
11. A patient with a spinal cord injury at T4 his/her vital signs would include falling blood pressure with bradycardia. The nurse recognizes that the patient is experiencing
- A. Relative hypervolemia
 - B. An absolute hypervolemia
 - C. Neurogenic shock low blood flow
 - D. Neurogenic shock due to massive vasodilatation
12. Major functions of the thyroid hormone include all **EXCEPT**;
- A. Increase protein metabolism
 - B. Increase serum cholesterol levels
 - C. Increase oxygen consumption and use
 - D. Increase basal metabolism
13. Mr Simelane was involved in a car accident and is admitted to the intensive care unit because of trauma. Statistics demonstrate that death as a result of trauma occur mostly (50%) due to
- A. Sepsis
 - B. Extensive blood loss
 - C. Laceration of the brain or brain stem
 - D. Multiple organ dysfunction
14. The following factors predispose the trauma patient to impaired oxygenation **EXCEPT**;
- A. Injury to airway structures
 - B. Aspiration of gastric contents
 - C. Decreased metabolic demands
 - D. Reduced haemoglobin and cardiac output

15. Shock can be classified as hypovolemic, cardiogenic or distributive. These may lead to the following **EXCEPT**;
- A. Acute kidney injury
 - B. Cardiac and respiratory depression
 - C. Sympathetic nervous system hyperfunction
 - D. Coma
16. Trauma patients are particularly vulnerable to developing multiple organ dysfunction syndrome (MODS) which is manifested by all **EXCEPT**:
- A. Infection
 - B. Cardiogenic shock
 - C. Tissue ischemia or hypoxia
 - D. Aspiration of gastric contents
17. Manifestation of organ dysfunction in MODS includes all **EXCEPT**;
- A. Abdominal distension
 - B. Jaundice
 - C. Infection
 - D. Increased glomerular filtration rate
18. Initial emergency management for burns includes all **EXCEPT**;
- A. Airway management
 - B. Respiratory management
 - C. Wound care
 - D. Circulatory management

TRUE AND FALSE QUESTIONS

For the following questions/statements state whether true or false e.g 28 = F

19. The electrolyte fluid of choice for burns during the first 24 hours is Ringer's lactate T.F
20. The most common type of burns in Swaziland are thermal burns T.F
21. The first component of burn shock is cardiogenic shock T.F
22. Metabolic acidosis in acute kidney injury is a result of accumulation of waste products T.F
23. In Glasgow Coma Scale special attention is given to the opening of the eye T.F
24. Pupillary function focuses pupil size reaction to light and eye movement T.F

25. Damage to the midbrain and upper pons often leads to metabolic acidosis T.F.

(25 MARKS)

QUESTION 2

Mr Shongwe, 58 years, was admitted with 36% burns of the body following a gas stove explosion in his house

- A. Identify clinical manifestations of injury in the following (three each)
- i. Airway and respiratory functioning (3)
 - ii. Circulatory functioning (3)
 - iii. Kidney functioning (3)
 - iv. Gastro intestinal functioning (3)
- B. Discuss your nursing management of any six of the identified manifestations (2 for each)
- (13)

(25 MARKS)

QUESTION 3

Motor vehicle accidents are common in Swaziland, clients admitted in hospital are often in shock

- a) Briefly describe the pathophysiology of shock. (10)
- b) Discuss the nursing management of hypovolemic shock due to injury under the following,
- i. Five nursing diagnoses (5)
 - ii. Nursing interventions for each nursing diagnosis (at least two for each) (10)

(25 MARKS)

TOTAL - 75 MARKS