UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
GENERAL NURSING SCIENCE DEPARTMENT
MAIN EXAMINATION - DECEMBER 2017

COURSE TITLE: ADVANCED MEDICAL-SURGICAL NURSING III

COURSE CODE : NUR 510
EXAMINER : JV MDLULI
DURATION : 2 HOURS

TOTAL MARKS: 75

NUMBER OF PAGES: 6

INSTRUCTIONS:

1. ANSWER ALL YOUR QUESTIONS ON THE PROVIDED ANSWER BOOKLET.

2. QUESTION 1 IS MULTIPLE CHOICE AND HAS 25 QUESTIONS.

3. QUESTIONS 2 and 3 ARE SHORT AND LONG ESSAY TYPE QUESTIONS AND CARRY MARKS AS INDICATED.

4. EACH CORRECT POINT/FACT/STATEMENT IS WORTH 1 MARK UNLESS INDICATED OTHERWISE ON THE QUESTION.

START EACH QUESTION ON A NEW PAGE

DO NOT OPEN THE EXAMINATION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR
1.1 A patient is having complications from abdominal surgery and remains NPO. Because enteral tube feedings are not possible, the decision is to initiate parenteral feedings. What are the major complications for this therapy?
   a. Aspiration pneumonia and sepsis
   b. Fluid and electrolyte imbalances and sepsis
   c. Fluid overload and pulmonary edema
   d. Hypoglycemia and renal insufficiency

1.2 The patient is to start parenteral nutrition. The nurse knows to prepare which site for catheter insertion?
   a. Basilic vein
   b. Femoral vein
   c. Radial artery
   d. Subclavian vein

1.3 A nurse is monitoring a patient’s nutrition. Which of the following blood tests is the most sensitive indicator of protein synthesis and catabolism?
   a. Albumin
   b. BUN
   c. Prealbumin
   d. Triglycerides

1.4 Angina pectoris is characterized by which of the following types of pain?
   a. Shooting
   b. Sharp
   c. Knife-like
   d. Tightness

1.5 The nurse is assessing a patient with left-sided heart failure. Which symptom would the nurse expect to find?
   a. Dependent edema
   b. Distended neck veins
   c. Dyspnea and crackles
   d. Nausea and vomiting

1.6 A patient admitted for unstable angina has which physiological mechanism most likely present?
   a. Partial occlusion of a coronary artery with a thrombus
   b. Complete occlusion of a coronary artery
   c. Fatty streak within the intima of a coronary artery
   d. Vasospasm of a coronary artery
1.7 The nurse is conducting a sleep assessment on an elderly patient. Which statement by the patient indicates a need for further assessment?
   a. “My wife says that I snore more and that I wake up suddenly several times a night.”
   b. “I feel rested when I wake up in the morning.”
   c. “Early to bed, early to rise and a nap describes me.”
   d. “I don’t wake up in the middle of the night with my leg bothering me when I cut down on my coffee.”

1.8 A patient has recently been diagnosed with diabetes mellitus in the ICU. Before being discharged this patient will need instruction on how to manage her lifestyle, how to inject insulin and deal with future diabetic emergencies. Which nurse competency is most needed in such a situation?
   a. Caring practice
   b. Facilitation of learning
   c. Advocacy and moral agency
   d. Clinical judgement

1.9 An ICU nurse, in testing the reflexes of a 3-month-old baby girl, strokes the lateral aspect of the sole of the foot to test for possible nerve damage. In response, the child fans her toes and dorsiflexes her big toe. What is the name of this reflex, and is the child’s response normal?
   a. Moro reflex; abnormal
   b. Rocking reflex; normal
   c. Grasp reflex; abnormal
   d. Babinski reflex; normal

1.10 The nurse is instructing the patient on the treatment for obstructive sleep apnea. Which statement indicates the patient needs further clarification?
   a. “Weight loss will help my sleep apnea.”
   b. “It is better for me to sleep on my side to prevent apnea episodes.”
   c. “I can have two alcoholic beverages before bed to help me sleep.”
   d. “I need to use my continuous positive airway pressure (CPAP) device every night when I sleep.”

1.11 Which is not a complication of bronchoscopy?
   a. Laryngospasm
   b. Headache
   c. Hemoptysis
   d. Vomiting

1.12 A statement that provides a legally recognized description of an individual’s desires regarding care at the end of life is a (an):
   a. Advance directive
   b. Guardianship ad litem
   c. Healthcare proxy
   d. Power of attorney
1.13. A nurse working with an infant patient observes that the child, who has a nasogastric tube, is grunting on expiration, wheezing, and seesaw breathing. The nurse recognizes that the infant is most likely experiencing which of the following conditions?
   a. Respiratory distress due to obstructed nasal passages
   b. Respiratory arrest due to obstruction of the glottis
   c. Epileptic seizure due to overstimulation
   d. Shock due to loss of blood

1.14 Ms. F is experiencing increasing shortness of breath and chest pain upon inspiration. The results of the chest radiography you ordered show the following: flattening of the diaphragm, blunting of the costophrenic angle and cardiac silhouette, and a slight shift in the mediastinal structures. You suspect which condition?
   a. Pneumothorax
   b. Pulmonary embolus
   c. Lobular pneumonia
   d. Pleural effusion

1.15 A 65-year-old patient with a history of metastatic lung carcinoma has been unresponsive to chemotherapy. The medical team has determined that there are no additional treatments available that will prolong life or improve the quality of life in any meaningful way. Despite the poor prognosis, the patient continues to receive chemotherapy and palliative care support. This is an example of what end-of-life concept?
   a. Palliative care
   b. Medical futility
   c. Terminal weaning
   d. Withdrawal of treatment

1.16 A critical care unit has decided to implement several measures to improve multidisciplinary collaboration. Apart from the expected improvements in patient outcomes, what other important effect should occur as a result of these measures?
   a. Identification of incompetent practitioners
   b. Increased staff retention
   c. Less discussion is front of patients and families
   d. Improvements in nurse manners in the unit.

1.17 Which type of pain typically persists for longer than 6 months following healing of the initial injury?
   a. Nociceptive
   b. Acute
   c. Chronic
   d. Neuropathic

1.18 Acute pulmonary oedema caused by heart failure is usually a result of damage to which of the following areas of the heart?
   a. Left atrium
   b. Right atrium
   c. Left ventricle
   d. Right ventricle
1.19 An elderly patient in the ICU is receiving intravenous opioid analgesia for pain. The nurse observes that the patient's respiratory rate has decreased to 8 breaths per minute. Which nursing intervention would be most appropriate?
   a. Administer naloxone intravenously very slowly.
   b. Administer diazepam immediately.
   c. Increase the dose of opioid.
   d. Massage the patient's feet to stimulate her breathing.

1.20 Which study best identifies valvular function and measures the size of the cardiac chambers?
   a. 12-lead electrocardiogram
   b. Cardiac catheterization
   c. Echocardiogram
   d. Electrophysiology study

1.21 Which statement made by a staff nurse identifying guidelines for palliative care would need corrected?
   a. Basic nursing care is a critical element in palliative care management.
   b. Common conditions that require palliative management are nausea, agitation, and sleep disturbance.
   c. Palliative care practices are reserved for the dying client.
   d. Palliative care practices relieve symptoms that negatively affect the quality of life of a patient.

1.22 A pregnant woman has arrived at the ICU with a blood pressure reading of 170/115, pronounced oedema in her hands and feet, and proteinuria. Which condition does the woman most likely have?
   a. Severe pre eclampsia
   b. Pre eclampsia
   c. Disseminated intravascular coagulation
   d. HELLP syndrome

1.23 Which are two main priorities for the critically ill pregnant woman?
   a. To enhance communication
   b. To support foetal growth and development
   c. To optimize maternal and family experiences
   d. To progress the pregnant woman

1.24 Which of the following is not a major foetal risk in a pregnant woman with cardiac disease?
   a. Intracerebral foetal death
   b. Prematurity
   c. Foetal development of cardiac disease
   d. Malpresentation of the foetus

MARKS : 25
2.1 Mr Diamini, a 60 year old patient is admitted into the intensive care unit after having been involved in a motor vehicle accident. He suffered a penetrating injury to the right side of his chest. He is restless and has difficulty breathing. Investigations are as follows:

- Chest X-ray: shows translucency on the right side
- PaCO₂: 48mmHg
- PaO₂: 65mmHg
- pH: 7.25

The next three questions relate to this scenario.

a. What condition does the patient have? (1)
b. What is your interpretation of the investigation in this condition. (4)
c. Discuss Mr Diamini’s nursing management according to the following nursing diagnoses
   i. Ineffective breathing pattern related to decreased lung expansion. (4)
   ii. Acute pain related to injury and medical intervention. (3)
   iii. Anxiety related to threat to psychological integrity. (3)

MARKS: 15

2.2 Research indicates that many women experience a variety of symptoms before having an acute myocardial infarction. State any five (5) of these warning signs. (5)

2.3 Laboratory assessment of cardiovascular status is a priority in the ICU. State any abnormalities that can occur in the following electrolytes and their possible causes. Use the table as a guide to answering this question.

<table>
<thead>
<tr>
<th>Electrolyte</th>
<th>Increase Name and 2 causes</th>
<th>Decrease Name and 2 causes</th>
<th>Intervention for increase (1 each)</th>
<th>Intervention for decrease (1 each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Calcium     |                           |                           |                                   |                                   | (18)

2.4 Differentiate between hypovolemic shock and cardiogenic shock in a pediatric patient. (2)

MARKS: 25

QUESTION 3

Discuss age related changes for the older adult patient in the following areas.

a. Peripheral vascular system (3)
b. Pulmonary gas exchange (3)
c. Gastrointestinal system (4)

MARKS: 10

GRAND TOTAL MARKS: 75