FACULTY OF HEALTH SCIENCES
DEPARTMENT OF NURSING SCIENCE

UNIVERSITY OF JOHANNESBURG

PROGRAMME	:	B CUR
SUBJECT	:	NURSING SCIENCE 1A: MEDICAL AND SURGICAL NURSING MODULE 1: HAEMOPOIETIC SYSTEM AND ONCOLOGY MODULE 2: CARDIOVASCULAR SYSTEM AND ENDOCRINOLOGY
CODE	:	VPK1A10
DATE	:	SUPPLEMENTARY EXAMINATION JULY 2016
DURATION	:	3 HOURS
WEIGHT	:	50:50
TOTAL MARKS	:	100 MARKS

EXAMINERS	:	MISS A BEZUIDENHOUT
MODERATOR (INTERNAL)	:	MRS IJ KEARNS
	:	PROF WE NEL
NUMBER OF PAGES	:	THIS PAPER CONSISTS OF NINE (9) PAGES

INSTRUCTIONS	:	QUESTION PAPERS MUST BE HANDED IN
REQUIREMENTS	:	2 BOOKS PER CANDIDATE

INSTRUCTIONS TO CANDIDATES:
PLEASE ANSWER ALL THE QUESTIONS. (½ mark per fact unless stated otherwise).
PLEASE ANSWER MODULE 1 AND 2 IN DIFFERENT BOOKS.
PLEASE HAND IN EXAMINATION PAPER

QUESTION 1

Select the best response for each item. For example: 1.1. C

There is only one correct answer.

1.1. Chemotherapy is one of the therapeutic modalities for cancer. This treatment is contraindicated to which of the following conditions?

a. Recent surgery.
b. Pregnancy.
c. Bone marrow depression.
d. All of the above. (1)

1.2. Which of the following laboratory values is expected for a client just diagnosed with chronic lymphocytic leukaemia?

a. Elevated sedimentation rate.
b. Uncontrolled proliferation of granulocytes.
c. Thrombocytopenia and increased lymphocytes.
d. Elevated aspartate aminotransferase and alanine aminotransferase levels. (1)

1.3. DIC is a disorder in which:

a. The coagulation pathway is genetically altered, leading to thrombus formation in all major blood vessels.
b. An underlying disease depletes haemolytic factors in the blood, leading to diffuse thrombotic episodes and infarcts.
c. A disease process stimulates coagulation processes with resultant depletion of clotting factors, leading to diffuse haemorrhage.
d. An inherited predisposition causes a deficiency of clotting factors that leads to overstimulation of coagulation processes in the vasculature. (1)

1.4. A type of leukaemia that is common but rarely in older adults is:

a. Acute myelocytic leukaemia.
b. Acute lymphocytic leukaemia.
c. Chronic lymphocytic leukaemia.
d. Chronic myelocytic leukaemia. (1)

1.5. When assessing vital signs in a patient with a permanent pacemaker, the nurse needs to know the:

a. Date and time of insertion.

b. Location of the generator.

c. Model number.

d. Pacer rate. (1)

1.6. The pain of angina pectoris is produced primarily by:

a. Coronary vasoconstriction.

b. Movement of thromboemboli.

c. Myocardial ischemia.

d. The presence of atheromas. (1)

1.7. The most characteristic symptom of pericarditis is:

a. Dyspnoea.

b. Constant chest pain.

c. Fatigue lasting more than 1 month.

d. Uncontrolled restlessness. (1)

1.8. The causative microorganism for rheumatic endocarditis can be accurately identified only by:

a. A throat culture.

b. An echocardiogram.

c. A chest x-ray.

d. Serum analysis. (1)

1.9. Post-catheterization nursing measures for a patient who has had a cardiac angiogram, include:

a. Assessing the peripheral pulses in the affected extremity.

b. Checking the insertion site for hematoma formation.

c. Evaluating temperature and colour in the affected extremity.

d. All of the above. (1)

1.10. Diabetes insipidus is a disorder related to a deficiency of:

a. Growth hormone.

b. Prolactin.

c. Oxytocin.

d. Vasopressin. (1)

1.11. Cancer is the name for a large group of diseases, all of which are characterised by:

a. Increasing differentiation of cells.

b. Production of toxins that alter cells.

c. rapid, explosive proliferation of cells.

d. cell growth that escapes normal control. (1)

1.12. The primary protective role of the immune system related to malignant cells is:

a. surveillance for cells with tumour-associated antigens.

b. Binding with free antigens released by malignant cells.

c. Production of blocking factors that immobilise cancer cells.

d. Responding to a new set of antigenic determinants on cancer cells. (1)

1.13 The primary difference between benign and malignant neoplasms is the:

a. rate of cell proliferation;

b. site of the malignant tumor;

c. requirements for cellular nutrients;

d. characteristic of tissue invasiveness. (1)

1.14 Important nursing roles related to prevention and detection of cancer include:

a. instructing people to eat low-fiber, refined carbohydrate diets;

b. instructing people on ways to increase capacity to cope with stress;

c. teaching people to have annual screening tests for all detectable cancer sites;

d. using people's natural fear of cancer to motivate changes in unhealthy lifestyles. (1)

1.15 The goals of cancer treatment are based on the principle that:

a. surgery is the single most effective treatment for cancer;

b. initial treatment is always directed towards curing the cancer;

c. a combination of treatment modalities are effective for controlling many cancers;

d. although the curing of cancer is rare, the quality of life can be increased with treatment modalities. (1)

1.16 The nurse counsels the patient receiving radiation therapy or chemotherapythat:

a. effective birth control methods should be used for the rest of the patient's life;

b. if nausea and vomiting occur during treatment, the treatment plan will be modified;

c. following successful treatment, a return to the person's previous functional level can be expected;

d. the cycle of fatigue-depression-fatigue that may occur during treatment can be reduced by restricting activity. (1)

1.17. An appropriate nursing intervention to promote nutrition in the patient with Cancer is:

a. providing bland, pureed food because the person's taste sensation l altered;

b. providing increased protein for normal cell recovery and immune system function;

c. encouraging the patient to eat a high-calorie, high protein snacks every few hours to prevent weight loss;

d. alerting the doctor that nutritional supplements may be needed when the patient has a 10 kg weight loss. (1)

1.18. Syndrome of inappropriate ADH that occurs in certain types of cancer is Primarily due to:

a. auto-immune reaction;

b. gram-negative septicaemia;

c. invasiveness of cancer cells;

d. ectopic hormonal production. (1)

1.19. A patient has recently been diagnosed with the early stages of breast cancer.
Which of the following is most appropriate for the nurse to focus on?

a. maintaining the patient's hope;
b. preparing a will and advance directives;
c. discussing replacement child care for the patient's children;
d. discussing the patient's past experiences with her grandmother's cancer. (1)

1.20. The most effective method for administering a chemotherapeutic agent that is a vesicant is to:

a. give it orally;
b. give it intra-arterially;
c. use an Ommaya reservoir;
d. use a central venous access device. (1)

***[20]**

QUESTION 2

Michael, a 45-year-old, successful businessman, was rushed to the hospital by the medical rescue squad after experiencing crushing sub-sternal pain radiating down his left arm. He also complained of dizziness and nausea.

Assessment data

History

- Has a history of angina pectoris and hypertension.
- Is overweight but recently loss 10 kg.
- Rarely exercises.
- Has two teenage children who are causing "problems".
- Recently experienced the loss of his best friend and business partner, who died from cancer.

Physical examination:

- Diaphoretic, shortness of breath
- BP = 160/100 mmHg Pulse = 120 bpm Respiration = 26 bpm

Laboratory data

- CK-MB elevated
- Cholesterol = 9,0 mmol/l
- Low density lipoprotein (LDL) = 5,0 mmol/ℓ
- High density lipoprotein (HDL) = 0,91 mmol/ℓ
- Myoglobin elevate
- Troponin T is positive
- ECG: show premature ventricular contractions and ST elevation in leads II, III, AvF, V5, V6

Collaborative care

- Reteplace
- Morphine 2-4 mg IV prn
- Tridil IV
- Oxygen 2L/min
- Bed rest
- Monitor vital signs every hour

Please answer the questions that follows:

2.1. Define the term myocardial infarction. (2)

2.2. Define the term angina pectoris. (1)

2.3. Differentiate between angina pectoris and myocardial infarction in terms of the type and nature of the pain, ECG findings, laboratory findings and treatment. (6)

2.4. Explain the pathophysiologic bases of the clinical manifestations (physical examination data, laboratory data) that Michael exhibit. (10)

2.5. Based on the assessment data presented, write two (2) nursing diagnoses for Michael. (6x½)=(3)

2.6. For each diagnosis mentioned, describe four (4) specific nursing actions with a rationale for each. (8)

2.7. Explain critically the health education that you would give to Michael on discharge from the hospital. Rationalize your reason for each point of the health education. (10)

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QUESTION 3

David is a 56-year-old construction worker. He has been admitted in the hospital and is diagnosed with diabetes mellitus. He presents with the following clinical data:

Vital data:

Blood pressure	:	148/96 mmHG
Heart rate	:	89 bpm
Temperature	:	37.6°C
Respiration	:	23 bpm
Blood glucose	:	14.3 mmol/L

Physical examination:

Weight	:	92 Kg
Height	:	1.65 m

Wound on lower left leg about 5 cm in size, oozing puss (patient verbalize he hurt himself 2 weeks back but the wound does not want to heal, it just gets worse), with a foul smell.

He consumes about 3-4 L of water and urinates excessively.
He verbalizes that he is never able to satisfy his hunger.
He is always tired and is struggling with blurred vision.
He has lost about 8 Kg in the last 2 months.

Biochemical data:

Urinalysis : presence of ketones and glucose.

Please answer the following questions with regards to the aforementioned scenario.

3.1. Explain the underlying pathophysiological reason for the clinical data that David presents with. (8)

3.2. Formulate two (2) nursing diagnosis for David, based on the clinical data that he presents with. (6x½) =(3)

3.3. For each diagnosis mentioned, describe three (3) specific nursing actions with a rational for each. (6)

3.4. You have to give health education to David before he is discharged. Give comprehensive health education to David, covering the following aspects:diet, exercise, self-monitoring, foot care, medication compliance. (15)

3.5. Differentiate between Type 1 and Type 2 diabetes, based on onset, clinical manifestations and treatment. (8)

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