



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
END OF SEMESTER AUGUST 2024 EXAMINATIONS**

COURSE CODE AND TITLE: BSN 214-BSM 214: HUMAN PATHOLOGY AND HAEMATOLOGY

DATE: MONDAY 5TH AUGUST 2024

Duration: 2 HOURS

Start: 9:00 AM

Finish: 11:00 AM

INSTRUCTIONS

- 1.** This exam is out of 70 marks
- 2.** This Examination comprises **THREE** Sections. Section I: Multiple Choice Questions (20 marks) Section II: Short Answer Questions (30 marks) and Section III: Long Answer Questions (20 marks)
- 3.** Answer **ALL** Questions.
- 4.** Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

SECTION I: MULTIPLE CHOICE QUESTIONS

[20 MARKS]

1. An increase in the number of new cells in an organ or tissue is referred to as;-
 - A. Dysplasia
 - B. Hyperplasia
 - C. Metaplasia
 - D. Atrophy
2. The components of the inflammatory process are capable of?-
 - A. Destroying the tissue and aid in rapid healing
 - B. Enlarging the injured tissue and help in healing
 - C. Injuring normal tissues and lead to a worse pathology
 - D. Injuring normal tissue and reduce the pathology
3. Cell atrophy refers to-
 - A. An increase in the size of the cell
 - B. Decrease in the size of the cell
 - C. Replacement of one cell type by another
 - D. Increase in the number of cells in an organ
4. Dead organelles are removed from the cell through;-
 - A. Auto phagocytosis
 - B. Heterophagy
 - C. Phagocytosis
 - D. Regurgitation
5. The following is not an adaptive cellular response;-
 - A. Atrophy
 - B. Hypertrophy
 - C. Necrosis
 - D. Metaplasia
6. Immediate and early response to tissue injury include all **EXCEPT**;-
 - A. Vasodilation
 - B. Lymphocyte, macrophage, plasma cell (mononuclear cell) infiltration
 - C. Vascular leakage and edema
 - D. Leukocyte emigration
7. Vasodilation;
 - A. Accounts for warmth and redness
 - B. Opens microvascular beds
 - C. Causes an early exudates (protein rich) into interstitial
 - D. Causes increased intravascular pressure

8. The most important blood cells in coagulation process are?
- A. Red blood cells
 - B. Granulocytes
 - C. Platelets
 - D. Lymphocytes
9. Reduced plasma oncotic pressure is the most important mechanism of edema in;-
- A. Congestive heart failure.
 - B. Edema of leg affected by venous thrombosis.
 - C. Edema of the arm in breast cancer patients.
 - D. Nephrotic syndrome.
10. Possible outcome of acute inflammation include all EXCEPT;-
- A. Complete resolution
 - B. Scarring (fibrosis)
 - C. Progression to chronic inflammation
 - D. Chronic wound formation
- 11 The following are characteristics of malignant tumors apart from;-
- A. Metastasis
 - B. Infiltrate surrounding tissues
 - C. Encapsulated
 - D. Poorly differentiated cells
12. Bile is synthesized by;
- A. Enterocyte
 - B. Hepatocyte
 - C. Kupffer cell
 - D. Acinar cell
13. The phenomenon where WBC's marginate and become attached to the edge of the endothelium is;-
- A. Pavementing
 - B. Margination
 - C. Adhesion
 - D. Rolling
14. Transfusion reactions and organ rejection is caused by;-
- A. T-Cell mediated (Type 4) hypersensitivity
 - B. Immediate (Type 1) hypersensitivity
 - C. Immune complex mediated (Type 3) hypersensitivity
 - D. Antibody mediated (Type 2) hypersensitivity

15. Generalized edema results from;-
- A. Systemic hypertension.
 - B. Congestive heart failure.
 - C. Hepatitis
 - D. Nephron
16. Disorders that predispose to thrombosis include all of the following EXCEPT:
- A. Pancreatic carcinoma.
 - B. Pregnancy.
 - C. Vitamin K deficiency.
 - D. Sickle cell anemia.
17. Realizing that liver function declines with age, it is essential that the nurse closely monitor all elderly patients for;-
- A. Hematuria
 - B. Ascites
 - C. Jaundice
 - D. Drug Toxicity
18. TNM stands for;-
- A. Time Nodules Metaplasia
 - B. Tumor Nodules Metaplasia
 - C. Tumor Nodes Metastasis
 - D. Tumor Nodules Metastasis
19. In any discussion involving cancer with a patient, there are usually two terms - staging and grading. Which term determines the prognosis of the cancer?
- A. Staging
 - B. Grading
 - C. Anaplasia
 - D. Dysplasia
20. As regards the process of inflammation, release of histamine is triggered when;-
- A. Cells degranulate and antibody titer is low
 - B. Platelets are activated and mast cells degranulate
 - C. Mast cells degranulate and basophils depressed
 - D. Binding of antibody to mast cells and basophils occur

SECTION 11: SHORT ANSWER QUESTIONS

[30 MARKS]

1. State the five [5] cardinal signs of local inflammation (5 marks)
2. State the five [5] cellular adaptations to stress (5 marks)
3. Outline five causes of cell injury in pathology (5 marks).
4. Briefly describe three stages of bone healing (6 marks)
5. Enumerate the four [4] main body defense mechanisms (4 marks).
6. Briefly describe mechanisms of type I hypersensitivity reaction (5 marks).

SECTION III: LONG ANSWER QUESTIONS

[20 MARKS]

1. Master Brayson aged 15 years has been admitted with Hemophilia.
 - a) Define hemophilia (2 marks)
 - b) Describe five (5) stages of process of hemostasis (10 marks)
 - c) Explain four (4) factors that affect hemostasis (8 marks)