



(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

**FIRST YEAR, THIRD TRIMESTER EXAMINATIONS FOR THE DEGREE
OF**

BACHELOR OF SCIENCE IN PHYSIOTHERAPY (MAIN PAPER)

COURSE CODE: **BSP 123**

COURSE TITLE: **GENERAL PATHOLOGY**

DATE: WEDNESDAY 20TH APRIL 2022

INSTRUCTIONS TO CANDIDATES

Answer all Questions

- Sec A: Multiple Choice Questions (MCQ) 20 Marks
Sec B: Short Answer Questions (SAQ) (40 marks)
Sec C: Long Answer Questions (LAQ) (40 marks)

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper consists of 4 Printed Pages. Please Turn Over.



SECTION A (MCQS)

(20 Marks)

1. Which one of the following is NOT a common symptom of illness?

- a) Pain
- b) Nausea
- c) Swelling
- d) Fever

2. Cell adaptation where there is increased cell proliferation and decreased differentiation is?

- a) Metaplasia
- b) Neoplasia
- c) Dysplasia
- d) Hypoplasia

3.Which of the following is an example of hypertrophy

- a) Increase in liver size after a partial hepatectomy
- b) Increase in the size of the female breast
- c) Increase respiratory epithelium in response to Vit A deficiency
- d) Increase in size of the female uterus in pregnancy

4. In necrosis

- a) The nuclear changes are due to non-specific breakdown of DNA
- b) Karyolysis and pyknosis are the only 2 types of nuclear changes
- c) In caseous necrosis the basic outline of the cells is preserved
- d) There is a decreased eosinophilia in the necrotic cells

5. Apoptosis

- a) Is usually stimulated by hypoxia
 - b) Produces a moderate degree of inflammation
 - c) Features chromatin aggregates
 - d) Is the underlying process in caseous necrosis
6. Which of the following changes is associated with irreversible cell damage?
- a) Glycogen depletion
 - b) Flocculent densities in mitochondria
 - c) Cellular swelling.
 - d) Loss of microvilli.

7. Metaplasia

- a) Is an increase in the number and size of cells in a tissue
- b) Is the process that occurs in Barrett's esophagitis
- c) Is typically an irreversible process
- d) In the respiratory tract preserves mucous secretion

8.Histamine exerts its effect during inflammation by

- a) vasoconstriction of post capillary sphincters.
- b) Constriction of large arteries.
- c) Acting on H₂ receptors on mast cells.
- d) Causing venular endothelial contraction.

9. Which of the following genes is involved in the conversion of proto-oncogenes into oncogenes causing cancer?

- a) Metastasis genes
- b) Angiogenesis genes
- c) Transposons
- d) Tumor suppressor gene

10. If the following events were placed in their most probable order of occurrence following a skin wound which would come fourth?

- a) Growth of granulation tissue.
- b) Loss of vascularity of fibrous scar.
- c) Migration of epithelial cells from wound edges.
- d) Wound edges united by collagen.

11. Which is not a feature of myasthenia gravis?

- a) Motor weakness is usually of proximal extremities and bulbar
- b) There is usually no sensory loss
- c) Symptoms are often worse as the day progresses
- d) It is due to antibodies formed against acetylcholinesterase

12. Which ONE of the following is not an organ specific auto-immune disease?

- a) Chronic auto-immune gastritis.
- b) Chronic auto-immune thyroiditis.
- c) Insulin dependent diabetes.
- d) Rheumatoid arthritis

13. which one of the following is not associated with thrombosis?

- a) Activation of the coagulation mechanism
- b) Endothelial damage.
- c) Formation of platelet aggregates.
- d) Thrombocytopenia.

14. What lymphatic structure absorbs lipids in the intestine?

- a) Lymphatic duct
- b) Lacteal
- c) Lymphatic trunk
- d) Collecting vessel

15. For which ONE of the following tumours is there a definite genetic basis in a proportion of cases?

- a) Bronchial carcinoma.
- b) Cervical carcinoma.
- c) Colonic carcinoma.
- d) Endometrial carcinoma.

16. Which ONE of the following is not a predisposing factor for atheroma?

- a) Cigarette smoking.
- b) High level of serum high density lipoprotein.
- c) High level of serum low density lipoprotein (LDL).
- d) Male sex

17. Which of the following convey the longest lasting immunity to an infectious agent?

- a) Naturally acquired passive immunity
- b) Artificially acquired passive immunity
- c) Naturally acquired active immunity
- d) Vaccination.

18. The most common malignancy in patients with AIDS is

- a) NHL
- b) Primary lymphoma of the brain
- c) Kaposi's sarcoma
- d) Histoplasmosis

19. What are the two categories of angina?

- a) Stable and unstable
- b) Chronic and acute
- c) Severe and mild
- d) Arterial and venous

20. Which ONE of the following is least likely to be found in a child dying of acute rheumatic fever?

- a) Aschoff bodies.
- b) 'Bread and butter' pericarditis.
- c) History of recent sore throat.
- d) Large crumpling vegetations on the mitral valve.

SECTION B (SAQs)

1. Describe any four 4 autoimmune diseases (8 marks)
2. Describe the causative disorders and clinical manifestations of hypervolemia (8 marks)
3. Discuss staging of cancer (8 Marks)
4. Describe the factors promoting an increase in capillary blood pressure (8 Marks)
5. Discuss four causes of acute renal failure (ARF) (8 Marks)

SECTION C (LAQs)

1. Discuss lung cancer with the following headings:
 - a) Types
 - b) Stages
 - c) Diagnosis
 - d) Treatment(20 Marks)
2. Pulmonary pathology fall under obstructive or restrictive diseases;. Discuss each of them under:
 - a) Symptoms
 - b) Causes
 - c) Diagnosis
 - d) Treatment(20 Marks)