



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

FOURTH YEAR SEMESTER ONE EXAMINATIONS

**FOR THE DEGREES OF
BACHELOR OF MEDICAL LABORATORY SCIENCES
AND
BACHELOR OF MEDICAL BIOTECHNOLOGY**

COURSE CODE: BML 418

COURSE TITLE: GENERAL PATHOLOGY

DATE:

TIME:

INSTRUCTIONS TO CANDIDATES

This examination paper consists of three sections, **A** (Multiple Choice Questions), **B** (Short Answer Questions), and **C** (Long Answer Questions). Answer all questions in ALL the sections.

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 5 Printed Pages. Please Turn Over.

BML 421: GENERAL PATHOLOGY

SECTION A: MULTIPLE CHOICE QUESTIONS (20 MARKS)

- Q1. Which of the following serum tumour markers is not correctly matched with the cancer?
- a) PSA: prostate cancer
 - b) CA-125: ovarian cancer
 - c) CA 19-9: pancreatic cancer
 - d) Beta-HCG: cervical cancer
- Q2. Dilatation of a blood vessel thought to be caused by weakening of the media especially of abdominal and iliac arteries is known as:
- a) Embolism
 - b) Aneurysm
 - c) Atheroma
 - d) Thrombus
- Q3. Which of the following does not constitute cancer metastasis?
- a) Haematogenous spread
 - b) Transplantation via surgical incision
 - c) Skeletal spread
 - d) Seeding of body surfaces and cavities
- Q4. Which of the following is true of coal-workers pneumoconiosis?
- a) Anthracotic pigment accumulate in pleural lymphatic macrophages
 - b) Also known as black lung disease
 - c) Anthracoid pigment accumulate in pleural lymphatic macrophages
 - d) Complications include respiratory distress
- Q5. Which of the following is the most common cancer in Kenyan women?
- a) Breast cancer
 - b) Kaposi's sarcoma
 - c) Cervical cancer
 - d) Oesophageal cancer
- Q6. Which of the following is not deleterious effect of lifestyle choices
- a) Megaloblastic anaemia
 - b) Incidental asthma
 - c) Chronic bronchitis
 - d) Blindness
- Q7. Which one of the following is not a useful gross pathology feature?
- a) Infarct
 - b) Size
 - c) Shape
 - d) Consistency

- Q8. The passive escape of leukocytes facilitated by chemotactic mediators is?
a) Diapedesis
b) Adherence
c) Ecchymosis
d) Petechial haemorrhagic
- Q9. Which of the following is not a cause of hypoxia?
a) Ischemia
b) Cardiopulmonary failure
c) Anaemia
d) Anoxia
- Q10. A fluid exudate described as clear water fluid of low protein content especially fibrinogen is known as:
a) Catarrhal
b) Serous
c) Haemorrhagic
d) Petulant
- Q11. Which one of the following is not a chemical carcinogen?
a) Naphthylamine
b) Asbestos
c) Uranium
d) Benzene
- Q12. Which of the following is not true regarding amyloidosis?
a) Accumulation of amyloid proteins
b) Stain red with H and E stain
c) The kidney is the most commonly involved organ
d) Hepatomegaly may be present
- Q13. Which of the following is not true regarding Kwashiorkor?
a) Common during the first year of life
b) Loss of visceral proteins
c) Hypoalbuminemia
d) Generalized edema
- Q14. Which of the following is not a chemical mediator released from mast cells and basophils after IgE cross-linking?
a) Thrombin and bradykinin
b) Histamine and heparin
c) Eosinophil and neutrophil chemotactic factors
d) Platelet activating factor and prostaglandin D4

- Q15. Which of the following is not true regarding Albinism?
- a) Melanin pigmentation deficiency in the oculocutaneous tissues
 - b) Ochronosis
 - c) Tyrosinase deficiency
 - d) Increased risk of basal and squamous cell carcinoma
- Q16. Which of the following is not a nuclear change in irreversible cell injury?
- a) Pyknosis
 - b) Calcium influx
 - c) Karyorrhexis
 - d) Karyolysis
- Q17. An ulcer with rolled out edges is commonly associated with:
- a) Basal cell carcinoma
 - b) Squamous cell carcinoma
 - c) Tuberculosis
 - d) Syphilis
- Q18. Which of the following genes inhibits apoptosis:
- a) bcl-2
 - b) p53
 - c) Caspase
 - d) Fas
- Q19. Which one of the following is not true regarding Down's syndrome
- a) Karyotype 47 XX or XY +21
 - b) Commonest of the chromosomal disorders
 - c) Commonest cause of inherited mental retardation
 - d) Risk decreases with maternal age
- Q20. Common types of point mutations underlying Mendelian disorders include the following except:
- a) Missense mutations
 - b) Synonymous mutations
 - c) Nonsense mutations
 - d) Frameshift mutations

SECTION B: SHORT ANSWER QUESTIONS (40 MARKS)

1. Describe atrophy under the following: definition, cause, and morphologic appearance (8 marks).
2. Outline the methods used in pathology (8 marks).
3. Describe the protective factors against free radicals (8 marks).
4. State the characteristics of dysplasia (8 marks).
5. Outline the factors that affect wound healing (8 marks).

SECTION C: LONG-ANSWER QUESTIONS (40 MARKS)

1. Describe the causes of cellular injury (20 marks).
2. Discuss the following pathological processes:
 - a) Edema (10 marks)
 - b) Shock (10 marks)