



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

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

SECOND YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE
IN
MEDICAL LABORATORY SCIENCES; MEDICAL
BIOTECHNOLOGY; NUTRITION
DIRECT ENTRY**

MAIN EXAM

COURSE CODE: BML122

COURSE TITLE: SYSTEMIC HUMAN ANATOMY

DATE: 28/04/2022

TIME: 8.00 -10.00 AM

INSTRUCTIONS TO CANDIDATES

This paper is divided into three sections, **A B** and **C**, carrying respectively: Multiple Choice Questions (**MCQs**), Short Answer Questions (**SAQs**) and Long Answer Questions (**LAQs**).

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

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

Page 1 of 5

SECTION A: MULTIPLE CHOICE QUESTIONS (20MARKS)

Answer all questions

1. The venous drainage of the caudate lobe is into which structure?
 - A. Left hepatic vein
 - B. Middle hepatic vein
 - C. Right hepatic vein
 - D. Inferior venacava
 - E. Portal vein
2. Suspensory ligaments of the liver include?
 - A. Falciform ligament
 - B. Left triangular ligament
 - C. Right triangular ligament
 - D. Round ligament
 - E. ALL of the above
3. The round ligament is also known as?
 - A. Ligamentum teres
 - B. Arantius ligament
 - C. Ductus venosus
 - D. Left triangular ligament
 - E. falciform ligament
4. Cells that secrete HCL in the stomach are called?
 - A. Chief cells
 - B. B-cells
 - C. Enteroendocrine cells
 - D. Parietal cells
 - E. Enterocytes
5. Which part of the large intestine receives materials from the ileum?
 - A. Descending colon
 - B. Cecum
 - C. Ascending colon
 - D. Sigmoid colon
 - E. Rectum
6. The structure under inferior surface of the tongue is?
 - A. Foramen caecum of the tongue
 - B. Lingual tonsil
 - C. Sublingual caruncle
 - D. Vallate papilla
 - E. Limiting sulcus
7. The largest bone in the human is?
 - A. Skull
 - B. Spine
 - C. Femur
 - D. Tibia
 - E. Humerus
8. The difference between a broken bone and a broken bone is?
 - A. Severity
 - B. Location
 - C. Complication

- D. Bone involved
 - E. No difference
9. When a forensic expert examines a skeleton, they can tell?
- A. Age
 - B. Gender
 - C. Certain cause of death
 - D. All of the above
 - E. None of the above
10. Nutrients necessary for healthy bones include?
- A. Calcium
 - B. Zinc + magnesium
 - C. Protein
 - D. All of the above
 - E. None of the above
11. The pharynx has _____ secretion
- A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5
12. Which is the correct path air takes when it enters the trachea on its way to the lungs?
- A. Bronchi – Bronchioles – pulmonary capillaries - alveoli
 - B. Bronchioles – bronchi – alveoli – pulmonary capillaries
 - C. Bronchioles – pulmonary capillaries – alveoli - bronchi
 - D. Bronchi – bronchioles - alveoli - pulmonary capillaries
 - E. Bronchi – alveoli – bronchioles –pulmonary capillaries
13. Which stratum of the epidermis is full of keratin cornified to prevent water loss?
- A. Basale
 - B. Granulosum
 - C. Corneum
 - D. Spinosum'
 - E. None of the above
14. The duodenum
- A. Is a retroperitoneal structure
 - B. Is an intraperitoneal structure
 - C. Is 25 cm in length
 - D. Lies between levels of L4
 - E. Its fourth part lies to the right of the Aorta
15. Which of the following is a facial bone?
- A. Frontal
 - B. Temporal
 - C. Sphenoid
 - D. Ethmoid
 - E. Maxillary
16. Neurons arise from embryonic
- A. Endoderm
 - B. Epidermis
 - C. Mesoderm

- D. Mesenchyme
 - E. Ectoderm
17. The narrowest part of the uterus is?
- A. the fundus
 - B. the infundibulum
 - C. The body
 - D. The ampulla
 - E. The cervix
18. The abnormal thickening of the stratum corneum is known as?
- A. Dandruff
 - B. Acne
 - C. Comedo
 - D. Cadlus
 - E. Abrasion
19. The innermost layer of the skin is?
- A. Dermis
 - B. Epidermis
 - C. Hypodermis
 - D. Stratum lucidum
 - E. Stratum Basale
20. Collecting substances to provide structural and biochemical support to skin cells is performed by?
- A. Fibroblasts
 - B. Adipocytes
 - C. Macrophages
 - D. Langerhans cells
 - E. Melanocytes

SECTION B – SHORT ANSWER QUESTIONS – (40 marks)

Answer all questions

1. Describe the form of pharynx, esophagus, lower esophageal sphincter **(5 marks)**
2. Describe the structures that increase the surface area of the small intestine **(5 mark)**
3. Describe the structural anatomy of the pharynx **(5 marks)**
4. List the components of the lymphatic system **(5 marks)**
5. Describe the heart valves stating their function and location **(5 marks)**
6. Describe the histology of the small intestine **(5 marks)**
7. Name the extrinsic muscles of the tongue and state their function **(5 marks)**
8. Describe the morphology of various neurons and their function **(5 marks)**

SECTION C – LONG ANSWER QUESTIONS (60marks)

Answer all questions

1. Describe;
 - a) Fetal circulation **(12 marks)**
 - b) Tetralogy of Fallot defects of the heart **(8 marks)**
2. Describe gross and microscopic anatomy of the gastrointestinal tract **(20 marks)**

3. Describe the gross anatomy and histology of the kidney(20 marks)

