



# Technical University of Mombasa

*Faculty of Applied and Health Sciences*

DEPARTMENT OF **MEDICAL SCIENCES**  
DIPLOMA IN PHARMACEUTICAL TECHNOLOGY  
(DPT 12S)

## **AMD 2101: HUMAN ANATOMY I**

**SPECIAL/SUPPLEMENTARY: EXAMINATIONS**

**SERIES:** February 2013

**TIME:** 2 HOURS

### **INSTRUCTIONS:**

You should have the following for this examination

- *Answer booklet*

This paper consists of **THREE sections A, B and C.**

Answer all questions in section **A** and **B** and choose **THREE** out of **FIVE** questions in section **C.**

*This paper consists of **10 PRINTED** pages*  
**SECTION A (40MARKS)**

1. The following organ is found in the cranial cavity
  - a) Brain
  - b) Hypothalamus
  - c) Heart
  - d) Lungs
  
2. The middle ear has the following bones except
  - a) Malleus
  - b) Tympanic membrane
  - c) Stapes
  - d) Incus
  
3. The following are some of the skin functions except
  - a) Sensation
  - b) Homeostasis
  - c) Repair damaged tissue
  - d) Protection
  
4. The following are cells that form a bone except
  - a) Osteoclasts
  - b) Osteocytes
  - c) Chondroblast
  - d) Osteoblasts
  
5. The shapes of bones include the following except
  - a) Long
  - b) figural
  - c) Short
  - d) Flat
  
6. The cytoskeleton does not include
  - a) Centrioles
  - b) Microtubules
  - c) Microfilaments
  - d) Intermediate filaments
  
7. Which is the ground substance in bone?
  - a) Jelly
  - b) Liquid
  - c) Semisolid
  - d) Calcium phosphate
  
8. Which of the following is not a feature of the skull?
  - a) Coronal
  - b) Lambdoid
  - c) Squamous

- d) Fontanelle
9. Histology is the study of
- Microscopes
  - The scanning electron microscope
  - Tissues
  - Body systems
10. The prefix 'cyto' stands for
- Cytoplasm
  - The cell
  - Plasma
  - Cytosol
11. The following form simple epithelium except \_\_\_\_
- Squamous
  - Columnar
  - Transitional epithelium
  - Cuboidal
12. A ring shaped section of the stomach would be a \_\_\_\_ section.
- Transverse
  - Coronal
  - Sagittal
  - Median
13. A \_\_\_\_\_ line passes through the sternum, umbilicus and non pubis
- Central
  - Proximal
  - Mid-Clavicular
  - Mid-sagittal
14. The arteries are to the veins
- Medial
  - Superficial
  - Superior
  - Deep
15. The simplest structure considered to be alive are
- Tissues
  - Organelles
  - Organisms
  - Cells
16. The prefix 'hetero' means
- Below
  - Solid
  - Different

- d) Same
17. \_\_\_\_\_ means studying anatomy by touch
- a) Microscopy
  - b) Auscultation
  - c) Percussion
  - d) Palpation
18. The study of structures by naked eye as called.
- a) Cytology
  - b) Ultra structure
  - c) Cross anatomy
  - d) Microscopic anatomy
19. Which of the following is not an essential part of the human anatomic position
- a) Eyes facing forward
  - b) Feet flat on the floor
  - c) Forearms supine
  - d) Mouth closed
20. The shape of the external ear is due to
- a) Hyaline cartilage
  - b) Elastic cartilage
  - c) Auricular cartilage
  - d) Skeletal muscle
21. The collagen of areolar tissue is produced by
- a) Macrophages
  - b) Fibroblasts
  - c) Mast cells
  - d) Leucocytes
22. A desmosome serves to
- a) Repair a damaged tissue
  - b) Bind epithelial cells together
  - c) Stop tissue decay
  - d) Improve contrast
23. Tendons are composed of \_\_\_\_\_ connective tissue
- a) Macrophages
  - b) Fibroblasts
  - c) Mast cells
  - d) Dense
24. \_\_\_\_\_ prevent fluid from seeping between epithelial cells
- a) Basement membrane
  - b) Communicating junctions
  - c) Tight junction

- d) Communicating junctions
25. Which one is a facial bone
- Lachrymal
  - Occipital
  - Spheroid
  - Frontal
26. What three bones make up the shoulder girdle
- Claride, scapula, Humens
  - Acromion, Claricle, Scapula
  - Scapula, Humenis, Acromion
  - Olecranon, Acromion, Hormerus
27. The regions of the spiral cord from superior to inferior parts of the body are:
- Cervical Thoracic, Sacral, Lumbar coccyx
  - Cervical Thoracic, Lumbar, Sacral, coccyx
  - Cervical , Thoracic, Coccyx, Lumbar, Sacral
  - Cervical ,Lumbar, Thoracic, Sacral, coccyx
28. The simplest type of gland is the
- Acinar
  - Tubular
  - Goblet
  - Saccular
29. Which one of the following is not a type of muscle tissue
- Myofibril
  - Skeletal
  - Smooth
  - Cardiac
30. The type of bone cells involved in resorption of bone to maintain optimum shape is
- Osteoblasts
  - Osteocytes
  - Osteoclasts
  - None of the above
31. The study of the structure and physical relationship involved between body parts is
- Pathology
  - Physiology
  - Anatomy
  - Biology
32. In which area do you think that pain from the gall bladder will be felt.
- Umbilical
  - Right upper quadrant
  - Left hypochondriac region

- d) Left lower quadrant
33. The external surface of the stomach is covered by a
- Mucosa
  - Ferosa
  - Lamina propria
  - Basement membrane
34. Which of these is a primary germ layer
- Epidemis
  - Mucosa
  - Ectoderm
  - Epithelium
35. The seminiferous tubules of the testes is lined with \_\_\_\_\_ epithelium
- Simple cuboidal
  - Pseudostratified columnar ciliated
  - Stratified squamous
  - Stratified cuboidal
36. The most abundant formed element(s) of blood is/are
- Plasma
  - Erythrocytes
  - Platelets
  - Leucocytes
37. The hair on a six year olds arm is
- Vellus
  - Lanugo
  - Rosacea
  - Alopecia
38. Which of these is a facial bone
- Frontal
  - Lacrimal
  - Occipital
  - Ethmoid
39. The bones of the middle ear do not include
- Malleus
  - Crista galli
  - Stapes
  - Incus
40. The simplest type of gland is the
- Acinar
  - Tubular
  - Goblet

d) Saccular

**SECTION B (Answer ALL questions)**

1. List the EIGHT main organs of the alimentary tract (4marks)
2. Draw a well labeled structure of a long bone (4marks)
3. Outline properties that distinguish epithelial from other tissues (4marks)
4. Illustrate the different levels of muscle organization (4marks)
5. Draw and label any FOUR shapes of cells (4marks)
6. Give a well labeled diagram of the body showing the four quadrants (4marks)
7. Name FOUR types of bone as classified by shape. (4marks)
8. Illustrate the tubular and the flask shaped glands (4marks)
9. Describe the human anatomic position (4marks)
10. Distinguish between organelles and inclusions giving an example of each. (4marks)

**SECTION C Answer any THREE questions**

1. Illustrate the human skeleton and name any 10 bones (20marks)
2. With clear illustration distinguish the different types of epithelial tissue (20marks)
3. Give the directional terms used in anatomy giving their meaning and examples of usage (20marks)
4. Illustrate the animal cell ultra structure with proper illustration. (20marks)
5. With clear illustration describe the features of the long bone. (20marks)