



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY  
SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR TVET DIPLOMA IN COMMUNITY HEALTH  
AND DEVELOPMENT**

**1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER 2023/2024 ACADEMIC YEAR**

**MAIN CAMPUS**

---

–

**COURSE CODE: HDC 2124**

**COURSE TITLE: HUMAN ANATOMY AND PHYSIOLOGY**

**EXAM VENUE: STREAM: (TVET Dip Comm Health & Dev)**

**DATE: EXAM SESSION:**

**TIME: 2.00 HOURS**

---

–

**Instructions:**

- 1. Answer all the questions in Section A and ANY other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**SECTION A: MCQS. WRITE THE ANSWERS IN YOUR BOOKLET.**

1) Which of the following terms describes the body's ability to maintain its normal state?

- (A) Anabolism
- (B) Catabolism
- (C) Tolerance
- (D) Homeostasis
- (E) Metabolism

2) Which of the following best describes the human body's defense mechanism against environmental bacteria?

- (A) Hair in the nose
- (B) Mucous membranes
- (C) Osteoblasts
- (D) Saliva
- (E) Tears

3) Which cells in the blood do not have a nucleus?

- (A) Lymphocyte
- (B) Monocyte
- (C) Erythrocyte
- (D) Basophil
- (E) Neutrophil

4) Which of the following is flexible connective tissue that is attached to bones at the joints?

- (A) Adipose
- (B) Cartilage
- (C) Epithelial
- (D) Muscle
- (E) Nerve

5) Which of the following allows air to pass into the lungs?

- (A) Aorta
- (B) Esophagus
- (C) Heart
- (D) Pancreas
- (E) Trachea

6) Which of the following is the body cavity that contains the pituitary gland?

- (A) Abdominal
- (B) Cranial
- (C) Pleural
- (D) Spinal
- (E) Thoracic

7) Which of the following closes and seals off the lower airway during swallowing?

- (A) Alveoli
- (B) Epiglottis
- (C) Larynx

- (D) Uvula
- (E) Vocal cords

8) Which of the following is located beneath the diaphragm in the left upper quadrant of the abdominal cavity?

- (A) Appendix
- (B) Duodenum
- (C) Gallbladder
- (D) Pancreas
- (E) Spleen

9) Which of the following anatomical regions of abdomen lies just distal to the sternum?

- (A) Epigastric
- (B) Hypochondriac
- (C) Hypogastric
- (D) Lumbar
- (E) Umbilical

10) Which of the following cavities are separated by the diaphragm?

- (A) Abdominal and pelvic
- (B) Cranial and spinal
- (C) Dorsal and ventral
- (D) Pericardial and pleural
- (E) Thoracic and abdominal

11) Which of the following terms describes the motion of bending the forearm toward the body?

- (A) Abduction
- (B) Eversion
- (C) Flexion
- (D) Pronation
- (E) Supination

12) In which of the following positions does a patient lie face down?

- (A) Dorsal
- (B) Erect
- (C) Lateral
- (D) Prone
- (E) Supine

13) If the foot is abducted, it is moved in which direction?

- (A) Inward
- (B) Outward
- (C) Upward
- (D) Downward

14) The anatomic location of the spinal canal is

- (A) caudal
- (B) dorsal
- (C) frontal

- (D) transverse
- (E) ventral

15) Which of the following is a structural, fibrous protein found in the dermis?

- (A) Collagen
- (B) Heparin
- (C) Lipocyte
- (D) Melanin
- (E) Sebum

16) A patient has a fracture in which the radius is bent but not displaced, and the skin is intact. This type of fracture is known as which of the following?

- (A) Closed, greenstick
- (B) Complex, comminuted
- (C) Compound, transverse
- (D) Open, spiral
- (E) Simple, pathologic

17) Which of the following is the large bone found superior to the patella and inferior to the ischium?

- (A) Calcaneus
- (B) Femur
- (C) Symphysis pubis
- (D) Tibia
- (E) Ulna

18) The physician directs the medical assistant to complete a request form for an X-ray study of the fibula. The procedure will be performed on which of the following structures?

- (A) Heel
- (B) Lower leg

19) Which of the following best describes the human body's defense mechanism against environmental bacteria?

- (A) Hair in the nose
- (B) Mucous membranes
- (C) Osteoblasts
- (D) Saliva
- (E) Tears

20) Which cells in the blood do not have a nucleus?

- (A) Lymphocyte
- (B) Monocyte
- (C) Erythrocyte
- (D) Basophil
- (E) Neutrophil

**SECTION B: ANSWER ANY TWO QUESTIONS**

1. Describe what is meant by hemiplegia. (20 marks)
2. Describe the structure and function of skeletal system. (20 marks)
3. Describe the structure of the human skin. (20 marks)