



*(Knowledge for Development)*

# **KIBABII UNIVERSITY**

## **TVET DIPLOMA EXAMINATIONS**

### **TERM 2**

#### **MAIN EXAMINATION**

**COURSE CODE:** ENV/OS/MGT/CR/05/6/A

**COURSE TITLE:** ANATOMY & PHYSIOLOGY STUDIES

**DATE:** 14<sup>TH</sup> APRIL 2023

**TIME:** 8.00 -10.00 PM

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**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION  
COUNCIL (TVET CDACC)**

**QUALIFICATION ANATOMY & PHYSIOLOGY TECHNIQUES**

**END OF TERM EXAMINATION**

**MULTIPLE CHOICE QUESTIONS**

**SECTION A – (10MKS) ATTEMPT ALL QUESTIONS**

1. Identify a structure responsible for secondary thickening in plants?
  - a. Lignin
  - b. Xylem
  - c. Cork cambium
  - d. Phloem
2. Name the organ likely to be found in abundance in an enzyme secreting cell.
  - a. Mitochondria
  - b. Golgi bodies
  - c. Lysosomes
  - d. Endoplasmic reticulum
3. Identify a disease whose symptom is hardening and swelling of the liver.
  - a. Jaundice
  - b. Cirrhosis
  - c. Kidney stones
  - d. Cardiac arrest
4. Name the structure that join bones to bones
  - a. Ligaments
  - b. Tendons
  - c. Muscles
  - d. Cartilage
5. A nerve cell that connects receptors and effectors.
  - a. Sensory nerve
  - b. Relay nerve
  - c. Motor nerve
  - d. None of the above
6. What is the name given to the tissue that joins muscles to muscles?
  - a. Tendons

- b. Cartilage
  - c. Ligaments
  - d. Fibres
7. Name strengthening material found in xylem tissue.
- a. Cellulose
  - b. Lignin
  - c. Pectin
  - d. Chitin
8. A strengthening material found in collenchyma tissue
- a. Pectin
  - b. Cellulose
  - c. lignin
  - d. cuticle
9. Identify the branch of anatomy that deals with internal structure of body tissue.
- a. Microscopy
  - b. Genetics
  - c. Histology
  - d. Cytology
10. Name the process by which plants absorb mineral ions from the soil.
- a. Osmosis
  - b. Capillarity
  - c. Mass flow
  - d. Active transport
  - e.

**SECTION B ATTEMPT ALL QUESTIONS (40MKS)**

11. State the differences between endocrine and nervous system. (4mks)
12. Explain biological aspects responsible for:- (4mks)
- i. Primary growth in plants
  - ii. Secondary growth in plants
13. State the meaning of the following terms in plant response:- (4mks)
- i. Phototaxis
  - ii. Aerotaxis
  - iii. Thigmo tropism
  - iv. Geotropism
14. What are the roles of each of the following to a germinating seed? (3mks)
- i. Oxygen
  - ii. Cotyledons
  - iii. Small seeds require light immediately after germination. Explain. (1mks)
15. Explain two types of germinations giving examples in each case. (4mks)
16. (a) What is a tactic response? (2mks)
- (b) state two importance of tactic response in living animals. (2mks)



17. State 4 reasons why water is significant in a seed germination. (4mks)
18. Give 4 ways of breaking dormancy in seeds. (4mks)
19. Name the hormone responsible for:- (4mks)
- a) Apical dominance
  - b) Secondary sexual characteristics in males
  - c) Milk stimulation in females
  - d) Sugar level regulations
20. What are the functions of the following parts in growth and development of plants?
- a) Epicotyl (2mks)
  - b) Hypocotyl (2mks)

**SECTION C ATTEMPT ALL QUESTIONS (50mks)**

21. Describe the role of the following hormones in the growth & development of plants.
- a) Auxins (4mks)
  - b) Gibberellins (4mks)
  - c) Cytokinins (4mks)
  - d) Ethylene (3mks)
22. Describe the role of hormones in menstrual cycle of females and gamete production. (15mks)
23. Describe how herbaceous plants are able to maintain an upright posture. (10mks)
24. Describe the structure and functions of various supportive tissues in woody plants. (10mks)