



# KITH & KIN INTERNATIONAL COLLEGE

7/11 Kaoli Olusanya Street, Owode Ibeshe, Ikorodu, Lagos State.

## FIRST TERM EXAMINATION 2025/2026 ACADEMIC SESSION

SUBJECT	BIOLOGY	CLASS	SS 1	DURATION	1½ HOURS
---------	---------	-------	------	----------	----------

1. What is the **most specific** level of classification?
  - A. Class
  - B. Species
  - C. Genus
  - D. Order
  
2. What is the science of classifying living things called ?
  - A. Taxonomy
  - B. Ecology
  - C. Evolution
  - D. Genetics
  
3. Which of the following is the highest taxonomic rank ?
  - A. Kingdom
  - B. Phylum
  - C. Domain
  - D. Species
  
4. Who developed the system of binomial nomenclature ?
  - A. Linnaeus
  - B. Aristotle
  - C. Darwin
  - D. Mendel
  
5. What is the basis for grouping organisms into kingdoms ?
  - A. Cell structure
  - B. Body organization
  - C. Mode of nutrition
  
6. What is the most specific taxonomic rank ?
  - A. Genius
  - B. Species
  - C. Family
  - D. Order
  
7. What is the study of living organisms & their interactions with the environment called ?
  - A. Biology
  - B. Chemistry
  - C. Physics
  - D. Geology
  
8. What is the basic unit of life ?
  - A. Cell
  - B. Tissue
  - C. Organ
  - D. System
  
9. Who is considered the father of biology ?
  - A. Aristotle
  - B. Darwin
  - C. Linnaeus
  - D. Mendel
  
10. What are the three main branches of biology ?
  - A. Botany , Zoology , Microbiology
  - B. Anatomy , Physiology , Genetics
  - C. Ecology , Evolution , Conservation
  - D. All of the above

11. What is the basic structural & functional unit of living organisms ?

- A. Tissue
- B. Cell
- C. Organ
- D. System

12 . Which organelle is responsible for generating energy ?

- A. Nucleus
- B. Mitochondria
- C. Ribosome
- D. Lysosome

13. What is the main function of the cell membrane ?

- A. To control cell growth
- B. To regulate what enters & leaves the cell
- C. To synthesis protein
- D. To store genetic information

14. Which organelle contains genetic materials ?

- A. Mitochondria
- B. Ribosome
- C. Nucleus
- D. Endoplasmic Reticulum

15. What is the movement of water molecules from high concentration to low concentration through selective permeable membrane called ?

- A. Osmosis
- B. Diffusion
- C. Active transport
- D. Diffusion

16. What is the term for the movement of molecules from high concentration to low concentration

- A. Active transport

- B. Passive transport
- C. Diffusion
- D. Osmosis

17. What is the primary function of the cell membrane ?

- A. To synthesize proteins
- B. To store genetic information
- C. To regulate what enters & leave the cell
- D. To generate energy

18. Which organelle is responsible for protein synthesis?

- A. Mitochondria
- B. Ribosome
- C. Lysosome
- D. Golgi apparatus

19. Which organelle is responsible for modifying & packaging proteins ?

- A. Endoplasmic reticulum
- B. Golgi apparatus
- C. Lysosome
- D. Mitochondria

20. What is the primary function of the nucleus ?

- A. Energy production
- B. Protein synthesis
- C. Cell signaling
- D. Storage of genetic information

21. What is the primary source of energy for animals ?

- A. Proteins
- B. Carbohydrates
- C. Fats
- D. Vitamins

22. Which nutrients is essential for building & repairing tissues ?

- A. Carbohydrate
- B. Proteins
- C. Fats
- D. Fiber

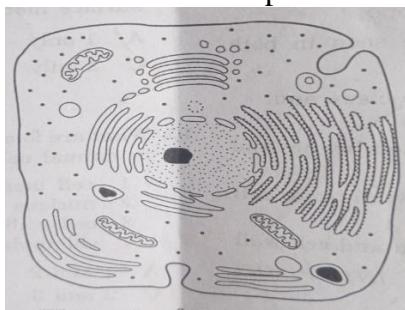
23. What is the process by which animals breakdown food into simpler molecules ?

- A. Ingestion
- B. Digestion
- C. Absorption
- D. Egestion

24. What is the term for a diet that includes both plant & animal- based food ?

- A. Herbivorous
- B. Carnivorous
- C. Omnivorous
- D. Autotrophic

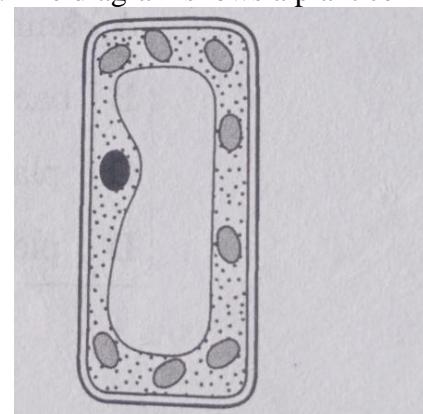
25. The diagram represents a cell as seen under the electron microscope .



What type of cell is this ?

	Type of cell	Reason
A	Animal cell	Outer layer is the cell membrane
B	Bacterium	No chromosome are visible
C	Plant cell	Cytoplasm is visible
D	Plant cell	Cell wall is visible

26. The diagram shows a plant cell

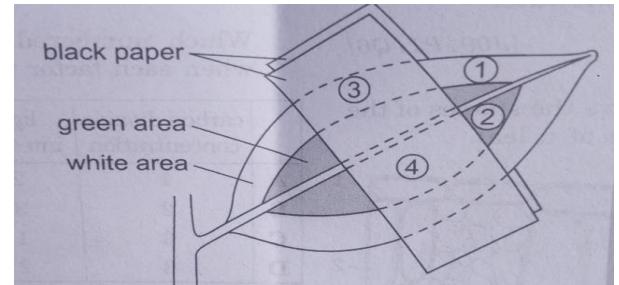


Which structure identifies this as a plant cell rather than animal cell?

- A. Cell membrane
- B. Cell wall
- C. Cytoplasm
- D. Nucleus

27. A plant has leaves that are partly green & partly white. The plant is destarched and a leaf is partly covered by black paper.

The plant is placed in bright light for several hours .Four disc are then cut from the leaf in the position shown & are tested for starch.



Which disc contain starch ?

- A. 1 only
- B. 1 and 2
- C. 2 only
- D. 3 and 4

28. The cell is a functional unit of living organisms because

- A. multicellular organisms are made up of cells

**B.** all cells in a multicellular organism function as a single cell

**C.** the function of a multicellular organism is the sum total of the functions of its constituent cells

**D.** the function of a single cell is superior to that of the multicellular organism

**E.** the cells of a multicellular organism are similar in structure

29. The organelle which eliminates water from the body of protozoa is

**A.** plasma membrane

**B.** contractile vacuole

**C.** cell wall

**D.** protoplasm

**E.** nucleus

30. Spirogyra is regarded as a multicellular plant because

**A.** its cells are linked together by cytoplasmic strands

**B.** its cells are joined to form organs

**C.** the cylindrical cells are linked end to end

**D.** the filaments consist of one cell only

**E.** it is an alga containing large vacuoles

31. Viruses are economically important because they?

**A.** do not have cell structures

**B.** can only reproduce inside living cells.

**C.** cause diseases in plants and animals

**D.** exist as crystals outside living cells

32. Which of the following statements about living things is correct?

**A.** animals respire using carbon(iv)oxide as a raw material

**B.** growth in plants is limited after some time

**C.** most plants respond to stimulus slowly

**D.** higher animals can reproduce asexually

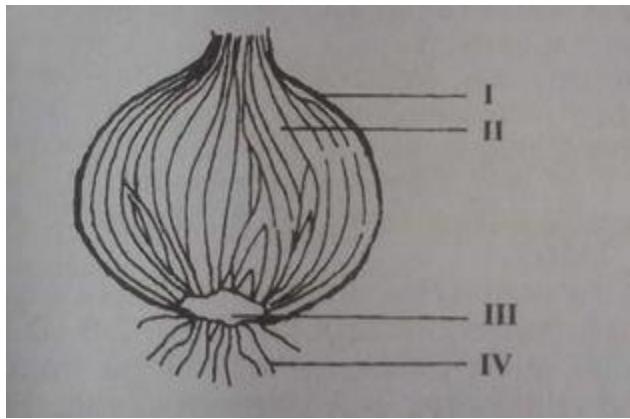
33. The organelle involved in the transport of substances within a cell is?

**A.** Golgi body

**B.** endoplasmic reticulum

**C.** ribosome

**D.** mitochondrion



34. The diagram above is an illustration of the longitudinal section of a plant organ. Study it and answer the question below;

The plant is a?

**A.** stem tuber

**B.** bulb

**C.** stolon

**D.** runner

35. The organelle involved in the transport of substances within a cell is?

**A.** Golgi body

**B.** endoplasmic reticulum

**C.** ribosome

**D.** mitochondrion

36. Some structures found in cells are listed

1. cell wall

2. cell membrane

3. chloroplast

4. cytoplasm

5. nucleus

Which structures are found in both animal cells & plant cells ?

- A. 1 2 4
- B. 1 2 3
- C. 2 3 5
- D. 2 4 5

37. What are found in plant cells but not in animal cells?

1. cell membrane

2. nucleus

3. cell wall

4. chloroplast

- A. 1 and 2
- B. 1 and 4
- C. 2 and 3
- D. 3 and 4

38. which of the following structures differentiates animal cell from a plant cell?

- A. Cytoplasmic
- B. Chloroplast
- C. Mitochondrion
- D. Cell membrane

39. The structure in the cell that controls the movement of substances in and out of the cells is the

- A. Cytoplasmic membrane
- B. Nuclear membrane
- C. Cytoplasm
- D. Protoplasm

40. Which of the following reagents is used for the test for starch?

- A. Million's reagent
- B. Fehlings reagent
- C. Iodine solution
- D. Sudan II

41. Which of the following is an autotrophic mode of nutrition?

- A. Chemosynthesis
- B. Saprophytism
- C. Parasitism
- D. Symbiosis

42. The following are necessary for photosynthesis to take place except

- A. Shelter them from excessive heat from the sun
- B. Give them protection from enemies
- C. Are used for building houses & furniture
- D. Beautify their surrounding

45. The scientist who discovered the cell while examining a thin slice of cork under the microscope was

- A. Robert Hooke
- B. Anton Van Leeuwenhoek
- C. Mattias Schleiden
- D. Alexander flemming

46. The process by which plants manufacture food from carbon-dioxide & water, using energy from the sun is termed

- A. Chemosynthesis
- B. Photosynthesis
- C. Autotrophic
- D. Heterotropism

47. Which of the following organisms is one – celled & free- living ?

- A. Volvox

- A. Chlorophyll
- B. Water
- C. Carbon-dioxide
- D. Oxygen

43. In which of the following process is carbon – dioxide given out?

- A. Respiration in plants
- B. Decay of organisms
- C. Burning of organic matter
- D. Burning of fuels

44. All animals are dependent on green plants because plants

- B. Spirogyra
- C. Rhizopus
- D. Chlamydomonas

48. Which of the following levels of organization in living things is the correct sequence , starting from the most complex to the simplest?

- A. Tissue ---cell---organ ----system
- B. System --- organ --- tissue – cell
- C. Cell ----tissue--- system ---organ
- D. Cell --- tissue ---organ ---system

49.Which of the following is not a cell organelle ?

- A. Golgi body
- B. Nucleus
- C. Fat droplets
- D. Ribosomes

50. Which of the following organisms possess both plant & animal characteristics?

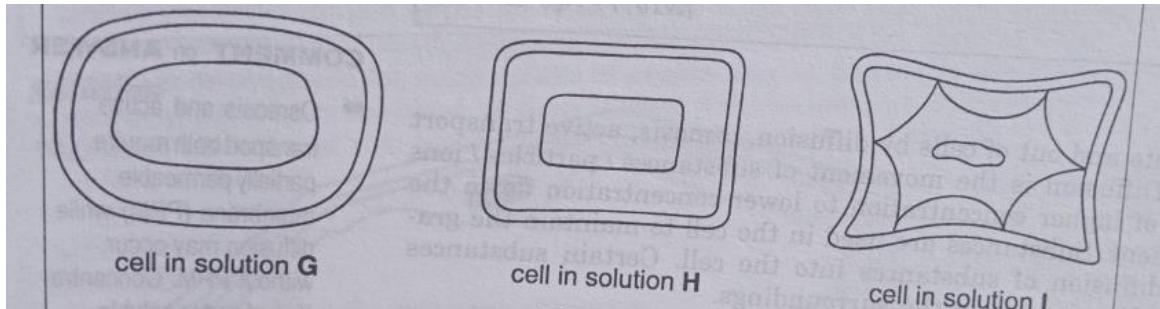
- A. Amoeba
- B. Paramecium
- C. Euglena
- D. Mucor

## THEORY

### PAPER 2– ESSAY [40 marks]

Question number 1 is compulsory. .Answer any four questions from the section

1. Fig 2.1 shows three similar plant cells 5 minutes after being placed in different solutions , G , H and I . One of these solutions has a composition & water potential exactly the same as that of the cell sap in the cells.



(a)One of the cell in Fig 2.1 , label clearly

i. With the letter J , a structure made of cellulose [2marks]  
ii. With the letter K , the part of the cell that would contain the nucleus [2marks]

(b)Identify the solution that has a higher water potential than the cell sap. [2marks]

Explain what happened to cause the appearance of the cell in that solution . [2marks]

(c)On the cell in solution I , shade all regions that would contain solution I

ii. Explain your answer [2marks]

2. 2. (a)Describe briefly the process involved in the breakdown of glucose in the cell of living organisms to produce energy (A T P) [2marks]

(b)State two conditions under which glucose in the cell of living organisms to produce energy [2marks]

(c)Describe an experiment to demonstrate that oxygen is released by green plants during photosynthesis  
WAEC1990[6marks]

3. a)What is a cell ? [2marks]

(b) Describe briefly the structure of DNA [2marks]

(c)Describe the process of mitosis [4marks]

(d)What is the importance of mitosis to living organisms [2marks]

WAEC 1995

4. (a)State two advantages of complex structural organization in higher organisms [2marks]  
(b) List two differences between colonial organisms & filamentous organisms [2marks]  
(c) Give one example each of a colonial organism & a filamentous organism [2marks]  
(d) Make a labelled diagram 10- 12cm long to show the structure of a named filamentous alga [4marks]

WAEC 1996

5. (a)i. Name four similarities found in plants & animal cells [2marks]  
ii. In a tabular form , list four different cells found in man & give function for each of the cells [2marks]  
(b) i. Name the two types of cell divisions [2marks]  
ii. Give two examples each of life processes involved in each type of the cell divisions[2marks]  
(c)Name the two types of reproduction usually associated with organisms [2marks]