



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	1 1/2 HOURS
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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

D. All of the above

6. What is the most specific taxonomic rank ?

- A. Genus
- 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

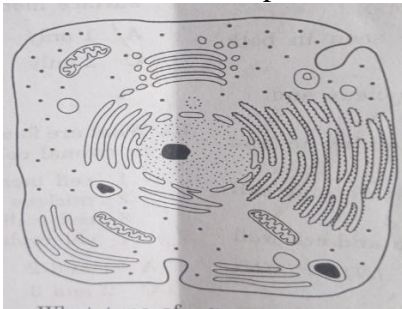
23. What is the process by which animals breakdown food into simpler molecules ?

- 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

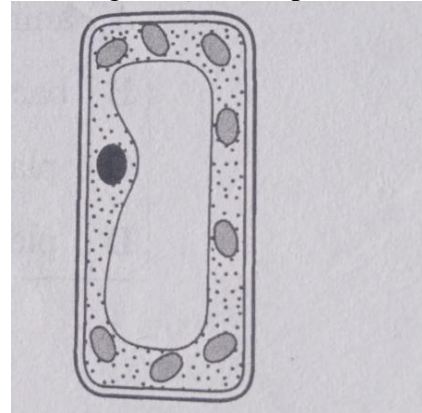
25. The diagram represents a cell as seen under the electron microscope .



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

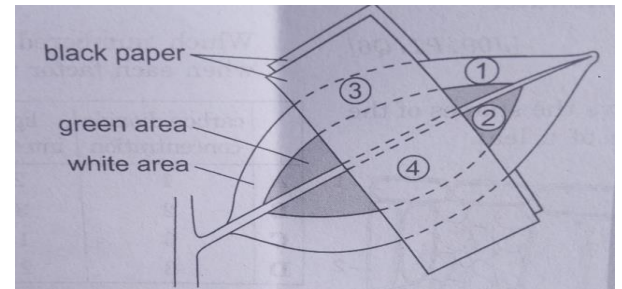


Which structure identifies this as a plant cell rather than animal cell?

- 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

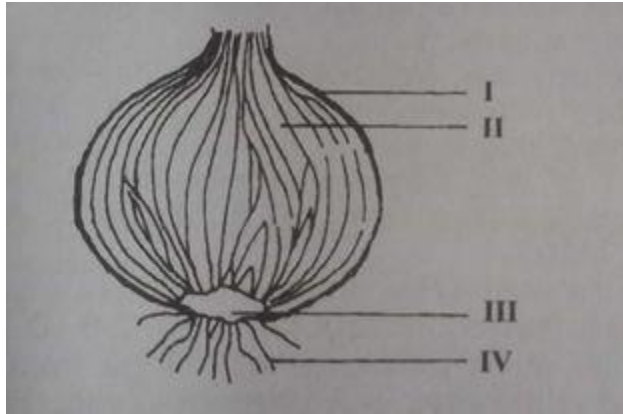
33. The organelle involved in the transport of substances within a cell is?

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. Heterotrophism

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 processes 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?

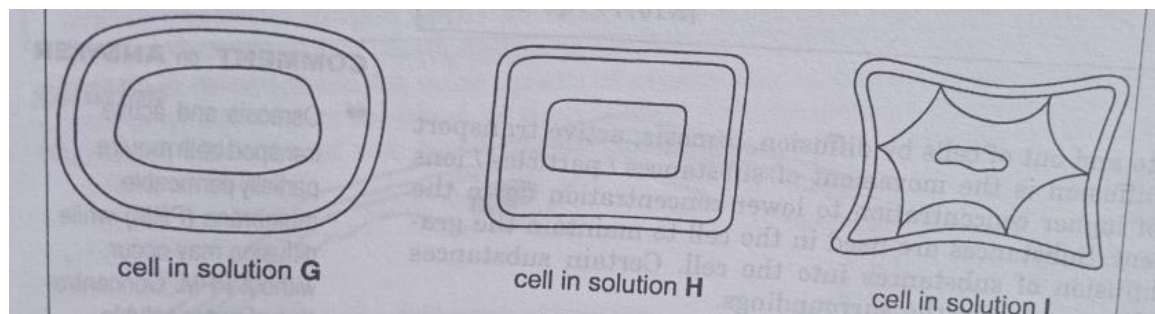
- A. Amoeba
- B. Paramecium
- C. Euglena
- D. Mucor

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

- With the letter J, a structure made of cellulose [2marks]
- 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

- Explain your answer [2marks]

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]