

UMMUL-QURA HIGH SCHOOL

Arowona Bus-Stop, Akanran Road, Oyo State, Ibadan.

First-Term Examination, 2020/2021 Session.

SUBJECT: Biology.

CLASS: SSS 2

Instructions: Answer **all** questions in SECTION **A** and **three** from SECTION **B**.

SECTION A: OBJECTIVES

TIME: 1hour.

1. Autotrophic nutrition may be defined in term of food obtained ----
.
A. from other organism in exchange for some products
B. by the break-down of complex substances
C. by an organism utilizing its own stored energy
D. by synthesizing simple substances using energy from an external source
2. Which of the following organisms is at the tissue level of organization?
A. Euglena
B. Paramecium.
C. Volvox.
D. Hydra.
3. Autotrophs are also known as ----.
A. consumer
B. decomposers
C. producers
D. herbivores
4. Which of the following groups of organisms feeds on green plants directly?
A. Producer.
B. Decomposers.
C. Primary consumer
D. Secondary consumer
5. The scientist who discovered the honeycomb structure of the cell was ----.
A. Robert Hook
B. Felix Dujardin
C. Mathias Schlciden
D. Louis Pasteur
6. Which of the following structures controls the activities of the living cell?
A. Nucleus.
B. Centrosome.
C. Chloroplasts.
D. Golgi body.
7. Different tissues in plants contribute to the support of the parts as a result of the following characteristics **except** ----.
A. malleability
B. rigidity
C. resilience
D. flexibility
8. The process by which plants and animals are modified in structure, physiology and behavior in order to survive is known as ----.
A. evolution
B. adaptation
C. succession
D. aggregation

9. The process of anaerobic respiration of yeast in sugar solution is known as ----.
 A. oxidation
 B. fermentation
 C. decomposition
 D. tissue respiration
10. Muscles are attached to bones by means of ----.
 A. ligament
 B. cartilage
 C. tendons
 D. connective tissue
11. Growing radius of seedlings are ----.
 A. negative phototropic
 B. positive phototropic
 C. negative geotropic
 D. negative hydrotropic
12. Over secretion of thyroxin is likely to lead to ----.
 A. thinness of body
 B. sluggishness
 C. dwarfism
 D. cretinism in infant
13. Which of the following would be the primary producer in food chain?
 A. Saprophytes.
 B. Herbivores.
 C. Carnivores.
 D. Green plants.
14. The role of dead organic matter in the soil is to ----.
 A. make the soil black
 B. increases the mineral salt content
 C. provide food for all living organisms
 D. increase the acidity of the soil
15. Which of the following resources is competed for orga6in the dessert?
 A. Light.
 B. Temperature.
 C. Oxygen.
 D. Water.
16. The following are necessary for photosynthesis to take place **except** ----.
 A. chlorophyll
 B. water
 C. carbon dioxide
 D. oxygen
17. Which of the following is not an example of a heterotrophic mode of nutrition?
 A. Symbiosis.
 B. Parasitism.
 C. Saprophytism.
 D. Holophytism.
18. Which of the following is a similarity between a typical animal and plant cell? Presence of ----.
 A. cellulose cell wall
 B. chlorophyll
 C. cell membrane
 D. large vacuole
19. Which of the following substances **cannot** control the growth of harmful micro-organisms?
 A. Antibiotic.
 B. Hypotonic salt solution.
 C. Disinfectant.
 D. Isotonic sugar solution.
20. The process by which plants manufacture food from carbon dioxide and water, using energy from the sun is termed ----.

- A. chemosynthesis
 - B. photosynthesis
 - C. autotropism
 - D. heterotrophism
21. Which of the following organisms exist as a filament?
- A. Euglena.
 - B. Volvox.
 - C. Paramecium.
 - D. Spirogyra.
22. An example of organ level of organization is ----.
- A. bird
 - B. kidney
 - C. spermatozoa
 - D. xylem
23. Which of the following forms of energy is utilized during photosynthesis?
- A. Potential.
 - B. Kinetic.
 - C. Solar.
 - D. Chemical.
24. The major mineral present in the shell of molluscs is ----.
- A. copper
 - B. sodium
 - C. iron
 - D. calcium
25. Cholera is mostly spread by ----.
- A. air
 - B. soil
 - C. water
 - D. noise
26. Which of the following organisms **cannot** exist freely on its own?
- A. Chlamydomonas.
 - B. Amoeba.
 - C. Paramecium.
 - D. Plasmodium.
27. The organism that can carry out both autotrophic and heterotrophic mode of nutrition is ----.
- A. chlamydomonas
 - B. euglena
 - C. endocrine
 - D. spirogyra
28. The complex energy-rich organic matter which living organisms need for life is ----.
- A. water
 - B. air
 - C. food
 - D. mineral salts
29. Which of the following natural resources is most readily available to all organisms?
- A. Oil.
 - B. Weather.
 - C. Air.
 - D. Food.
30. Which of the following organisms is an endo-parasite?
- A. Tapeworm.
 - B. Flea.
 - C. Tick.
 - D. Aphid.
31. The major problem experienced by organism living in small water bodies is ----.
- A. drying up
 - B. oxygen deficiency
 - C. scarcity of food
 - D. wave action
32. Which of the following organisms is **not** a protozoan?

- A. Amoeba.
 - B. Ascaris.
 - C. Plasmodium.
 - D. Paramecium.
33. A meal consisting of yam and a lot of vegetables is **not** a balanced diet because it does not contain ----.
- A. carbohydrates
 - B. protein
 - C. vitamins
 - D. minerals
34. In which of the following level of classification are the members most similar?
- A. Order.
 - B. Genus.
 - C. Species.
 - D. Phylum.
35. Example of flat bones are ---- and ----.
- A. the skull, ribs
 - B. spines, skull
 - C. skull, leg
 - D. wrist, ankles
36. The large and multinucleated cells that involve in demineralization or degradation of bones is known as ---.
- A. chitin
 - B. osteoclasts
 - C. cartilage
 - D. skeleton
37. The two principal elements contain in bone are ----- and -----.
- A. phosphorus, phosphate
 - B. phosphate salt, magnesium
 - C. phosphorus, calcium
 - D. calcium, phosphorus
38. Facial skeleton holds ----.
- A. the nose, eye and check muscle
 - B. ears, nose and mouth
 - C. nose, eye and mouth
 - D. check muscle, nose and ears
39. The passage of the spinal cord is known as ----.
- A. neutral canal
 - B. centrum
 - C. scapula
 - D. transverse process
40. The last two pair of ribs are called ---.
- A. true ribs
 - B. floating ribs
 - C. false ribs
 - D. cervical
41. The longest bone of the hind limb is the ----.
- A. clavicle
 - B. femur
 - C. humerus
 - D. ischium
42. The synovial membrane secretes ---- fluid.
- A. synovial
 - B. pelvic
 - C. semen
 - D. pleural
43. The following are importance of food **except** ----.
- A. repairs the worn-out body tissues
 - B. serves as energy source
 - C. reduces body immunity
 - D. builds up the body for growth
44. The general formula for disaccharides is ----.

- A. $C_6H_{12}O_6$
 - B. $C_{12}H_{22}O_{11}$
 - C. $C_{18}H_{24}O_{14}$
 - D. $C_{24}H_{24}O_{18}$
45. Addition of glucose and galactose will give us ----.
- A. lactose
 - B. maltose
 - C. sucrose
 - D. fructose
46. In Greek, 'hetero' means ----.
- A. other
 - B. self
 - C. take in
 - D. rattan
47. In digestion of food is also known as ----.
- A. constipation
 - B. diarrhea
 - C. stooling
 - D. mechanical digestion
48. Lack of protein will lead to a disease called ----.
- A. scurvy
 - B. kwashiorkor
 - C. Beri Beri
 - D. fatigue
49. Living things are classified into ---- Kingdoms.
- A. 2
 - B. 8
 - C. 6
 - D. 5
50. Krebs's cycle occurs in the ----.
- A. mitochondria
 - B. cytoplasm
 - C. nucleus
 - D. ribosomes

SECTION A: THEORY

TIME: $1\frac{1}{4}$ hour.

- 1ai. What is skeleton? 2 marks.
- 2aii. State **five** biological significant of skeletons. 5 marks.
- 1b. List and explain skeletal material of skeletons. 4.5 marks.
- 1c. Explain 'the skull'. 3.5 marks.
- 2a. List the vertebrae column with one function for each. 5 marks.
- 2b. What are Polysaccharides? Explain the forms of polysaccharides. 5 marks
- 2c. List and explain the forms of girdle. 5 marks.
- 3a. Explain the following;
- i. Saprophytic nutrition.
 - ii. Parasitic nutrition.
 - iii. Holozoic nutrition.
 - iv. Photosynthesis. 7.5 marks.
- 3bi. What is balanced diet? 1 mark.
- 3bii. State and explain **four** functions of supporting tissues in plants. 5 marks.
- 3biii. Mention **three** importance of water. 1.5 mark
- 4ai. What is joint? 2 marks.
- 4aii. State the types of movable joint. 2 marks
- 4aiii. Explain with **two** examples each, the type of movable joints mentioned in 4aii above. 6 marks.
- 4bi. Muscles work in antagonistic to each other. Explain. 3 marks.
- 4bii. List branches of biology. 3 marks.