

# UMMUL-QURA HIGH SCHOOL

Arowona Bus-Stop, Amuloko, Ibadan, Oyo State

Second Term Examination, 2020/2021 Academic Session.

**Subject:** Biology

**Class:** SSS 2

**Time:** 2:30 hours

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

## PAPER I & II [Objective and Theory]

### SECTION A: OBJECTIVE (40 marks).

1. A collection of cells that are similar in structure and perform similar functions is known as ----.  
A. organ  
B. system  
C. tissue  
D. cell
2. The branch of biology that deals with the study of disease that affect plants and animals is called ----.  
A. ecology  
B. entomology  
C. anatomy  
D. biology
3. The following are reptiles *except* ----.  
A. toad  
B. lizard  
C. snakes  
D. crocodile
4. The science of classification of organisms is known as ----.  
A. nomenclature  
B. binomial  
C. taxonomy  
D. grouping
5. The branch of biology that deals with the study of animals is referred to as ---.  
A. botany  
B. zoology  
C. genetics  
D. ecology
6. The features common to both plants and animals is ----.  
A. presence of chlorophyll  
B. growth  
C. both are autotrophic  
D. both stores glucose as starch
7. The locomotive organ used by amoeba is ----.  
A. cilia  
B. flagella  
C. pseudopodia  
D. tentacle
8. A characteristic of living things that deal with the removal of waste products of metabolism from the body is ----.  
A. reproduction  
B. excretion  
C. irritability  
D. respiratory
9. The standard way used by biologists in naming living organisms is referred to as ----.  
A. taxonomy  
B. grouping  
C. classification

- D. binomial system of nomenclature
10. The following belong to class of insects **except** ----.
- housefly
  - grasshopper
  - spider
  - butterfly
11. A body building food is ----.
- protein
  - fat
  - water
  - mineral
12. Which of the following animals is not an herbivore animal?
- Cow
  - Goat
  - Dog
  - Sheep
13. The type of nutrition in which organisms feed on dead organic remains of plants and animals is termed ----.
- parasitic
  - mutualism
  - symbiosis
  - saprophytic
14. Enzyme ptyalin is found in the ----.
- mouth
  - stomach
  - intestines
  - duodenum
15. The following are examples of fruit crops **except** ----.
- maize
  - yam
  - cassava
  - sweet potato
16. The chemical substance used to kill weed is called ----.
- herbicide
  - pesticide
  - insecticide
  - avicides
17. A method of preserving food by exposing the food materials to sun is known as ----.
- drying
  - salting
  - smoking
  - canning
18. All these are rodents **except** ----.
- rats
  - rabbits
  - grass cutter
  - grasshopper
19. The following crops are classified as perennial crops **except** ----.
- mango
  - oil palm
  - maize
  - orange
20. Green plants manufacture their food and by synthesizing organic material from ---- and ----.
- oxygen and water
  - carbon dioxide and water
  - carbon dioxide and energy
  - light and chlorophyll
21. Organisms which produce their own food are known as ----.
- autotrophs
  - heterotrophs
  - plant synthesis
  - all of the above

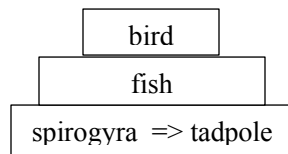
22. Food wastage is caused by the following **except** -----.
- natural disasters
  - microbial attack
  - unavailability of processing facilities
  - high carbohydrate contents
23. Crop like ginger, onion, pepper and thyme are classified as ----- crop.
- fruit
  - fibre
  - spices
  - forage
24. The producers in an ecosystem are also known as ----.
- autotrophs
  - carnivore
  - herbivore
  - heterotrophs
25. The direction of wind is determined with an instrument called -----.
- photometer
  - anemometer
  - wind vane
  - barometer
26. The amount of dissolved salt in water is referred to as -----.
- turbidity
  - salinity
  - density
  - dissolve gases
27. Large natural terrestrial ecosystem is referred to as -----.
- biosphere
  - biomass
  - ecological niche
  - environmental
28. The intensity of light is measured with -----.
- thermometer
  - anemometer
  - photometer
  - indicator
29. The PH 7 of a soil indicates that the soil is -----.
- neutral
  - acidic
  - basic
  - alkaline
30. The solid, rocky crust of the earth is - ----.
- hydrosphere
  - atmosphere
  - lithosphere
  - biosphere
31. A complex network or feeding relationship of food chains is called - food ----.
- chain
  - web
  - link
  - court
32. Animals that feed directly on the producers are referred to as a ----.
- carnivore
  - secondary consumers
  - primary consumers
  - tertiary
33. The secondary consumers in a food chain are also referred to as ----.
- herbivore
  - carnivorous
  - omnivores
  - producer

34. Which of the following animals is an omnivores animal?
- Cat
  - Loin
  - Domestic fowls
  - Goat
35. In a tropic level, the green plants are always at the ----- tropic level.
- first
  - third
  - second
  - fourth
36. A measure of energy present in the organisms at each tropical level of the food chain is termed -----.
- pyramid of number
  - pyramid of biomass
  - pyramid of energy
  - pyramid of biogass
37. The following return carbon dioxide back to the atmosphere **except** -----.
- Combustion
  - Decomposition
  - Respiration
  - Photosynthesis
38. Given a typical example; Guinea grass => grasshopper => toad => snake => hawk. Which one in the chain is the primary consumer?
- Toad
  - Snake
  - Grasshopper
  - Guinea grass
39. Water absorbed by plants and animal is lost to the atmosphere through the following **except** -----.
- respiration
  - transportation
  - excretion
  - condensation
40. The release of harmful waste into the environment is termed -----.
- adaptation
  - tolerance
  - population
  - pollution
41. Animal cell are different from plant cells because animal cells have ----.
- definite cell wall
  - large vacuole
  - centriole
  - chloroplast
42. Which of the following will cause wilting in plants?
- Humility
  - Coldness
  - Adequate soil water
  - Excessive transpiration
43. The complex relationship between the members of a community and their physical environment is known as -----.
- commensalism
  - symbiosis
  - saprophytism
  - ecilogy
44. Which of the following soil fertility improvement methods will have the most negative effect on the ecosystem if not controlled?
- Application of NPK fertilizer
  - Shifting cultivation
  - Crop rotation
  - Mixed farming

45. Organisms in an ecosystem are usually grouped according to their trophic level into -----.

- A. carnivorous and omnivores
- B. consumer and parasites
- C. producer and saprophytes
- D. producer and consumer

46. In the pyramid of energy illustrated below, the organism with the least amount transferred energy is -----.



- A. spirogyra
- B. tadpole
- C. fish
- D. bird

47. An example of organ level of organization is -----.

- A. bird
- B. kidney
- C. spermatozoa
- D. xylem

48. A structural similarity between paramecium and amoeba is the presence of -----.

- A. one food vacuole
- B. two contractile vacuoles
- C. two nuclei
- D. one gullet

49. The heart can beat continuously without being fatigued because it is composed of ---- muscles.

- A. skeletal
- B. smooth
- C. cardiac
- D. renal

50. The odontoid process is found on the --- vertebra.

- A. axial
- B. atlas
- C. thoracic
- D. sacral

SECTION B: THEORY (30 marks).

Instructions: Answer **three** questions in **ALL**.

1.
  - ai) Draw a balanced food web. 1 mark
  - ii) Define skeletal system. 2 marks
  - iii) State **five** biological importance of skeletal system. 3 marks
- bi) State **five** characteristics of living things and explain any two from them. 3 marks
- ii) List **three** importance of classification of living things. 2 marks
2. a) Define and briefly explain the following terms;
  - i. agriculture
  - ii. environment
  - iii. habitat
  - iv. population
  - v. atmosphere. 5 marks
- b) List **five** biomass of the world.  $2\frac{1}{2}$  marks
- c) State **three** importance of biology to agriculture.  $2\frac{1}{2}$  marks
3. a) State correctly and make use of appropriate illustration to explain first and second laws of thermodynamics. 5 marks
- b) State and explain **five** ways of improving crop yield. 5 marks
4. ai) Define enzymes. 1 mark
- ii) State characteristics of enzymes.  $2\frac{1}{2}$  marks
- iii) State the agricultural classifications of crops based on life cycle with **five** examples.  $2\frac{1}{2}$  marks
- b) List and explain factors that both affect aquatic and terrestrial habitats. 4 marks