

UMMUL QURA HIGH SHOOOL

Arowona Bus-Stop Amuloko Akanran Road, Ibadan.

THIRD-TERM EXAMINATION

CLASS: SSS 2 **SUBJECT:** Biology Practical. **DURATION:** 2 hours.

1. (a-i) Identify specimen **A, B, C, D** and **E**.
(a-ii) State **three** physical characteristics of each of specimens **A, B** and **C**.
(a-iii) Which of specimens **A, B** or is best for agriculture?
(a-iv) Give **two** reasons for your answer in 1a-iii above.
(a-v) State uses of specimens **D** and **E**.
(b-i) Draw specimen **D** of size 8 – 10 cm and label it.
(b-ii) Name **two** other equipment that can be used in place of specimens **D** and **E**.
(b-iii) Draw specimen **E** of size 10 – 12 cm.
(b-iv) State **five** economic importance of specimens **A, B** and **C**.
2. (a-i) Identify specimens **F, G, H, I** and **J**.
(a-ii) What is a parasite?
(a-iii) State the types of parasites.
(a-iv) Which types of parasite are specimen **F** and **G**?
(a-v) Give other **two** examples of each of specimens **F** and **G**.
(a-vi) State **four** economic importance of specimens **F** and **G**.
(b-i) Mention **five** bones that make up specimen **H**.
(b-ii) Draw any one of its components.
(b-iii) Specimen **H** is for which side?
(b-iv) Give at least **one** reason for your answer.
(b-v) Draw specimen **J** and label it.
(b-vi) State the types of specimen **I** and give reasons for your answer.
3. (a-i) Identify specimens **K, L, M, N** and **O**.
(a-ii) Specimen **K** belongs to which class of plant?
(a-iii) What is the kingdom of specimen **K**?
(a-iv) State **three** adaptive features of specimen **K**.
(a-v) Bearer of specimen **L** belongs to which kingdom?
(a-vi) State **three** economic importance of specimen **L**.
(b-i) State the **three** components of specimen **M** and their functions.
(b-ii) State the types of joint present in specimen **M**.
(b-iii) Cut and draw transverse section of specimen **N** of size 8 – 10 cm.
(b-iv) Which food nutrients is mainly present in specimen **N**?
(b-v) What is responsible for the state of specimen **O**.

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THIRD-TERM EXAMINATION

CLASS: SSS 2

SUBJECT: Biology.

DURATION: 2 hours.

Instruction: Answer all question in section A and any **three** questions in section B.

Section A: OBJECTIVES

1. The branch of biology that deals with the study of animals is referred to as ----.
 - A. botany
 - B. zoology
 - C. genetics
 - D. ecology
2. A characteristic of living things that deals with removal of waste products of metabolism from the body is ----.
 - A. reproduction
 - B. excretion
 - C. irritability
 - D. respiratory
3. The standard way of naming living organisms by biologists is referred to as ----.
 - A. grouping
 - B. binomial nomenclature
 - C. classification
 - D. taxonomy
4. A method of preserving food by exposing the food materials to sun is known as ----.
 - A. drying
 - B. salting
 - C. smoking
 - D. canning
5. The chemical substance used to kill weed is called ----.
 - A. Pesticide
 - B. Herbicide
 - C. Insecticide
 - D. Acicide
6. The type of nutrition in which organisms feed on dead organic remains of plants and animals is termed ----.
 - A. parasitic
 - B. saprophytic
 - C. mutualism
 - D. symbiosis
7. Enzymes ptyalin is found in the ----.
 - A. mouth
 - B. stomach
 - C. duodenum
 - D. intestine
8. Green plants manufacture their food by synthesizing organic material from ---- and ----.
 - A. oxygen and water
 - B. carbon dioxide and water
 - C. light and energy
 - D. carbon dioxide and energy
9. A body building food is ----.
 - A. protein

- B. fat
C. water
D. mineral salt
10. Organisms which produce their own food are known as -----.
- A. autotrophs
B. heterotrophs
C. plant synthesis
D. mutualist
11. The solid, rocky crust of the earth is -----.
- A. biosphere
B. atmosphere
C. lithosphere
D. hydrosphere
12. A complex network of feeding relationship of food chains is called food -----.
- A. link
B. web
C. court
D. chain link
13. The direction of wind is determined with an instrument called -----.
- A. barometer
B. photometer
C. anemometer
D. wind vane
14. Food wastage is caused by the following **except**;
- A. natural disasters
B. microbial attack
C. unavailability of processing facilities
D. higher carbohydrates contents
15. Crop like ginger, onions, pepper and thyme are classified as ----- crop.
- A. forage
B. spices
C. fiber
D. fruit
16. The pH 7 of a soil indicate that the soil is -----.
- A. neutral
B. acidic
C. basic
D. alkaline
17. The secondary consumers in a food chain are also known as ----.
- A. herbivores
B. carnivores
C. omnivores
D. producers
18. The amount of dissolved salt in water is referred to as -----.
- A. dissolve gases
B. density
C. salinity
D. turbidity
19. Large natural terrestrial ecosystem is referred to as ----.
- A. biosphere
B. biomass
C. ecological niche
D. environment
20. Which of following will cause wilting in plants?
- A. Humidity
B. Coldness
C. Adequate soil water
D. Excessive respiration

21. The release of harmful waste into the environment is termed - ----.

- A. Adaptation
- B. Tolerance
- C. Population
- D. Pollution

22. Which of the following animals is an omnivores animal?

- A. Cat
- B. Lion
- C. Domestic fowls
- D. Goat

23. A measure of energy present in the organisms at the various trophic levels of food chain is termed Pyramid of----.

- A. number
- B. biomass
- C. energy
- D. biogas

24. The following return carbon dioxide back to the atmosphere **except** ----.

- A. combustion
- B. decomposition
- C. respiration
- D. photosynthesis

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

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

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

- A. axial
- B. atlas

- C. thoracic
- D. sacral

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

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

28. Cholera is mostly spread by -----.

- A. air
- B. soil
- C. water
- D. noise

29. The salinity of a brackish habitat -----.

- A. increases immediately after rainfall
- B. increases at the end of rainy season
- C. decreases with an increase in number of organisms
- D. increases during dry season

30. If 90 ants are found in a field with a total area of 100 m², what is the population density of the ants?

- A. 0.09
- B. 0.90
- C. 9.00
- D. 90.0

31. 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
32. Anaerobic respiration in yeast produces carbohydrates and -----
.
- A. ethanol
B. water
C. oxygen
D. glucose
33. Muscle fatigue in the body of an athlete is due to ----.
- A. low pH
B. high oxygen content
C. accumulation of lactic acid
D. accumulation of carbonic acid
34. The major mineral present in the shell of molluscs is -----.
- A. copper
B. sodium
C. iron
D. calcium
35. The complex relationship between the members of a community and their physical environment is known as -----.
- A. commensalism
B. symbiosis
C. saprophytism
D. ecology
36. Which of the following soil fertility improvement methods will have the most negative effect on the ecosystem if not controlled?
- A. Application of NPK fertilizer
- B. Mixed farming
C. Shifting cultivating
D. Crop rotation
37. Which of the following substances is not an excretory product of animals?
- A. Carbon dioxide
B. Urea
C. Sweat
D. Oxygen
38. By what process is starch converted into maltose -----.
- A. hydrolysis
B. condensation
C. translocation
D. photosynthesis
39. The most important factor(s) that influence(s) the ecological niche of an organism is/are the ----.
- A. water, light and predator – prey relationship
B. food and water availability
C. physical environment
D. competition for food and space
40. Which of the following instruments is used to determine the turbidity of water?
- A. hydrometer
B. hygrometer
C. secchi disc
D. rain gauge
41. In an ecosystem, the least efficient energy transfer link is from the -----.

- A. secondary consumers to decomposer
B. sun to producer
C. primary consumer to secondary consumers
D. producer to primary consumer
42. Xerophytes have the following characteristic aimed at conserving water **except** ----.
- A. thick cuticle
B. sunken stomata
C. waxy cuticle
D. bread leaf surfaces
43. An association between living organisms in which one lives on and feeds at the expense of the other is known as -----.
- A. commensalism
B. predator
C. parasitism
D. mutualism
44. Which of the following diseases is caused by a bacterium?
- A. Ringworm
B. Poliomyelitis
C. Syphilis
D. Malaria
45. The number of individuals that the environment can support over a long period of time is it's - ----.
- A. growth rate
B. population capacity
C. total capacity
D. carrying capacity
46. A population which exceeds it's capacity and then collapses is represented graphically by a ----.
- A. bell-shaped curve
B. linear curve
C. sigmoid curve
D. skewed curve
47. The natural dwelling place of an organism to called its -----.
- A. Ecological niche
B. Habitat
C. Population
D. Environment
48. Which of the following ecological factors will result in food shortage?
- A. Drought
B. Low rate of reproduction
C. Emigration
D. Topology
49. Which of the following groups of organisms do not have members that can be called autotrophs?
- A. Protists
B. Mosses
C. Chloropyta
D. Fungi
50. Which of the following pyramids gives the most accurate picture of the relationships between the organisms at the various tropic levels in a food chain? A Pyramid of -----.
- A. number
B. energy
C. biomass
D. size

Section B: THEORY

1. (a-i) Explain the 'impact of culturing' in details. 2 marks.
(a-ii) State **three** methods of measuring microbial growth and explain them. 3 marks.
(b-i) What is forest stratification? 1 mark
(b-ii) State the layers of forest. 2 marks
(c) State features of animals in rainforest. 2 marks
2. (a-i) State **six** beneficial effects of microorganisms. 3 marks
(a-ii) Explain in detail, the phases of growth of microorganisms with the aid of growth curve. 3 marks
(b-i) Mention **four** features which adapt camel to live in its habitat. 2 marks
(b-ii) List four features of grassland habitat. 2 marks
3. (a) Define and briefly explain the following terms;
 - i. Agriculture
 - ii. Environment
 - iii. Habitat
 - iv. Atmosphere
 - v. Population5 marks
(b-i) Define enzymes 1 mark
(b-ii) State characteristics of enzymes. 2 marks
(b-iii) State first and second laws of thermodynamics. 2 marks
4. (a-i) Mention **five** harmful effects of microorganisms. 2.5 marks
5. (a-ii) State and explain **five** ways of controlling microorganisms. 2.5 marks
6. (b-i) List **three** forms in which living cells exist. 1.5 mark
7. (b-ii) Explain briefly energy flow in a freshwater habitat. 1.5 mark
(c) Explain briefly **three** roles of a decomposer in an ecosystem. 2 marks