

UMMUL-QURA HIGH SCHOOL

Arowona Bus-Stop, Amuloko, Ibadan, Oyo State

MOCK Examination, 2020/2021 Academic Session.

Subject: Biology

Class: SSS 3

Time: 3 hours

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

PAPER I & II [Objective and Theory]

SECTION A: OBJECTIVE (40 marks).

- The scientist who introduced binomial nomenclature in the classification of organisms was ----.
 - Carolus Limacus
 - John Ray
 - Livia Rasteur
 - Charles and Darum
- One major difference between plants and animals nutrition is the ability of plants to synthesise ----.
 - food for plants and animal
 - water for plant
 - water for animals
 - food for plants only
- Which of the following instruments is used to determine the turbidity of water?
 - Hygrometer
 - Hydrometer
 - Secchi disc
 - Rain gauge
- In an ecosystem, the least efficient energy transfer link is from the ----.
 - secondary consumers to decomposer
 - sun to producer
 - primary consumer to secondary consumers
 - producer to primary consumer
- An association between living organisms in which one other is known as ----.
 - commensalism
 - predation
 - parasitism
 - mutualism
- When large numbers of organisms share limited space and resources, the immediate result is ----.
 - excretion
 - emigration
 - competition
 - immigration
- The thyroid gland is located at the base of the ----.
 - mild brain
 - kidney
 - neck
 - liver
- What level of organization is spirogyra ----?
 - organ system
 - organ
 - cell
 - tissue

9. The odontoid process is found on the ---- vertebra.
 - A. atlas
 - B. thoracic
 - C. sacral
 - D. axial
10. Muscle fatigue in the body of an athlete is due to ----.
 - A. low PH
 - B. high oxygen contents
 - C. accumulation of lactic acid
 - D. accumulation of carbon fiber
11. The main function of the amniotic fluid is for ----.
 - A. respiration in the foetus
 - B. protection of the foetus from shock
 - C. lubricating the birth canal
 - D. nourishing the foetus
12. The major mineral present in the shell of molluscs is ----.
 - A. copper
 - B. sodium
 - C. iron
 - D. calcium
13. The digestion of protein starts in the ----.
 - A. small intestine
 - B. stomach
 - C. large intestine
 - D. mouth
14. Which of the following organisms cannot exist freely on its own?
 - A. Chlamydomonas
 - B. Amoeba
 - C. Paramecium
 - D. Plasmodium
15. Which of the following is the site for ATP production?
 - A. Lysosom
 - B. Nucleus
 - C. Mitochondria
 - D. Ribosome
16. The organism that can carry out both autotrophic and heterotrophic modes of nutrition is ----.
 - A. chlamydomonas
 - B. eudorina
 - C. euglena
 - D. spirogyra
17. Destination of amino acids in the liver produces ----.
 - A. blood sugar
 - B. glycogen
 - C. bile
 - D. urea
18. The complex energy-rich organic matter which living organisms need for life is ----.
 - A. water
 - B. air
 - C. food
 - D. mineral salts
19. Which of the following functions is associated with calcium in plants? Formation of ----.
 - A. cellulose wall
 - B. ribosome
 - C. cell membrane
 - D. protein
20. The natural dwelling place of an organism is ----.
 - A. ecological niche
 - B. habits
 - C. population

- D. environment
21. Which of the following ecological factors will result in food shortage?
- Drought
 - Low rate of production
 - Emigration
 - Topology
22. Which of the following pyramids gives the most accurate picture of the relationships between the organisms at the various trophic levels in a food chain? A pyramid of - ----.
- numbers
 - energy
 - biomass
 - size
23. The establishment of game reserves and parks is a method of ----.
- conserving natural resources
 - cultivating game
 - cultural awareness
 - controlling population
24. Which of the following practices is **not** used in conserving water?
- Damming
 - Deforestation
 - Reforestation
 - Afforestation
25. Which of the following resources **cannot** be renewed?
- Air
 - Petroleum
 - Good crop
 - Soil
26. Which of the following materials is **not** easily biodegradable?
- Polythene bag
 - Cotton bag
 - Hides and skin bag
 - Paper bag
27. The inability of an organism to adapt to its habitats can lead to ----.
- dormancy
 - adaptation
 - excretion
 - survival
28. Which of the following terms is associated with natural selection?
- Adaptive radiation
 - Differential reproduction
 - Population variability
 - Survival of the fittest
29. Which of the following scientists did not contribute to the development of genetics?
- Thomas Morgan
 - Wilhelm Johnson
 - Gregor Mendel
 - Felix Durjadin
30. Scientists who study genetics are known as ----.
- genealogist
 - genetics
 - menfelist
 - genescenti
31. The rational and prudent use of natural resources is known as ----.
- preservation
 - conservation
 - utilization
 - management
32. Which of the following relationship does **not** involve two organisms?
- Commensalism
 - Saprophitism

- C. Symbiosis
 - D. Parasitism
33. The function of the villi in the alimentary canal is to -----.
- A. secrete gastric juice
 - B. curdle milk
 - C. emulsify fat
 - D. increase the surface area of the absorption
- The step below are involved in the testing of a leaf for starch. Study them carefully and use it to answer questions 34 – 35. I - Decolorize leaf
II – Dip Decolorize leaf in warm water
III – Place leaf in boiling water
IV – Add iodine solution.
34. The correct order for the test is ----.
- A. I, II, III and IV
 - B. I, III, II and IV
 - C. II, III, I and IV
 - D. III, I, II and IV

35. The best time to pluck the leaf for the experiment is ----.
- A. after being exposed to sun light
 - B. three hours after sun set
 - C. before sun rise
 - D. six hours after sunrise
36. Special modifications which enable an organism to survive in its habitat is known as -----.
- A. adaptation
 - B. tolerance
 - C. mimicry
 - D. coloration
37. Flaccidity in plants is associated with -----.
- A. Cessation of photosynthesis

SECTION B: THEORY (30 marks).

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