

**HERITAGE GLOBAL ACADEMY**

**2, Ola Iya Close, Off Okiki Street, Isawo Road, Owutu, Agric-Ikorodu, Lagos**

**FIRST TERM 2nd CA, 2022/2023 SESSION**

**SUBJECT: BIOLOGY CHECKPOINT**

**Class: JSS3**

**Time Allowed: 45 Minutes**

***Section A***

***Multiple Choice Section***

1. Many diseases caused by bacteria can be treated and cured by using
   1. Antiseptic
   2. Antibiotics
   3. Antigens
   4. Antibodies
2. Cholera is mostly spread by
   1. Noise
   2. Water
   3. Soil
   4. Air
3. One of the methods of preventing measles is by
   1. Sleeping under mosquito net
   2. Attacking the vector
   3. Attacking the secondary host
   4. Vaccinating young children
4. Which of the following is a type of micro-organism?
   1. Bacteria
   2. Earthworm
   3. Ant
   4. Mosquito
5. Which of the following diseases is caused by a virus?
   1. Tuberculosis
   2. Malaria
   3. Measles
   4. Cholera
6. How do antibiotics work against bacteria?
   1. They destroy the cell walls of bacteria
   2. They inhibit the growth of bacteria
   3. They neutralize the toxins produced by bacteria
   4. They prevent bacteria from reproducing
7. Which of the following is an example of a protozoan?
   1. Amoeba
   2. E. coli
   3. Streptococcus
   4. Bacillus
8. Which of the following is the causative agent of malaria?
   1. Mycobacterium leprae
   2. Treponema pallidum
   3. Plasmodium falciparum
   4. Trypanosoma cruzi
9. Syphilis is caused by
   1. Mycobacterium leprae
   2. Treponema pallidum
   3. Plasmodium falciparum
   4. Trypanosoma cruzi
10. All of the following scientists are associated with the study of micro-organisms except
    1. Robert Whittaker
    2. Robert Koch
    3. Louis Pasteur
    4. Anthony von Leewhenhoek
11. Which of the following is a pathogen?
    1. House fly
    2. HPV
    3. Black fly
    4. Tse tse fly
12. What is the primary function of a vaccine?
    1. To treat a disease
    2. To boost the immune system
    3. To prevent infection
    4. To reduce fever
13. Which of the following is a non-communicable disease?
    1. Influenza
    2. Tuberculosis
    3. Diabetes
    4. Malaria
14. What is the role of antibodies in the immune system?
    1. They attack and destroy pathogens
    2. They transport oxygen in the blood
    3. They regulate body temperature
    4. They aid in digestion
15. Which of the following microscope is suitable for studying viruses in the laboratory?
    1. Simple microscope
    2. Compound microscope
    3. Electron microscope
    4. Light microscope
16. Which of the following organelles is common to both plant and animal cells?
    1. Cell membrane
    2. Chlorophyll
    3. Cellulose cell wall
    4. Large vacuole
17. The network of double membrane that serve as the power house of the cell
    1. Plasma membrane
    2. Nuclear membrane
    3. Mitochondrion
    4. Endoplasmic reticulum
18. Which of the following is regarded as the basic unit of life?
    1. Tissue
    2. Cell
    3. Organ
    4. System
19. Which of the following structures is regarded as the genetic material of the cell?
    1. DNA
    2. Nucleolus
    3. Centriole
    4. Lysosome
20. Which of the following is not correct about living cell?
    1. The basic unit of a living organism is the cell
    2. All living organisms are either single or groups of cells
    3. There is no life apart from the life of the cell
    4. All the cells in organisms are the same
21. The major function of the cell membrane is that it
    1. Controls what enters into and goes out of the cell
    2. Synthesizes protein
    3. Breaks down worn-out organelles
    4. Is the site for photosynthesis
22. Which of the following structure is a tissue?
    1. Bone
    2. Erythrocyte
    3. Neurons
    4. Platelet
23. Which of the following levels of organization in living things is in the correct sequence, starting from the most complex to the simplest?
    1. Tissue, cell, organ, system
    2. Cell, organ, tissue, system
    3. Tissue, organ, cell, system
    4. Cell, Tissue, organ, system
24. Which of these has the most complex level of organization?
    1. Euglena
    2. Hydra
    3. Heart
    4. Virus
25. At what level of organization is amoeba?
    1. System
    2. Tissue
    3. Cellular
    4. Organ
26. Which of the following taxa embraces the rest?
    1. Kingdom
    2. Phylum
    3. Genus
    4. Specie
27. The branch of biology that deals with the principles of classification of organisms is known as
    1. Biological index
    2. Ecology
    3. Taxonomy
    4. Nomenclature
28. In the binomial system of naming organisms, the second name is called the
    1. Scientific name
    2. Specific name
    3. Generic name
    4. Common name
29. In which of the following levels of classification are the members most similar?
    1. Phylum
    2. Genus
    3. Specie
    4. Order
30. The botanical name of banana is
    1. *Musa cavendishi*
    2. *Musa paradisiaca*
    3. *Lycopersicum esculentum*
    4. *Dioscorea alata*

**SECTION B: ESSAY**

***Answer any questions that will earn you 30 p0ints***

1. Complete the table below by naming the classes of vertebrates in their evolutionary trend and giving one example each of the classes

|  |  |
| --- | --- |
| Classes of Vertebrates | One Example |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

(5 marks)

1. In a tabular form, list 5 cell organelles against their function (5 marks)
2. List the seven major groups into which taxonomists classify living things in order of hierarchy. (5 marks)
3. Give the taxonomic classification of man from the highest taxon to the lowest (5 marks)
4. In a tabular form, list the 5 kingdoms of living organisms and give one example each

(5 marks)

1. List and define the 4 levels of organization of life (5 marks)
2. In a tabular form, list 5 differences between plant and animal cell (5 marks)
3. List the 5 statements of the cell theory (5 marks)