Biology (unit 1 and 2) revision questions for grade 12

Choose the best answer from the given alternatives

Unit one

1. Which one of the following is correct about Protozoa?
    A. Unicellular organism that lack cell wall
    B. Most are motile
    C. Include organisms such as plasmodium, amoeba and paramecium
    D. All of the above
2. Which one of the following is wrong about Fungi?
    A. Eukaryotic organism that obtains its nutrition using extracellular digestion
    B. Many fungi produce hyphae
    C. Fungi lack true stem, roots and leaves.
    D. None of the above
3. How does fungi causes disease?
    A. releasing enzyme that digest the substances in the tissues.
    B. physically damaging the tissue as hyphae grow.
    C. Secreting toxins
    D. All are possible answers
4. Which is wrong about algae?
    A. All algae are unicellular
    B. Contribute the highest oxygen on the globe than other photosynthetic organisms
    C. Majority live in aquatic environment
    D. All of the above are correct
5. Why viruses are mostly considered as non-living particle?
    A. Viruses cannot independently carry out all life process like other living things
    B. All viruses are obligatory parasites to any other organisms
    C. Viruses lack nucleus and cytoplasm
    D. They are simply genetic material surrounded by protein coat
6. Gram- negative –
    A. Bacteria stained pink when stained by Gram's stain
    B. Gram-negative bacteria have much less peptidoglycan.
    C. Gram-negative bacteria also possess a membrane outside their cell wall
    D. All of the above

7. Failure of organ or systems, without any obvious damage or physical sign of disease in the organ is

    A. Multifunctional diseases

    B. Functional diseases:

    C. Human induced diseases

    D. None of the above

8. Which one of the following is incorrect about an organism which is among the most important organism to natural processes and human

    A. Cosmopolitan organism

    B. Have prokaryotic cell

    C. The DNA of the bacteria forms a continuous loop that is intermingled with the cytoplasm

    D. All of the above

9. The purpose of genetic modification in plants/crops is mainly aimed to provide

    A. Resistance to infectious diseases

    B. Resistance to animal pests

    C. Longer shelf-life before decaying

    D. All are possible answers

10. Why Viruses are not considered as living organism?

    A. No metabolic pathway

    B. All are parasitic.

    C. Their size ranges from 0.0 1-0.2μm; 10^6 times smaller than most human cells; lack nucleus

    D. several are produced inside the host cell

11. When some viruses infect cells, they release their RNA into the cells and an enzyme that causes it to be reverse transcribed into DNA. This type of viruses are in the group of

    A. RNA viruses

    B. DNA viruses

    C. Retroviruses

    D. A and C are correct answer

12. If the infection causes the virus to enter to the latent state where its DNA is reproduced with the host DNA, but no new viruses are formed, this type of ype of life-cycle in virus is called

    A. Lytic life cycle

    B. Lysogenic life cycle

    C. Chronic release life cycle

    D. None of the above

13. Which is wrong about the modes of virus transmission?
    A. Some viruses injects just their DNA into a host cell, the rest of the virus part remains outside the cell
    B. Entering the whole virus into the host cell using the process of endocytosis by tricking the cell
    C. Virus injects its cellular protein, but the DNA replicates outside the host cell
14. Which is wrong about HIV?

    A. HIV targets CD4-lymphocytes or T-helper cells.

    B. HIV has spikes on its surface

    C. The heads of viruses are made of glycoprotein known as gp120

    D. None of the above

15. Bacteria mode of nutrition include

    A. Photosynthetic

    B. Chemoynthetic

    C. Parasitic

    D. All of the above

16. Bacterial cells can exist in either of one of the following except
    A. Cocci (sing. Coccus):- spherical bacteria
    B. Baccilli (sing. baccillus):- rod shape bacteria
    C. spirochates:-spiral or corkscrew-shaped bacteria
    D. None of the above
17. A bacterium which can grow in either in the presence or absence of oxygen is termed as
    A. Obligate aerobes
    B. Obligate anaerobes
    C. Facultative anaerobes
    D. Either obligate aerobes or anaerobes

18. The bacteria that cause diseases have special structural or biochemical properties that determine their virulence or pathogenicity. These include the ability to
    A. colonize and invade their host;
    B. resist or withstand the antibacterial defenses of the host;
    C. produce various toxic substances that damage the host.
    D. All are possible answers
19. Many crop plants can be genetically modified by inserting foreign gene into them. This gives the plants new traits such as
    A. resistant to pest
    B. longer shelf life
    C. faster growth rate
    D. increase food quality
20. In which of the following does the bacteria and its role is incorrectly matched?
    A. nitrogen fixation- Rhizobium and nitrobacter
    B. ammonification- Ammonifying bacteria
    C. nitrification- Nitrifying bacteria - Nitrosomonas
    D. denitrification - Pseudomonas denitrificans
21. The reason why there is no AIDS vaccine is
    A. Viruses mutate regularly
    B. Viruses reproduce in immune cells themselves.
    C. Viral DNA remains hidden in host cell DNA for many years.
    D. All are possible answers

Unit two

22. The science of ecology which deals with the complete ecosystem that consists of both biotic and abiotic components and interaction among them is termed as
    A. autecology
    B. synecology
    C. eco-ecology
    D. none of the above
23. A kind of symbiosis where one species benefits while the other neither benefits nor is harmed is
    A. Mutualism
    B. Amensaism
    C. Commensalism
    D. Protocoopration
24. Biologically nitrogen can be fixed by
    A. mutualistic nitrogen fixing bacteria
    B. free living nitrogen fixing bacteria
    C. commensal bacteria
    D. A and B are possible answers

25. Main processes in nitrogen cycle which coverts molecular nitrogen is
    A. Nitrogen fixation
    B. Absorption of NO-3/NH+4 by plants from soil to make protein, nucleic acid and ATP.
    C. Ammonification or Decomposition of plants and animals waste and dead bodies.
    D. Nitrification: oxidation of Ammonia into nitrate
26. The main processes in phosphorus cycle **does no**t include one of the following:
    A. Absorption of phosphate from soil and water by plants and algae.
    B. Phosphate passed along food chain to various heterotrophs (consumers).
    C. When dead bodies are decomposed, phosphate ions are released from phospholipid, ATP and Nucleic acids and returned to soil and water.
    D. None of the above
27. What is the essence of ecological succession?
    A. Organisms colonize an area.
    B. Organisms change the abiotic conditions in an area.
    C. The changed abiotic conditions allow other species to colonize the area.
    D. All of the above
28. From the following, which is climax community?

    A. Mosses

    B. Forests and fauna

    C. Matured forest with same kinds of vegetation

    D. Lichens

29. In which primary succession does the succession begins on a very dry substratum such as bare-rock

    A. Xerosere

    B. Hydrosere

    C. Hydrosere

    D. All of the above

30. From the following, which factor influence the types of climax community?

    A. Climate Temperature Rainfall

    B. Grazing

    C. Soil type - Soil depth

    D. All of the above

31. Biomes in Ethiopia found in the rift valley and eastern high land is
    A. Tropical dry forest
    B. Temperate grass land
    C. Tropical montane
    D. Dry grass land

32. Biodiversity refers to variety of organisms within a region. It can be measured in
    A. Species diversity and genetic diversity
    B. Ecosystem diversity
    C. Cultural diversity
    D. All of the above
33. The consequences of clearing tropical rain forest include all of the following except
    A. Reduction in species diversity
    B. Destruction of ecological niches
    C. Reduction in the rate at which CO2 is removed from atmosphere.
    D. All of the above
34. Dangers that result from loss of biodiversity are
    A. Increased flooding
    B. Loss of medicinal plants
    C. Loss of animals from w/c drugs can be produced
    D. All of the above
35. Concern of biodiversity loss suggests that biodiversity loss contributes to
    A. Worsening health and lower material wealth
    B. Increasing insecurity of food supply and worsening social relations
    C. Increasing vulnerability(low physical protection against food)
    D. All are passible answers
36. The ecological principles that form the basis for conservation of biodiversity are
    A. the protection of species and varieties of species will support biodiversity.
    B. Maintaining habitat is fundamental to conserving species
    C. Large areas are usually containing more species than smaller area with similar habitats.
    D. All of the above.
37. Factors influencing the size of population by movement of individuals or population is
    A. natality (Birth rate)
    B. mortality(death rate)
    C. immigration
    D. emigration
38. The population of the world has been increasing quickly over past two hundred years because
    A. Decrease impact of pathogens
    B. Improved sanitations
    C. Improved medical care

D. All of the above

39. Factors limiting natural population growth such as space, competition, predation, disease are
    A. density-dependent factors
    B. Density-independent factors
    C. Similar to the effect of temperature, water, salinity, topography and rain
    D. All except C
40. The population of the world has been increasing quickly over past two hundred years because
    A. Decrease impact of pathogens
    B. Improved sanitations
    C. Improved medical care
41. The first organism to repopulate an area affected by a volcanic eruption are called
    A. keystone species
    B. Primary species
    C. Climax species
    D. Pioneer species
42. The strategy for using natural resources without depleting them and for providing human needs without causing long-term environmental harm is called
    A. Afforestation
    B. Sustainable development
    C. Reforestation
    D. Successful use