

BIOLOGICAL CLASSIFICATION

1. Which group shows the most extensive metabolic diversity ?
(1) Plantae (2) Animalia
(3) Monera (4) Fungi
2. Archaeobacteria differ from other bacteria in :-
(1) Nucleoid
(2) Composition of cell wall
(3) Composition of cytoplasm
(4) Composition of genetic material
3. Which group of organisms is responsible for the production of biogas from the dung of cows and buffaloes ?
(1) *Methanomonas* (2) Methanogens
(3) Cyanobacteria (4) *Mycoplasma*
4. Choose the correct statement :-
(1) Most of the bacteria are autotrophs
(2) All bacteria are heterotrophs
(3) Some bacteria are heterotrophs
(4) Most of the bacteria are heterotrophs
5. Which of the following character is common in both cyanobacteria and green plants ?
(1) Cell wall composition
(2) Presence of chlorophyll 'a'
(3) Presence of Nif gene
(4) Presence of 80s ribosome
6. *Nostoc* can fix atmospheric nitrogen in specialised cell, called :-
(1) Harmocyst
(2) Harmogonium
(3) Heterocyst
(4) Akinete
7. Which process is not performed by bacterial activity?
(1) Production of antibiotics
(2) Fixing nitrogen in legumes
(3) Making curd from milk
(4) Production of pseudomycelium
8. Choose the correct set of bacterial disease :-
(1) Mumps, cholera, dengue
(2) Chicken pox, typhoid, mumps
(3) Mumps, tetanus, chicken pox
(4) Cholera, typhoid, tetanus
9. Choose the incorrect statement regarding *Mycoplasma* :-
(1) They lack cell wall
(2) They are smallest living cell
(3) They can survive without oxygen
(4) They have mesosome for respiration
10. According to five kingdom system single-celled eukaryotes are placed under :-
(1) Plantae (2) Monera
(3) Protista (4) Fungi
11. According to five kingdom system, kingdom protista includes :-
(1) Dinoflagellates, Diatoms, Euglenoids, Slime mould, Bacteria
(2) Euglenoids, Fungi, Slime mould, Dinoflagellates, Protozoans
(3) Slime mould, Protozoans, Dinoflagellates, Diatoms, Euglenoids
(4) Protozoans, Moss, Euglenoids, Slime mould, Diatoms
12. Cell wall of diatoms are embedded with :-
(1) Calcium oxalate crystals
(2) Silica particles
(3) Iron
(4) Calcium carbonate crystals
13. Which are chief producers of oceans ?
(1) Diatoms (2) Dinoflagellates
(3) Euglenoid (4) Green algae
14. Which organism is responsible for making the sea appear red by rapid multiplication ?
(1) *Euglena* (2) *Noctiluca*
(3) *Gonyaulax* (4) *Trypanosoma*

15. Euglenoids have a protein rich layer instead of a cell wall. This layer is called as :-
 (1) Epidermis (2) Skin
 (3) Pellicle (4) Middle layer
16. Choose the incorrect statement from following:
 (1) Dinoflagellates have stiff cellulosic plates on the outer surface
 (2) Euglenoids have two flagella, one lies longitudinally and the other transversely
 (3) Slime mould spores are dispersed by air currents
 (4) In diatoms, the cell walls form two thin overlapping shells, which fit together as in a soap box.
17. The cell wall of fungi are composed of :-
 (1) Chitin and cellulose
 (2) Cellulose and polysaccharides
 (3) Chitin and polysaccharides
 (4) Chitin, polysaccharides and glycogen
18. Which group of organisms is used to make bread and beer ?
 (1) *Rhizopus* (2) *Yeast*
 (3) *Albugo* (4) *Neurospora*
19. Fungus prefers to grow in :-
 (1) Warm and humid places
 (2) Cold and humid places
 (3) Warm and cold both
 (4) Warm, cold and humid places
20. In fungi when the hyphae are continuous and branched tubes and filled with multinucleated cytoplasm, these are called :-
 (1) Unicellular hyphae
 (2) Coenocytic hyphae
 (3) Multicellular hyphae
 (4) Both 1 and 3
21. In fungi sexual reproduction is by :-
 (1) Fragmentation, Ascospores and Basidiospores
 (2) Budding, Conidia, and Basidiospores
 (3) Oospores, Ascospores and Basidiospores
 (4) Fission, Zoospores, Oospores
22. Mycelium of members of phycomycetes is :-
 (1) Septate and coenocytic
 (2) Aseptate and coenocytic
 (3) Septate and multicellular
 (4) Septate and unicellular
23. Choose the incorrect statement about phycomycetes :-
 (1) Members are found in aquatic habitats
 (2) Spores are endogenously produced in sporangium
 (3) Zygospore is formed by reduction division
 (4) Its members reproduce sexually may be isogamous, anisogamous or oogamous.
24. Which is not a member of Phycomycetes ?
 (1) *Albugo* (2) *Aspergillus*
 (3) *Rhizopus* (4) *Mucor*
25. Which fungus is used extensively in biochemical and genetic work ?
 (1) *Agaricus* (2) *Aspergillus*
 (3) *Claviceps* (4) *Neurospora*
26. Choose the incorrect statement about ascomycetes :-
 (1) Mycelium is branched and septate
 (2) Sexual spores are produced endogenously
 (3) They have sac like structure in which karyogamy takes place
 (4) Reduction division occurs in fruiting bodies and form conidia
27. Which group of organism is related with basidiomycetes ?
 (1) Mushroom, *Ustilago*, *Aspergillus*
 (2) Puffballs, *Agaricus*, *Aspergillus*
 (3) Mushroom, *Ustilago*, *Agaricus*
 (4) *Ustilago*, *Aspergillus*, *Agaricus*
28. Which set of diseases is caused by members of basidiomycetes ?
 (1) Rust and smut
 (2) Ergot and smut
 (3) Ergot and rust
 (4) Powdery mildew and rust
29. Fungi imperfecti are called,
 (1) members of phycomycetes
 (2) members of ascomycetes
 (3) members of basidiomycetes
 (4) members of deuteromycetes

- 30.** Which is not found in members of deuteromycetes ?
 (1) Asexual reproduction
 (2) Mode of nutrition
 (3) Structure of mycelium
 (4) Sexual reproduction
- 31.** Which disease is not caused by a fungus ?
 (1) Late blight of potato (2) Black rust of wheat
 (3) Red rust of pea (4) Ergot of rye
- 32.** Which of the following are noncellular organisms that are characterized by having an inert crystalline structure outside the living cell:-
 (1) Bacteria
 (2) *Mycoplasma*
 (3) Virus
 (4) Lichen
- 33.** Select false statement :-
 (1) Lichens are symbiotic association between algae & fungi
 (2) Viruses are smaller than bacteria
 (3) Virus name are obligate parasites
 (4) Viruses are facultative parasite
- 34.** Which one of the following statement is true about bacteriophages ?
 (1) They are generally single stranded RNA viruses.
 (2) They are generally double stranded DNA viruses
 (3) They are generally single stranded DNA viruses.
 (4) They are generally double stranded RNA viruses
- 35.** Select incorrect statement about viroid :-
 (1) Free infectious RNA
 (2) It was discovered by T.O. Diener
 (3) It causes potato spindle tuber disease
 (4) It contains high molecular weight RNA
- 36.** Which is incorrect statement ?
 (1) The *Mycoplasma* are organisms that completely lack a cell wall
 (2) *Mycoplasma* can survive without oxygen
 (3) *Mycoplasma* are the smallest living cells.
 (4) *Mycoplasma* are sensitive to penicillin
- 37.** Endomycorrhizal fungus is :-
 (1) *Pythium* (2) *Mucor* (3) *Glomus* (4) *Rhizopus*
- 38.** Generally plant viruses are :-
 (1) Double stranded DNA viruses
 (2) Single stranded RNA viruses
 (3) Single stranded DNA viruses
 (4) Double stranded RNA viruses
- 39.** Which of the following are not included in the five kingdom system of classification ?
 (a) Viruses (b) Viroid (c) Lichen (d) Prions
 (1) only a and b
 (2) only b, c and d
 (3) only a and c
 (4) All a, b, c and d
- 40.** Select incorrect statement about lichens :-
 (1) These are very good pollution indicators
 (2) The algal component of lichen is known as phycobiont
 (3) The fungal component of lichen is known as mycobiont
 (4) The algal component of lichen is known as mycobiont
- 41.** Select incorrect statement :-
 (1) W.M. Stanly showed that viruses could be crystallized.
 (2) In addition to protein coat viruses also contain genetic material that could be either RNA or DNA
 (3) The small sub units of capsid called capsomeres
 (4) The small subunits of capsid are called peplomers
- 42.** Which among the following was not the criteria for classification of organisms into 5 kingdoms proposed by Whittaker ?
 (1) Complexity of cell
 (2) Phylogenetic relationship
 (3) Mode of nutrition
 (4) Metabolism

- 43.** Find out the wrong statement about kingdom fungi proposed by Whittaker :
- (1) Eukaryotic organism
 - (2) Chitinous cell wall
 - (3) Multicellular with well distinct tissue system
 - (4) Heterotrophic (saprophytic or parastic) mode of nutrition
- 44.** In five kingdom classification of Whittaker, all prokaryotic organism were grouped together under kingdom monera. Among the following statements findout incorrect for Bacteria :
- (1) Bacteria are gouped under four groups based on their shape
 - (2) They are simple in structure, but complex in behaviour
 - (3) They show most extensive metabolic diversity
 - (4) The vast majority of bacteria are autotrophs
- 45.** According to five kingdom system of classification, single celled eukaryotes are placed under protista, members of protista are primarily
- (1) Terrestrial
 - (2) Aquatic
 - (3) Saprophytic
 - (4) Epiphytic
- 46.** Which kingdom out of five kingdoms proposed by Whittaker, forms a link with others dealing with plants, animals and fungi ?
- (1) Monera
 - (2) Protista
 - (3) Plantae
 - (4) Fungi
- 47.** Chrysophytes involves :
- (1) diatoms
 - (2) dinoflagellates
 - (3) desmids
 - (4) both 1 and 3
- 48.** Released toxins of which group of protista is the cause of death of other marine animals such as fishes :-
- (1) Chrysophytes
 - (2) Dianoflagellates
 - (3) Desmids
 - (4) Euglenoids
- 49.** In deprived of sunlight which group of protista behave like heterotrophs by predating on other smaller organisms :-
- (1) Slime moulds
 - (2) Protozoans
 - (3) Euglenoids
 - (4) Dinoflagellates
- 50.** Single celled eukaryotes placed under protista and they link with fungi, plants and animals. Slime moulds are saprophytic protists. What is incorrect about slime moulds :
- (1) Body moves along decaying twigs and leaves engulfing organic matter
 - (2) Under suitable conditions they form plasmodium which may grow and spread over several feet
 - (3) Under favourable conditions plasmodium differentiate and form fruiting body
 - (4) Their spores possesses cell wall
- 51.** Which of the following group of organisms show a great diversity in morphology and habitat :-
- (1) Chrysophytes
 - (2) Dinoflagellates
 - (3) Protozoan protists
 - (4) Fungi
- 52.** Fungi constitute a unique kingdom of heterotrophic organisms. About their reproduction which combination is not true :
- (1) Fragmentation, Fission, Budding
 - (2) Conidia, Sporangiospores, Zoospores
 - (3) Oospore, Ascospore, Basidiospores
 - (4) Fragmentation, Zoospores, Ascospore
- 53.** On the basis of intervening dikaryotic stage which of the following fungal group is odd :
- (1) Phycomycetes
 - (2) Basidiomycetes
 - (3) Ascomycetes
 - (4) Club fungi
- 54.** Kingdom fungi classify into various classes based on some parameters except :
- (1) Morphology of mycelium
 - (2) Mode of spore formation
 - (3) Dikaryophase
 - (4) Fruiting body
- 55.** Which of the following is not applicable on phycomycetes :
- (1) Obligate parasites on plants
 - (2) Found in moist and damp places
 - (3) Septate, Coenocytic mycelium
 - (4) Endogenously produced spores

- (1) Phycomycetes
- (2) Ascomycetes
- (3) Basidiomycetes
- (4) Deuteromycetes

- (1) Phycomycetes
- (2) Ascomycetes only
- (3) Basidiomycetes only
- (4) Either ascomycetes or basidiomycetes

- (1) Autotrophs
- (2) Parasites
- (3) Decomposers
- (4) Symbiotic

- (1) Sporophytic and gametophytic phase
- (2) Length of haploid & diploid phases
- (3) Number of haploid and diploid phases
- (4) Freelifing or dependent nature of haploid & diploid phases

	Column-I		Column-II
a	D.J. Ivanowsky	i	Discovery of viroids
b	Beijerinck	ii	Crystallisation of virus
c	W.M. Stanley	iii	<i>Contagium vivum fluidum</i>
d	T.O. Diener	iv	Discovery of TMV

- (1) Plant infecting viruses having ssRNA
- (2) Animal infecting viruses having single or double stranded RNA or double stranded DNA
- (3) Bacteriophages usually have double stranded RNA
- (4) Bacteriophages usually have double stranded DNA

- (1) Gall formation
- (2) Mosaic formation
- (3) Leaf rolling and curling
- (4) Yellowing and vein clearing

- (1) Larger than viruses
- (2) Have free infectious DNA
- (3) Have free infectious RNA
- (4) Have high molecular weight RNA

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