#### **SET 1: BIOLOGICAL CLASSIFICATION (50 MCQs)**

- 1. Who proposed the Five Kingdom Classification system?
  - a) Linnaeus
  - b) R.H. Whittaker
  - c) Aristotle
  - d) Haeckel
- 2. The main criteria for Whittaker's classification included all except
  - a) Cell structure
  - b) Body organization
  - c) Color of the organism
  - d) Mode of nutrition
- 3. Which of the following is not a characteristic of Kingdom Monera?
  - a) Prokaryotic cell
  - b) Presence of nuclear membrane
  - c) May be autotrophic or heterotrophic
  - d) Non-cellulosic cell wall
- 4. Archaebacteria can survive in extreme environments because
  - a) They are eukaryotes
  - b) They have resistant spores
  - c) They have a unique cell wall composition
  - d) They lack a plasma membrane
- 5. Methanogens are found in
  - a) Human intestine
  - b) Cattle gut
  - c) Hot springs
  - d) Acidic soils
- 6. Cyanobacteria are also called
  - a) Green algae
  - b) Blue-green algae
  - c) Red algae
  - d) Brown algae
- 7. The specialized nitrogen-fixing cells in cyanobacteria are called
  - a) Zoospores
  - b) Heterocysts
  - c) Ascocarps
  - d) Basidia

- 8. Mycoplasma differ from bacteria because they
  - a) Are multicellular
  - b) Lack cell wall
  - c) Have chlorophyll
  - d) Have nuclear membrane
- 9. The group of single-celled eukaryotes is
  - a) Monera
  - b) Protista
  - c) Fungi
  - d) Plantae
- 10. Diatom cell walls are made of
  - a) Cellulose
  - b) Chitin
  - c) Silica
  - d) Protein

- 11. Diatomaceous earth is formed from
  - a) Fungal mycelia
  - b) Bacterial cells
  - c) Diatom shells
  - d) Algal cellulose
- 12. Dinoflagellates move with the help of
  - a) Cilia
  - b) Flagella
  - c) Pseudopodia
  - d) Mycelia
- 13. Red tides in the sea are caused by
  - a) Blue-green algae
  - b) Red dinoflagellates
  - c) Brown algae
  - d) Euglenoids
- 14. The pellicle of Euglena is composed of
  - a) Chitin
  - b) Protein
  - c) Cellulose
  - d) Silica

- 15. Slime moulds are
  - a) Photosynthetic protists
  - b) Saprophytic protists
  - c) Parasitic protists
  - d) Symbiotic protists
- 16. Amoeboid protozoans move by
  - a) Cilia
  - b) Flagella
  - c) Pseudopodia
  - d) Spores
- 17. The protozoan causing sleeping sickness is
  - a) Plasmodium
  - b) Entamoeba
  - c) Trypanosoma
  - d) Paramecium
- 18. Which of the following is a ciliated protozoan?
  - a) Amoeba
  - b) Paramecium
  - c) Euglena
  - d) Trypanosoma
- 19. Plasmodium belongs to which group?
  - a) Sporozoans
  - b) Ciliates
  - c) Flagellates
  - d) Amoeboids
- 20. The body of most fungi is made up of
  - a) Cellulose fibers
  - b) Hyphae forming mycelium
  - c) Pseudopodia
  - d) Flagella

- 21. Cell wall of fungi is made of
  - a) Cellulose
  - b) Peptidoglycan
  - c) Chitin and polysaccharides
  - d) Silica

<ul> <li>22. Fungi that absorb food from dead organic matter are called –</li> <li>a) Parasites</li> <li>b) Saprophytes</li> <li>c) Symbionts</li> <li>d) Decomposers</li> </ul>	_
<ul> <li>23. Lichens represent a symbiotic association between —</li> <li>a) Algae and bacteria</li> <li>b) Algae and fungi</li> <li>c) Fungi and viruses</li> <li>d) Bacteria and fungi</li> </ul>	
<ul> <li>24. Asexual reproduction in fungi occurs by —</li> <li>a) Fission</li> <li>b) Budding</li> <li>c) Spore formation</li> <li>d) Fragmentation only</li> </ul>	
25. Dikaryotic phase (n + n) occurs in — a) Ascomycetes and basidiomycetes b) Phycomycetes c) Deuteromycetes d) Monera	
26. Bread mould belongs to — a) Phycomycetes b) Ascomycetes c) Basidiomycetes d) Deuteromycetes	
27. Yeast belongs to —     a) Phycomycetes     b) Ascomycetes     c) Basidiomycetes     d) Deuteromycetes	
28. The sexual spores in Ascomycetes are — a) Zoospores b) Conidia c) Ascospores d) Basidiospores	
29. Mushrooms belong to — a) Phycomycetes b) Ascomycetes c) Basidiomycetes	

d) Deuteromycetes

- 30. In Basidiomycetes, basidiospores are produced
  - a) Endogenously
  - b) Exogenously
  - c) By budding
  - d) By fission

- 31. The imperfect fungi are placed in
  - a) Basidiomycetes
  - b) Deuteromycetes
  - c) Phycomycetes
  - d) Ascomycetes
- 32. Alternaria belongs to
  - a) Ascomycetes
  - b) Deuteromycetes
  - c) Phycomycetes
  - d) Basidiomycetes
- 33. Kingdom Plantae includes
  - a) All autotrophic prokaryotes
  - b) All eukaryotic autotrophs with chlorophyll
  - c) All heterotrophs
  - d) Only algae
- 34. The phenomenon of alternation of generations occurs in
  - a) Fungi
  - b) Plants
  - c) Animals
  - d) Protists
- 35. Kingdom Animalia includes
  - a) Autotrophic organisms
  - b) Multicellular heterotrophs without cell walls
  - c) Single-celled eukaryotes
  - d) Unicellular autotrophs
- 36. Food reserve in animals is stored as
  - a) Starch
  - b) Cellulose
  - c) Glycogen
  - d) Lipids only

- 37. Viruses are
  - a) Prokaryotic organisms
  - b) Non-cellular infectious agents
  - c) Eukaryotic microbes
  - d) Cellular parasites
- 38. The genetic material in viruses is
  - a) Both RNA and DNA
  - b) Only DNA
  - c) Either RNA or DNA
  - d) Only protein
- 39. Tobacco Mosaic Virus (TMV) contains
  - a) DNA
  - b) RNA
  - c) Both DNA and RNA
  - d) No nucleic acid
- 40. The protein coat of a virus is called
  - a) Envelope
  - b) Capsid
  - c) Core
  - d) Capsule

- 41. Viroids differ from viruses because they lack
  - a) RNA
  - b) DNA
  - c) Protein coat
  - d) Nucleic acid
- 42. The infectious protein particles are known as
  - a) Virions
  - b) Prions
  - c) Viroids
  - d) Lichens
- 43. Mad cow disease in cattle is caused by
  - a) Virus
  - b) Bacteria
  - c) Prions
  - d) Viroids

<ul><li>44. Lichens do not grow in —</li><li>a) Polluted areas</li><li>b) Humid regions</li></ul>	
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h) Humid regions	
c) Forests	
d) Rocky places	
45. The algal partner in lichens is called —	
a) Mycobiont	
b) Phycobiont	
c) Zoobiont	
d) Chlorobiont	
46. The fungal partner in lichens is called —	
a) Mycobiont	
b) Phycobiont	
c) Zoobiont	
d) Sporobiont	
47. Which of the following is an example of mutualism	1?
a) Lichen	
b) Rust on wheat	
c) Cuscuta on host	
d) Plasmodium in humans	
48. The first scientist to propose a classification of org	janisms was —
a) Linnaeus	
b) Aristotle	
c) Whittaker	
d) Haeckel	
49. The term "virus" meaning "poison" was coined by	
a) Ivanowsky	
b) Beijerinck	
c) Pasteur	
d) Stanley	
50. The first virus to be crystallized was —	
a) HIV	
b) TMV	
c) Bacteriophage	
d) Influenza virus	

### Answers: Set 1

Q	Ans								
1	b	2	С	3	b	4	С	5	b
6	b	7	b	8	b	9	b	10	С
11	С	12	b	13	b	14	b	15	b
16	С	17	С	18	b	19	а	20	b
21	С	22	b	23	b	24	С	25	а
26	а	27	b	28	С	29	С	30	b
31	b	32	b	33	b	34	b	35	b
36	С	37	b	38	С	39	b	40	b
41	С	42	b	43	С	44	а	45	b
46	а	47	а	48	b	49	b	50	b