

## QAD Series

## Virus, bacteria, BGA, Mycota Algae

1. Virus was first discovered by  
a) Beijernick b) Iwanoswky c) Meyer d) Stanley
2. The size of virus ranges from  
a) 10 – 600nm b) 50 – 700nm c) 10 – 300nm d) 50 – 900nm
3. Hydrophobia and Influenza are caused by  
a) Bacterium b) Fungus c) Virus d) Protozoan
4. Of the following which will not grow on enriched agar  
a) *Penicillium* b) Virus c) Yeast d) bread mould
5. TMV was first isolated in crystallization state by  
a) Beijernick b) Iwanosky c) Chase d) Stanley
6. Which of the following disease is caused by virus?  
a) Tuberculosis b) Typhoid c) Diphtheria d) Pox
7. In a cyanophage, the genetic material is  
a) DNA b) RNA c) Both d) Proteins
9. Bacteriophage attacking *E. coli* is known as  
a) Cyanophage b) Phycophage c) Prophage d) Coliphage
10. Capsid refers to  
a) nucleic acid of virus b) protein coat of virus  
c) carbohydrate part of virus d) nucleoid of virus
11. Virus having double stranded RNA is  
a) gemini virus b) reo virus c) retro virus d) ribovirus
12. Hereditary material in TMV is  
a) ds DNA b) ss DNA c) ss RNA d) ds RNA
13. Virion refers to  
a) capsid of virus b) dead virus  
c) nucleic acid of virus d) complete form of virus
14. Most plant viruses have  
a) only RNA b) only DNA c) RNA & DNA both d) None
15. Mosaic of sugarcane is caused by  
a) Bacteria b) Virus c) Fungi d) Algae
16. Bacteriophage is similar to fungus in having  
a) RNA as genetic material b) DNA as genetic material  
c) cell wall d) similar mode of reproduction
17. Which of the following statement is correct?  
a) viruses do not contain nucleic acid b) All viruses contain DNA  
c) All viruses contain RNA  
d) Some viruses contain DNA and some RNA
18. The process which cannot take place in the absence of virus is  
a) Transformation b) Conjugation c) Translocation d) Transduction
19. Which one of the following has doubtful biological status?  
a) Bacteria b) Virus c) BGA d) None of these
20. Structurally complete virus is called as  
a) Viroid b) Virion c) Vira d) Virus
21. The largest virus is  
a) Pox virus b) Penicillium virus  
c) Wound tumour virus d) TMV
22. Most plant viruses have  
a) Only RNA b) Only DNA  
c) RNA & DNA both d) either RNA or DNA
23. Animal viruses have  
a) Only RNA b) Only DNA  
c) RNA & DNA both d) either RNA or DNA
24. Which of the following is not true of viruses?  
a) They are made up of nucleic acids and protein  
b) They can reproduce only in host protoplasm  
c) They can grow in dilute sugar solution  
d) They cannot utilize oxygen
25. Bacteria was discovered by  
a) Linnaeus b) Pasteur c) Robert Koch d) Leeuwenhoek
26. The term bacteria was given by  
a) Pasteur b) Lister c) Leeuwenhoek d) Ehrenberg
27. Which organelle is called chondroids in Bacteria?  
a) Mitochondria b) Chromatophores c) Pilli d) Mesosomes
28. Which is present in cell wall of bacteria?  
a) n – phenyl glucosamine b) n– acetyl phenylamine  
c) n– acetyl glucosamine d) n– acetyl muramic acid
29. Atrichous bacteria do not possess  
a) cilia b) pilli c) flagella d) cell wall
30. *E. coli* is bacterium  
a) Monotrichous b) Lophotrichous c) Amphitrichous d) Peritrichous
31. Endospore formation generally occurs in  
a) Coccus form b) Vibrio form c) Bacillus form d) Spirillum
32. Which is free living  $N_2$  fixing bacteria?  
a) *Rhizobium* b) *Streptomyces* c) *Nitrobacter* d) *Azotobacter*
33. Antiviral agents (interferon) are  
a) Lipids b) Proteins c) Alkaloids d) Nucleic Acid
34. Bacteria smallest in size are  
a) Bacillus b) Coccus c) Spirillum d) Vibrio
35. Red pigment present in root nodules of legumes is  
a) Phycoerythrin b) Bacteriochlorophyll  
c) Leghaemoglobin d) Bacterioviridin
36. Bacterial ribosomes lie on  
a) cytoplasm b) nuclear membrane  
c) cell wall d) endoplasmic reticulum
37. Denitrifying bacteria convert  
a) Nitrate to free nitrogen b) Nitrogen to ammonia  
c) Ammonia to nitrate d) Nitrite to nitrate
38. Plasmids are  
a) genome of bacteria b) a part of genetic materials  
c) extra genetic material of bacteria d) genetic material of plants
39. Which of the following causes diphtheria?  
a) *Corynebacterium* b) *Pseudomonas* c) *Bacillus* d) *Salmonella*
40. Most studied bacteria is  
a) *E. coli* b) *Pseudomonas* c) *Azotobacter* d) *Clostridium*
41. Asexual reproductive structure in bacteria is known as  
a) akinete b) exospore c) endospore d) heterocyst
42. Botulism means  
a) bottle fermentation b) skin disease  
c) canned food poisoning d) fungal disease
43. Bacteria differ from fungi groups in one of the following  
a) cell wall of fungal cellulose b) heterotrophic nutrition  
c) binary fission d) absence of chlorophyll
44. Organism without any specific shapes are  
a) Mycoplasma b) Bacteria c) Viruses d) Cyanobacteria
45. Respiratory structures in bacteria are  
a) mitochondria b) ribosomes c) mesosomes d) cytoplasm
46. Bacteria are regarded to be plants because  
a) some of them are green b) they are present everywhere  
c) some of them cannot move d) they have rigid cell wall
47. If a bacterial cell divides once every five minute it takes one hour to fill a cup. How much time will it take to fill 3 cups?  
a) 70 min b) 80 min c) 65.5 min d) 75 min
48. Hydrogen donor in bacteria photosynthesis is usually  
a)  $H_2O$  b)  $H_2S$  c)  $H_3PO_4$  d)  $NH_3$
49. Bacteria cell differs from higher plant in lacking  
a) ability to respire b) a true nucleus  
c) capacity to divide d) ability to absorb water
50. An organism which is generally without plastids and can synthesize it's organic food  
a) Bacterium b) Virus c) Fungus d) Bacteriophage
51. Photosynthetic bacteria have  
a) Chloroplasts b) lamella c) Chromoplasts d) Leucoplast
52. Which of following is rod shaped bacterium?  
a) Bacillum b) Bacteria c) Vibrio d) Streptococcus



53. Bacteria are generally absent in  
a) sea water b) rain water c) distilled water d) snow
54. Bacteria are used in  
a) Tanning of leather b) Curling of tea leaves  
c) Curdling of milk d) All of these
55. A group of genetically identical bacteria derived from a single cell by fission is called  
a) pure line b) offspring c) clone d) genome
56. First experiment of conjugation was performed by  
a) Lederberg and Tatum b) Zinder  
c) Griffith d) Zinder and Lederberg
57. F – factor in bacteria is  
a) plasmid b) episome c) colichine factor d) prophage
58. Fungi differ from algae in having  
a) mainly cellulosic cell wall b) mainly cell wall of chitin  
c) unicellular non-jacketed sex organs  
d) starch as reserved food
59. In which group of fungi, spores are flagellated?  
a) ascomycetes b) zygomycete c) phycmycetes d) basidiomycetes
60. In fungi, food is mainly stored in the form of  
a) glycogen oil b) glucose c) starch d) lipids
61. In sac fungi (ascomycetes) the ascospores occurs in sac like body is  
a) ascus b) basidium c) ascocarp d) basigiocarp
62. The fungi are commonly stained by  
a) acetocarmine b) gentian violet/crystal violet  
c) cotton blue/lactophenol d) safranin violet
63. A saprophyte which can act as a saprophyte as well is known as  
a) facultative saprophyte b) facultative parasite  
c) obligate saprophyte d) obligate parasite
64. Zoospores may give rise to  
a) gametes b) promycelium c) hyphae d) spores
52. Fungal spore produced asexually at the tip or sides of hyphae is  
a) sporangiospores b) conidia c) oidia d) spores
53. What does *Claviceps* cause?  
a) dandruff b) blindness c) ergotism d) angina
54. Chitin is chemically  
a) n-acetyl glucosamine b) n-acetyl muramic acid  
c) n-acetyl gluconic acid d) L-derivative of cellulose
55. Edible part of mushroom is  
a) reproductive phase b) assimilatory phase  
c) mycelium d) monokaryotic phase
56. Cell wall of bacteria and fungi  
a) both have glycopeptides b) both have NAM & cellulose  
c) both have NAG d) both have chitin
57. A carcinogen present in mould *Aspergillus flavus* which grow in ground nuts & storage grains is  
a) phenacetin b) vinyl chloride c) aflatoxin d) benzidine
58. Presently source of 'wonder drug' is extracted from *Penicillium*  
a) *notatum* b) *chrysogenum* c) *camemfertii* d) *roqueforti*
59. Lichen is symbiotic relationship between algae and  
a) Mosses b) Fungi c) Bacteria d) Protozoa
60. A common phycobiont in lichen is  
a) *Microcystis* b) *Trebouxia* c) *Euglena* d) *Citraria*
61. Most of lichens are composed of  
a) BGA and basidiomycetes b) BGA & ascomycetes  
c) Green algae & phycmycetes d) Green algae & ascomycetes
62. Lichens are best indicators of  
a) air pollution b) water pollution c) soil pollution d) all pollution
63. Reindeer moss is the common name for  
a) *Funaria* b) *Marchantia* c) *Cladonia* d) *Polytrichum*
64. Rock flower is the common name of  
a) *Portulaca* b) *Parmelia* c) *Physcia* d) *Rocella*
65. Helotism is a term used for the symbiosis of  
a) Algae and Fungi b) *Pinus* & Fungi  
c) Algae & *Cycas* d) Algae & Bacteria
66. Which of the following is an example of foliose lichen?  
a) *Cladonia* b) *Usnea* c) *Lecanora* d) *Parmelia*
67. In basidiolichens, the phycobiont is always  
a) Cyanophyceae b) Chlorophyceae c) Bacteria d) Green alga
68. Which food is used by fungal partner made by algal partner in a lichen?  
a) Starch b) Sugar c) Mannitol d) Glycogen
69. The indicator of SO<sub>2</sub> pollution is  
a) lichens b) ferns c) liverwort d) hornworts
70. Lichen multiply by  
a) conidia b) oidia c) ascospores d) soredia
71. Which partner can live without other in the lichen?  
a) Algae b) Fungi c) Both d) Neither a nor b
72. Lichen are found in  
a) Xerophytic b) Mesophytic c) Aquatic d) All habitats
73. The term algae was given  
a) F.E. Fritsch b) Jussieu c) E. Haeckel d) Copeland
74. The composition of cell wall of algae is  
a) cellulose b) chitin c) glycocalyx d) hemicellulose
75. The reserve food material of algae is  
a) glycogen b) floridean c) starch d) oil, mannitol
76. The parasitic algae which causes red rust of coffee is  
a) *Cephaleurous virescence* b) *Cephalenrous arabica*  
c) *Herveylla* d) All
77. The algae found inside plant is  
a) *Nostoc* b) *Anaebena* c) Both a & b d) *Spirillina*
78. The unicellular non-motile algae is  
a) *Chlorella* b) *Chlamydomonas* c) *Spirogyra* d) *Ulothrix*
79. The heterotrichous type of branching is found in  
a) *Cladophora* b) *Nostoc* c) *Spirogyra* d) *Ulothrix*
80. The horse shoe shaped chloroplast is found in  
a) *Chlorella* b) *Chlamydomonas* c) *Ulothrix* d) *Oedogonium*
81. The largest algae is  
a) *Microcystis* b) *Acetabularia* c) *Chlorella* d) *Macrocystis*
82. The pseudoparenchymatous algae is  
a) *Laminaria* b) *Fucus* c) *Polysiphonia* d) brown alga
83. The chlorophyll found in Cyanophyceae is  
a) Chl-a b) Chl-b c) either a or b d) chl-d
84. The pigment found in all the group of algae is  
a) Chl-a b) Chl-b c) carotene d) both a & c
85. The reserve food martial for Red algae is  
a) starch b) cyanophycean starch  
c) Floridian starch d) glycogen
86. The laminarian is reserve food material of  
a) BA b) RA c) BGA d) GA
87. Agar-agar is chemical substance which is extracted from  
a) *Graciratina* b) *Laminaria* c) *Gellidium* d) *Sargassum*
89. Sea is red due to  
a) blue algae b) red algae c) blue green algae d) green algae
90. Homothallic *Spirogyra* reproduce through  
a) scalariform conjugation b) lateral indirect conjugation  
c) lateral direct conjugation d) all
91. The Archegonium of ferns differs from that of moss in  
a) bent neck b) flask shaped c) club shaped d) dome
92. Zygospore of *Spirogyra* is  
a) haploid b) diploid c) either a or b d) none
93. The Hormogonium formation takes place in  
a) *Spirogyra* b) *Ulothrix* c) *Nostoc* d) Yeast
95. The most common method of reproduction of *Nostoc* is  
a) vegetative b) asexual c) sexual d) all
96. The algae used in dynamite blasting process is  
a) green algae b) diatom c) dinoflagellate d) brown algae
97. Red tide is caused by  
a) diatom b) dinoflagellate c) green algae d) brown algae
98. Red snow is caused by  
a) *Cephaleurous* b) *Chlamydomonas nivallis*  
c) *Chlorella* d) *Chlamydomonas yellowstonensis*