BIOLOGICAL CLASSIFICATION

1. Aristotle classified plants into

1) Annuals, biennials, perennials *2) Herbs, Shrubs, Trees

3) Cryptogams, Phanerogams 4) Thallophytes, Non-thallophytes

2. Linnaeus gave the classification living organisms in his book entitled

1) Species plantarum 2) Systema naturae 3) Genera Plantarum 4) All

3. The following organism falls into neither Plant Kingdom nor Animal kingdom in Linnaeus classification of living organisms.

*1) Euglena 2) Chlorella 3) Chlamydomonas 4) Volvox

4. Linnaeus placed unicellular photosynthetic organisms under the group.

1) Fungi 2) Bryophytes *3) Algae 4) Pteridophytes

5. Five kingdom classification for the classification of living organisms was given by

1) Haeckel 2) Copeland 3) Carl Woese *4) Whittaker

6. Fungi were given the status of Kingdom by

*1) Whittaker 2) Haeckel 3) Cavalier Smith 4) Copeland

7. In five kingdom classification, multi cellular organisms are absent in

*1) Protista 2) Fungi 3) Plantae 4) Animalia

8. Match the following

List – I	List – II
A) Monera	I) Absence of Cell wall
B) Protista	II) First Eukaryotes
C) Plantae	III) Chemoautotrophic nutrition
D) Fungi	IV) Cellulosic cell wall
	V) Chitinoous cell wall

	A	B	C	D
1)	I	II	IV	V
2)	II	I	V	IV
*3)	III	II	IV	V
4)	II	III	IV	V

9. [A]: All Monerans have cell wall
[R]: Organism that causes Witches broom disease has cellulose in its cell envelope
1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
3) A is true but R is false
*4) A and R are false

10. According to Five Kingdom classification, *Chlorella* and *Chlamydomonas* belong to Kingdom

*1) Protista 2) Monera 3) Animalia 4) Plantae

11. Cell wall of Archaens has

1) Peptidoglycan *2) N-Acetyl TalosamineUronic acid

3) N-Acetyl muramic acid 4) D-amino acids

12. Rumen Archaens are

1) Halophiles 2) Thermophiles *3) Methanogens 4) Photoautotrophs

13. Cell membrane with branched chain lipids is seen in

1) Protista 2) Eubacteria 3) Cyanobacteria *4) Archaens

14. Pathogenic organisms are absent in

1) Eubacteria 2) Actinomycetes 3) Mycoplasmas *4) Archaebacteria

15. Mesosomes are

1) Infoldings of cell membrane of Eukaryotes

2) Infoldings of Cell membrane of Mycoplasmas

3) Infoldings of Cell membrane of Gram negative Eubacteria

*4) Infoldings of Cell membrane of Gram Positive Eubacteria

16. The most extensive metabolic diversity is shown by

1) Archaebacteria *2) Eubacteria 3) Mycoplasmas 4) Actinomycetes

17. Match the following

List – I	List – II
A) Bacillus	I) Mycoplasma
B) Corynebacterium	II) Archaea
C) Trichdesmium	III) Actinomycete
D) Halobacterium	IV) Eubacterium
	V) Cyanobacterium

	A	B	C	D
*1)	IV	III	V	II
2)	V	III	IV	II
3)	IV	III	I	II
4)	V	IV	II	III

18. [A]: Whittaker gave kingdom status to Fungi.
[R]: In Five kingdom classification, the composition of cell wall was also considered for classification.
*1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
3) A is true but R is false
4) A is false but R is true

19. Endospores are produced by

1) Mycoplasmas 2) Actimycetes *3) Eubacteria 4) Cyanobacteria

20. These are the smallest living cells

*1) Mycoplasmas 2) Archaebacteria 3) Actinomycetes 4) Protists

21. **Mycoplasmas cause the following disease in plants**.

1) Mosaic *2) Witches broom 3) Chlorosis 4) Canker

22. Non-chlorophyllous organism that can trap the light energy and convert it into ATP is

1) Methanobacterium 2) Sulpholobus *3) Halobacterium 4) Thermoplasma

23. Pleuroneumonia in cattle is caused by

1) Archaea 2) Eubacteria 3) Actinomycetes *4) Mycoplasmas

24. Mycoplasma is

1) Spherical 2) Rod shaped 3) Spirillum *4) Pleomorphic

25. Oxygenic photosynthetic moneran is

1) Halobacterium 2) Thermoplasma *3) Anabaena 4) Chlorobium

26. Match the following

List – I	List – II
A) Urethritis in man	I) Archaebacteria
B) Tetanus	II) Cyanobacteria
C) Heterocyst	III) Actinomycetes
D) L-Glycerol	IV) Mycoplasma
	V) Eubacterium

	A	B	C	D
1)	IV	V	II	III
*2)	IV	V	II	I
3)	V	IV	I	II
4)	III	V	II	I

27. [A]: Nostoc fixes both Nitrogen and Carbondioxide.
[R]: It has heterocyst.
1) Both A and R are true and R is the correct explanation of A
*2) Both A and R are true but R is not the correct explanation of A
3) A is true but R is false
4) A is false but R is true

28. Centroplasm of Cyanobacteria has

1) Ribosomes 2) Gas vacuoles *3) Chromosome 4) RNA

29. Cells with gelatinous sheath around them are seen in

1) Eubacteria 2) Archaea *3) Cyanobacteria 4) Eugelnoids

30. These organisms are non-flagellated

1) Archaea 2) Eubacteria 3) Euglenoids *4) Cyanobacteria

31. Hormogonia are

1) Fragments of filaments of filamentous bacteria

2) Fragments of Eubacteria

3) Cleaved protoplast of Mycoplasmas

*4) Fragments of Trichomes of Cyanobacteria

32. Akinetes are the reproducing structures of

*1) Cyanobacteria 2) Eubacteria 3) Mycoplasmas 4) Archaea

33. These are branched filamentous monerans

*1) Actinomycetes 2) Eubacteria 3) Cyanobacteria 4) Archaea

34. Mycolic acid is the cell wall component of

1) Eubacteria 2) Gram negative bacteria

*3) Cyanobacteria *4) Actinomycetes

35. Match the following

List – I	List – II
A) Corynebacterium	I) Mycoplasma
B) Anabaena	II) Archaea
C) Salmonella	III) Cyanobacterium
D) Methanogen	IV) Eubacterium
	V) Actinomycete

	A	B	C	D
1)	II	IV	V	I
*2)	V	III	IV	II
3)	IV	V	I	II
4)	V	III	IV	I

36. [A]: Streptomyces is an Actinomycete.
[R]: It forms radiating colonies in Cultures.
*1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
3) A is true but R is false
4) A is false but R is true

37. Mycobacterium is

*1) Parasite 2) Saprophyte 3) Chemoautotroph 4) Photoautotroph

38. Boundaries of this kingdom are not well defined

1) Monera *2) Protista 3) Plantae 4) Animalia

39. Protistans without histones are

1) Diatoms 2) Euglenoids 3) Protozoans *4) Dinoflagellates

40. Golden algae are

*1) Chrysophytes 2) Dinoflagellates 3) Euglenoids 4) Green algae

41. Kieselghur is cell walls of

1) Golden algae *2) Diatoms 3) Dinoflagellates 4) Myxomycetes

42. This is Whirling Whip

1) Diatom *2) Noctiluca 3) Pinnularia 4) Euglena

43. Auxospores are seen in

*1) Diatoms 2) Dinoflagellates 3) Bacteria 4) Euglenoids

44. Match the following

List – I	List – II
A) Bioluminiscence	I) Euglena
B) Red Tide	II) Trichdesmium
C) Red sea	III) Trichoderma
D) Cytostome	IV) Gonyoulax
	V) Noctiluca

	A	B	C	D
1)	IV	V	III	II
2)	I	II	IV	III
3)	V	IV	II	III
*4)	V	IV	II	I

45. [A]: Noctiluca is a dinoflagellate
[R]: It has two parallelly arranged flagella
1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
*3) A is true but R is false
4) A is false but R is true

46. Cell wall is made of cellulose in

*1) Dinoflagellates 2) Diatoms 3)Euglenoids 4) Ciliates

47. Stigma is present in

1) Eubacteria 2)Archaebacteria *3)Euglenoids 4) Paramecium

48. Mesokaryotes do not have

1) Nuclear envelope 2) nucleolus *3) Histones 4) DNA

49. Pellicle is present in

1) Dinoflagellates *2) Euglenoids 3) Slime moulds 4) All

50. Choose the correct statement

1) Pellicle is rich in lipids

*2) Chromosomes of dinoflagellates are always in condensed state

3) Euglenoids have sexual reproduction

4) Slime moulds are ancestors of Plantae

51. Heterokontic flagella are seen in

I. Dinoflagellates II. Cyanobacteria III.Euglenoids IV Amoeboid protists

1) I, II, IV 2) II, III, IV *3) I, III 4) II, III

52. Eyespot of euglenoids is more associated with

1) Pellicle 2) Nucleus 3)Chromatophore *4) Reservoir

53. Match the following

List – I	List – II
A) Palmelloid stage	I) Marine amoeboids
B) Plasmodium	II) Dinoflagellate
C) Silica shells	III) Diatoms
D) Sulcus	IV) Slime moulds
	V) Euglenoids

	A	B	C	D
*1)	V	IV	I	II
2)	V	IV	I	III
3)	IV	V	II	III
4)	IV	III	I	II

54. [A]: Euglena shows heterotrophic nutrition
[R]: It lacks chlorophylls

1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
*3) A is true but R is false
4) A is false but R is true

55. The resemblance of Euglena with higher plants is

1) Presence of flagella 2) Presence of pyrenoid

*3) having similar type of chlorophylls 4) has no similarity at all

56. Fruiting bodies are seen in

1) Euglenoids *2) Slime moulds 3)Dinoflagellates 4)Chrysophyceae

57. The parasitic protists are

I. Entamoeba II. Trypanosoma III. Plasmodium

1) I, II 2) I, III 3) II, III *4) I, II, III

58. Sleeping sickness in man is caused by a

1) Dinoflagellate 2) Amoeboid protozoan

*3) Flagellated protozoan 4) Ciliated protozoan

59. Spores have cell wall but not the main body of the organism in

1) Sporozoans 2)amooeboids *3) Slime moulds 4) None

60. These are saprophytic protists

*1) Slime moulds 2)Euglenoids 3) Protozoans 4) Diatoms

61. Dikaryophase is seen in the life cycle of

1) All fungi 2) All protists 3)Myxomycetes *4) Some fungi

62. Match the following

List – I	List – II
A) Rust fungus	I) Penicillium
B) White spot on Mustard	II) Yeasts
C) Bread making	III) Albugo
D) Source of antibiotics	IV) Rhizopus
	V) Puccinia

	A	B	C	D
1)	V	IV	II	I
*2)	V	IV	II	III
3)	IV	V	I	II
4)	III	IV	II	I

63. [A]: Chitin is a polysaccharide
[R]: It is made of polymer of aminosugars

*1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
3) A is true but R is false
4) A is false but R is true

64. Dikaryotic stage is seen in

I. Ascomycetes II. Basidiomycetes III.Phycomycetes IV.Deuteromycetes

1) I, III 2) II, III 3) III, IV *4) I, II

65. Zoospores are formed in

1) Ascomycetes 2) Basidiomycetes *3)Phycomycetes 4)Deuteromycetes

66. Bread mould is

1) Alternaria *2) Rhizopus 3) Penicillium 4) Yeasts

67. Puff balls belong to

1) Phycomycetes 2)Ascomycetes *3)Basidiomycetes 4)Deuteromycetes

68. Ascogenous hyphae are seen in the life cycle of

1) Aspergillus 2)Polyporous 3)Albugo 4)Lycoperdon

69. The following fungus is extensively used in genetical and biochemical studies

1) *Claviceps* 2) *Penicillium* *3)*Neurospora* 4)*Saccharomyces*

70. Sex organs are absent in

I. Basidiomycetes II. Ascomycetes III.Phycomycetes IV.Deuteromycetes

1) I, II 2) I, III 3) II, III *4) I, IV

71. Match the following

List – I	List – II
A) Lycoperdon	I) Bracket fungus
B) Ustilago	II) Mushroom
C) Agaricus	III) Bread mould
D) Polyporous	IV) Smut fungus
	V) Puff Balls

	A	B	C	D
1)	V	IV	I	III
*2)	V	IV	II	I
3)	IV	V	II	III
4)	V	IV	I	II

72. [A]: Ascospores are sexual spores
[R]: These are formed exogenously after meiosis
1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
*3) A is true but R is false
4) A is false but R is true

73. Penicillum has

1) Basidiocarp 2) Apothecium 3)Perithecium *4)Cleistothecium

74. This is Cup shaped fruiting body of Fungi

1) Basidiocarp *2) Apothecium 3)Perithecium 4)Cleistothecium

75. These are edible fungi

I. Truffles II. Morels III. Mushrooms IV. Toadstools

1) I, II only 2) III only 3) I, II, IV *4) I, II, III

76. Asexual reproduction is rare in the following group of fungi

1) Ascomycetes *2)Basidiomycetes 3)Phycomycetes 4)Deuteromycetes

77. Somatogamy is seen in

*1) Basidiomycetes 2)Ascomycetes 3)Deuteromycetes 4)Phycomycetes

78. Choose the wrong statement

1) Sex organs are present in Ascomycetes

2) Sex organs are present in Phycomycetes

*3) Sex organs are present in Basidiomycetes

4) Sex organsare absent in Deuteromycetes

79. Choose the correct statements

I. Sexual reproduction is shown by Basidiomycetes

II. Sexual reproduction is absent in Deuteromycetes

III. Asexual reproduction is absent in Basidiomycetes

IV. Phycomycetes show gametogamy

*1) I, II, IV 2) II, III, IV 3) I, II, III 4) I, IV, III

80. Match the following

List – I	List – II
A) Biocontrol	I) *Ustilago*
B) Early blight in potato	II) *Puccinia*
C) Red rot in Sugar cane	III) *Trichoderma*
D) Rust fungus	IV) *Alternaria*
	V) *Colletotrichum*

	A	B	C	D
1)	IV	III	I	V
*2)	III	IV	V	II
3)	III	V	IV	I
4)	III	IV	V	I

81. [A]: Deuteromycetes reproduce by zoospores
[R]: They show asexual reproduction
1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
3) A is true but R is false
*4) A is false but R is true

82. This is partially heterotroph

1) Noctiluca 2) Cuscuta *3)Bladerwort 4) Rye

83. This is parasitic plant.

1) Euglena 2) Trypanosoma 3) Venus-fly-trap *4) Cuscuta

84. Living organisms that show holozoic nutrition and having multicellular body are placed in the following kingdom by whittaker

1) Monera 2) Protista 3) Animalia *4) Plantae

85. Six kingdom classification was given by

1) Copeland 2) Haeckel 3) Whittaker *4) Carl Woese

86. The following biomolecule was used by Carl Woese to study the phylogenetical relationships among the organisms.

1) Transfer RNA *2) ribosomal RNA 3) messenger RNA 4) DNA

87. Progenote is the common ancestral group to

1) Archaea 2) Bacteria 3)Eukarya *4) All

88. Choose the correct statement

1) Archaea and Bacteria are more closely related according to Carl Woese

*2)Archaea and Eukarya are more closely related according to 3 domain classification

3) Domain Bacteria has two kingdoms

4) Bacteria and Eukarya are more closely related according to 6 kingdom classification

89. Match the following

List – I	List – II
A) Infectious protein	I) Trichoderma
B) Infectious nucleic acid	II) Lichen
C) Infectious nucleio-protein	III) Prion
D) Symbiont	IV) Viroid
	V) Virus

	A	B	C	D
*1)	III	IV	V	II
2)	IV	V	III	II
3)	III	V	IV	I
4)	III	IV	V	I

90. [A]: Viruses did not find a place in classification of living organisms.
[R]: Viruses do not have cellular structure
*1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
3) A is true but R is false
4) A is false but R is true

91. The term Virus was given by

1) Iwanowsky *2) Pasteur 3) Jenner 4) Leeuwenhoek

92. Capsid is

1) Protein of Prion

2) Nucleic acid of Viroid

3) Nucleic acid of Virus

*4) Protein coat of Virus

93. Diener discovered

1) Archaea 2) Viruses *3) Viroids 4) Prions

94. Choose the correct pair

1) Prions - DNA 2) Virus – only DNA *3) Viroid - RNA 4) Viroid – Protein

95. Tobacco mosaic virus has

1) DNA and Protein 2) RNA and Carbohydrate

*3) RNA and Protein 4) RNA, Protein and Carbohydrate

96. **These organisms are incapable or multiplying in the absence of host**.

I. Viruses II. Viroids III.Prions IV. Bacteria

1) I, II, IV 2) II, III, IV 3) I, III, IV *4) I, II, III

97. Scrapie disease in Sheep is caused by

*1) Prions 2) Viroids 3)Virusoids 4) Viruses

98. Match the following

List – I	List – II
A) Madcow disease	I) Lichen
B) Potato spindle tuber	II) Virus
C) Bacteriophage	III) Alga
D) Mycobiont	IV) Viroid
	V) Prion

	A	B	C	D
1)	IV	III	II	I
2)	II	IV	I	II
*3)	V	IV	II	I
4)	V	IV	III	I

99. [A]: HIV is a virus
[R]: It has RNA
1) Both A and R are true and R is the correct explanation of A
*2) Both A and R are true but R is not the correct explanation of A
3) A is true but R is false
4) A is false but R is true

100.[A]: Lichens are indicators of Air pollution
[R]: They are resistant to air pollutants
1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true but R is not the correct explanation of A
*3) A is true but R is false
4) A is false but R is true