

BIOLOGY PART-I

(OBJECTIVE PART)

- The study of distribution of animals in nature is called:

<input checked="" type="checkbox"/> (a) Zoogeography	(b) Biodiversity
(c) Geography	(d) Wild life
- Study of tissue is called: OR Study of fossils is called: (2 Time)

(a) Morphology	(b) Anatomy	<input checked="" type="checkbox"/> (c) Histology	(d) Microbiology
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- The study of parasite is called.

(a) Paleontology	(b) Histology	(c) Microbiology	<input checked="" type="checkbox"/> (d) Parasitology
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- A group of similar cells that perform similar function is: (3 Times)

(a) Organ	(b) Organelles
<input checked="" type="checkbox"/> (c) Tissue	(d) System
- A large regional community primarily determined by climate is called as: (6 Time)

<input checked="" type="checkbox"/> (a) Biome	(b) Biosphere	(c) Population	(d) Community
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- Population of different species living in the same Habitat from a: (1 Time)

(a) Biome	(b) Biosphere	(c) Population	<input checked="" type="checkbox"/> (d) Community
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- The lowest percentage of bio-elements in man among the following is of:

(a) Chlorine	<input checked="" type="checkbox"/> (b) Manages	(c) Sulphur	(d) Iron
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- The percentage of hydrogen present in human body is: (1 Time)

(a) 20%	(b) 15%	<input checked="" type="checkbox"/> (c) 10%	(d) 5%
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- Which one of these is Macro Molecule?

(a) H ₂ O	(b) CO ₂	<input checked="" type="checkbox"/> (c) O ₂	(d) Starch
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- Which one serves to build macromolecules

(a) ATP	<input checked="" type="checkbox"/> (b) Starch	(c) Glucose	(d) Kertain
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- The tentative explanation of observation: (5 Times)

<input checked="" type="checkbox"/> (a) Hypothesis	(b) Deduction
(c) Law	(d) Theory
- The reasoning that moves from general to specific is: (1 Time)

<input checked="" type="checkbox"/> (a) Deductive	(b) Inductive	(c) Scientific	(d) Theoretical
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- The percentage of water in human bone cell is: (1 Time)

(a) 18%	(b) 19%	<input checked="" type="checkbox"/> (c) 20%	(d) 25%
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- The most recent era is: (1 Time)

(a) Paleozoic	<input checked="" type="checkbox"/> (b) Cenozoic	(c) Mesozoic	(d) Protozoic
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- The numbers of species of insects are:

(a) 22.5%	(b) 17.6%	(c) 15.5%	<input checked="" type="checkbox"/> (d) 53.1
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- The deductive reasoning we move from: (1 Time)

<input checked="" type="checkbox"/> (a) General to specific	(b) Specific to general
(c) General to general	(d) Specific to specific
- The first ever clone was prepared in 1997 in:

(a) England	(b) Ireland	<input checked="" type="checkbox"/> (c) Scotland	(d) Maryland
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- An aphid that attacks Walnut tree is being controlled biologically by: (1 Time)

- (a) Wasp (b) House fly (c) Hone bee (d) Mosquito
19. AIDS is caused by:
(a) Fungi (b) Bacteria (c) Virus (d) Algae
20. In biological control an aphid is being controlled by:
(a) Honey bee (b) Wasp (c) Mosquito (d) Dragon fly
21. The percentage of water in bacterial cell is about: (2 Time)
(a) 15% (b) 18% (c) 50% (d) 70%
- 2.3: Importance of Water
22. Human tissues have 85% water in cells of: (2 Time)
(a) Brain (b) Bone (c) Blood (d) Liver
23. The specific heat of vaporization of water is: (2 Time)
(a) 457 kcal/kg (b) 574 kcal/kg (c) 547 kcal/kg (d) 475 kcal/kg
24. The specific heat of vaporization of water in kcal/kg: (2 Time)
(a) 457 (b) 574 (c) 547 (d) 475
25. The most abundant carbohydrates in nature is: (3 Time)
(a) Starch (b) Cellulose (c) Glucose (d) Maltose
26. Which one of following is not a polysaccharide? (2 Time)
(a) Chitin (b) Cutin (c) Pectin (d) Dextrin
27. The covalent bond between two monosaccharide's is called: (3 Time)
(a) Peptide bond (b) Glycosidic bond
(c) Hydrogen bond (d) Ester bond
28. Monosaccharide which are rare in nature and occur in some bacteria is: (1 Time)
(a) Trioses (b) Tetroses (c) Pentoses (d) Hexoses
29. Glycogen gives colour with iodine:
(a) Black (b) Red (c) Blue (d) Green
30. The melting point of palmitic acid is: (1 Time)
(a) -8°C (b) 34°C (c) 63.1°C (d) 55.6°C
31. The most abundant organic compound in mammalian cell:
(a) Water (b) Proteins (c) Carbohydrates (d) Lipids
32. Keratin is an example of Fibrous protein present in: (2 Time)
(a) Nails and Hair (b) Blood
(c) Muscles (d) Bones
33. Peptide bond is a: (1 Time)
(a) C-N link (b) C-O link (c) N-H link (d) C-H link
34. In the α - helix protein structure, each turn of the helix has amino acids. (1 Time)
(a) 3.6 (b) 4.6 (c) 5.6 (d) 6.6
35. Which of the following is not a fibrous protein:
(a) Keratin (b) Myosin (c) Fibrin (d) Hormones
36. The percentage of ribosomal RNA in the cell is:
(a) 4% (b) 20% (c) 50% (d) 80%
37. Hydrogen bonds between adenine and thymine are:
(a) Three (b) Four (c) Five (d) Two
38. The Ribosomal RNA (rRNA) is synthesized and stored in the:
(a) Golgi Complex (b) Centriole
(c) Nucleolus (d) Vacuole
39. Chemical nature of most cellular secretions is: (2 Time)
(a) Proteins (b) Lipids (c) Glycoproteins (d) Carbohydrates
40. If non-protein part is loosely attached to protein, it is known as: (3 Time)
(a) Cofactor (b) Coenzyme (c) Holoenzyme (d) Active site
41. The detachable cofactors of an enzyme is known as: (1 Time)

- (a) Activator (b) Prosthetic group
(c) Coenzyme (d) Apo enzyme
42. Metal ions are related to:
(a) Coenzymes (b) Vitamins (c) Cofactors (d) Substrate
43. If the non-protein part of enzyme is covalently bonded; it is called: (4 Time)
(a) Co-factor (b) Activator (c) Co-enzyme (d) Prosthetic group
44. An activated enzyme consisting of a polypeptide chain and a cofactor is called: (4 Time)
(a) Apoenzyme (b) Holoenzyme (c) Coenzyme (d) Both A & B
45. An enzyme with its co-enzyme or prosthetic group removed is designated as: (3 Time)
(a) Holoenzyme (b) Apoenzyme (c) Coenzyme (d) Activator
46. The enzymes involved in cellular respiration are found in _____
(a) Chloroplast (b) Ribosomes (c) Mitochondria (d) Golgibodies
47. Lock and key model was proposed by: (2 Time)
(a) Koshland (b) Emil Fischer (c) Flemming (d) Watson
48. According to lock and key model, the active site is: (3 Time)
(a) Soft structure (b) Flexible Structure
(c) Attractive Structure (d) Rigid Structure
49. Induced fit model was proposed by: (2 Time)
(a) Emil Fischer (b) Koshland (c) Jenner (d) Pasteur
50. Optimum pH for the proper functioning of enzyme sucrase is: (4 Time)
(a) 2.00 (b) 4.50 (c) 5.50 (d) 7.60
51. The optimum pH of salivary amylase is: (3 Time)
(a) 2.80 (b) 4.80 (c) 6.80 (d) 8.80
52. The optimum pH of enzyme pepsin is: (3 Time)
(a) 2 (b) 6.8 (c) 7 (d) 9
53. The enzyme with optimum pH=7.60 is: (1 Time)
(a) Arginase (b) Enterokinase (c) Catalase (d) Sucrase
54. The optimum temperature of human body enzyme is: (2 Time)
(a) 27°C (b) 37°C (c) 47°C (d) 57°C+
55. Optimum pH value for enzyme pepsin is: (1 Time)
(a) 4.50 (b) 9.00 (c) 2.00 (d) 5.50
56. The optimum pH of catalase is: (2 Time)
(a) 6.60 (b) 7.60 (c) 8.60 (d) 9.60
57. Optimum pH for action of pancreatic lipase is:
(a) 3.00 (b) 5.00 (c) 7.00 (d) 9.00
58. The competitive inhibitors of succinic acid is: (1 Time)
(a) Fumaric acid (b) Malonic acid
(c) Citric acid (d) Acetic acid
59. Poisons like cyanides, antibiotics and some drugs are examples of: (1 Time)
(a) Enzymes (b) Co-enzymes (c) Inhibitors (d) Cofactors
60. Reversible inhibitors form weak linkage with:
(a) Substrate (b) Product (c) Enzyme (d) Reactant
61. The resolution of naked eye is: (1 Time)
(a) 1mm (b) 1 μ m (c) 1nm (d) 1cm
62. Resolution power of a typical compound microscope is: (1 Time)
(a) 300X (b) 1.0 μ m (c) 2.0 μ m (d) 2-4 Angstrom
63. Resolution of human naked eye is:
(a) 162 (b) 262 (c) 252 (d) 152

64. Which is not found in primary wall?
 (a) Cellulose (b) Hemicellulose
(c) Lignin (d) Pectic
65. The process of taking in liquid material by cell membrane is called:
 (a) Phagocytosis (b) Exocytosis
(c) Pinocytosis (d) Lymphocytosis
66. The percentage lipids in plasma membrane is:
 (a) 60-80% (b) 30-60% **(c)** 20-40% (d) 10-20%
67. Cell membrane is chemically composed of proteins: **(1 Time)**
 (a) 10-20% (b) 20-30% (c) 40-50% **(d)** 60-80%
68. Cell wall is secreted by: **(3 Time)**
(a) Protoplasm (b) Nucleoplasm
 (c) Golgi Complex (d) Ribosome
69. When cross-section of centriole is observed it shows as it consists of:
(a) 9-microtubules (b) 3-microtubules
 (c) 11- microtubules (d) 6- microtubules
70. The soluble part of the cytoplasm is called:
 (a) Stroma (b) Gel **(c)** Cytosol (d) Matrix
71. Cisternae are associated with:
(a) ER (b) Mitochondria
 (c) Nucleus (d) Chloroplast
72. Harmful substances are detoxified in the liver cells by:
 (a) Mitochondria **(b)** Endoplasmic
 (c) Golgi Complex (d) Nucleolus
73. A structure found attached to membranes in cell. It consists of 2 parts. Name it.
 (a) Golgi Apparatus (b) Mitochondria
 (c) Lysosome **(d)** Ribosome
74. A group of ribosome attached to mRNA is known as: **(1 Time)**
 (a) Lysosome (b) Peroxisome **(c)** Polysome (d) Glyoxisome
75. The attachment of two sub fibrous protein in: **(2 Time)**
 (a) Ca^{+2} **(b)** Mg^{+2} (c) K^{+2} (d) Fe^{2+}
76. Proteins are synthesized by: **(4 Time)**
 (a) Polysome (b) Nucelosome (c) Lysosome **(d)** Ribosome
77. The factory of ribosome is the: **(1 Time)**
 (a) 30S (b) 50S (c) 70S **(d)** 80S
78. Eukaryotic ribosomes are composed of almost equal amount of:
(a) RNA and Protein (b) DNA and Protein
 (c) RNA and Lipid (d) RNA and Carbohydrates
79. Most of the cell secretions are in nature.
 (a) Proteins (b) Lipids (c) Carbohydrates **(d)** Glycoproteins
80. Gogi apparatus is concerned with cell: **(2 Time)**
 (a) Division (b) Lysis **(c)** Secretion (d) Storage
81. Tay-Sach's disease is because of absence of an enzyme. That is involved in catabolism of: **(1 Time)**
 (a) Polysaccharides (b) Oligosaccharides
 (c) Proteins **(d)** Lipids
82. Tay-Sach's disease results due to accumulation, in brains cells of: **(1 Time)**
 (a) Mg^{+2} ions (b) Glucose (c) Proteins **(d)** Lipids
83. De Duve discovered cell organelle:
 (a) Mitochondria **(b)** Lysosome (c) Plastids (d) Golgi Complex
84. The diameter of peroxisome is approximately:

- (a) $0.2\mu m$ (b) $0.3\mu m$ (c) $0.4\mu m$ (d) $0.5\mu m$
85. Glyoxosomes are most abundant in:
 (a) Human blood (b) Plant seedlings (c) Liver cells (d) Microorganisms
86. What is not true about microfilaments?
 (a) Actin (b) Amoeboid movement
 (c) Cyclosis (d) Linked with outer surface of plasma membrane
87. The protein present in microtubules is: (1 Time)
 (a) Actin (b) Tetroses (c) Tubulin (d) Tropomyosin
88. Cyclosis and amoeboid movements are because of:
 (a) Microtubules (b) Microfilaments
 (c) Intermediate filaments (d) None of these
89. Infolding of inner membrane of mitochondria are called as: (2 Time)
 (a) Cisternae (b) Cristae (c) Granum (d) Thylakoid
90. Cristae are found in:
 (a) Golgi complex (b) Chloroplast
 (c) Endoplasmic reticulum (d) Mitochondria
91. Which one of the following cellular organelles is called power house of the cell?
 (a) Chloroplast (b) Mitochondria
 (c) Golgibodies (d) Lysosomes
92. Chromoplast impart colours to the plants other than:
 (a) Yellow (b) Red (c) Green (d) Blue
93. Stroma is a fluid in the chloroplast:
 (a) Thylakoids (b) Matrix (c) Granum (d) Intergranum
94. Plastids are only found in: (1 Time)
 (a) Bacteria (b) Viruses (c) Plant Cell (d) Animal Cell
95. The fluid that surrounds the Thylakoid is called: (2 Time)
 (a) Matrix (b) Stroma (c) Medium (d) Cytoplasm
96. Robert Brown reported the presence of:
 (a) Lysosome (b) Ribosomes (c) Mitochondria (d) Nucleus
97. Eukaryotes have pores per nucleus:
 (a) 3000 (b) 30,000 (c) 6 or 8 (d) 3 or 4
98. The number of pores in nuclear membrane of erythrocyte is:
 (a) 03 or 04 (b) 02 or 03 (c) 05 or 06 (d) 30,000
99. Organelle found in both prokaryotic and eukaryotic cells:
 (a) Ribosomes (b) Mitochondria (c) Chloroplasts (d) Lysosomes
100. Closely related classes are grouped into:
 (a) Division (b) Order (c) Family (d) Kingdom
101. Initially, the classification was based on:
 (a) Cytology (b) Physiology (c) Morphology (d) Genetic features
102. Binomial nomenclature system was given by:
 (a) Pasteur (b) Le-Duve (c) Lamarck (d) Linnaeus
103. Binomial system of nomenclature was devised by:
 (a) E-Chatton (b) Ernst Hackle
 (c) Robert Whittaker (d) Carlous Linnearus
104. The common name for Solanum melangena is: (1 Time)
 (a) Potato (b) Tobacco (c) Onion (d) Tomato
105. The smallest known viruses contain RNA in spherical capsid are the: (1 Time)
 (a) Polio Viruses (b) Pox Viruses
 (c) Herpes Viruses (d) Influenza Viruses
106. The common name of Allium cepa is: (1 Time)

- (a) Piyaz (b) Bathu (c) Channa (d) Potato
107. Solanum tuberosum is the scientific name of:
 (a) Onion (b) Tomato (c) Potato (d) Garlic
108. Organelle of symbiotic origin is: (5 Time)
 (a) Cell Wall (b) Cell membrane
 (c) Mitochondria (d) Vacuole
109. In five kingdom system, Eukaryotic multicellular organisms are placed in kingdom:
 (a) Monera (b) Protista (c) Fungi (d) Animalia
110. The number of capsomers in capsid of adenovirus are. (4 Time)
 (a) 152 (b) 252 (c) 352 (d) 452
111. Madcow disease is caused by: (3 Time)
 (a) Bacteria (b) Fungus (c) Prions (d) Virion
112. The number of capsomeres present in herpes virus capsid is: (2 Time)
 (a) 252 Capsomers (b) 162 Capsomers
 (c) 250 Capsomers (d) 100 Capsomers
113. The size of Parvovirus is:
 (a) 100 nm (b) 20 nm (c) 250 nm (d) 75 nm
114. Capsomers are subunits which form capsid of a virion. These capsomeres are chemically.
 (a) Lipids (b) Nucleic acids
 (c) Carbohydrate (d) Proteins
115. Lytic cycle completion occurs about:
 (a) 15 min (b) 25 min (c) 35 min (d) 5 min
116. Paramyxoviruses cause the disease: (1 Time)
 (a) Influenza (b) Polio
 (c) Mumps & Measles (d) Herpes Simple
117. Influenza viruses are: (2 Time)
 (a) DNA naked (b) DNA enveloped
 (c) RNA enveloped (d) RNA naked
118. A disease, which is highly contagious is: (1 Time)
 (a) Measles (b) Mumps (c) Influenza (d) Herpes
119. Which of the following viral disease is caused by DNA virus?
 (a) Herpes simplex (b) Influenza
 (c) Mumps (d) Polio
120. Which one of the following viral disease is caused by RNA virus?
 (a) Small pox (b) Influenza (c) Poliomyelitis (d) Mumps
121. HIV belongs to the group of viruses called:
 (a) Pox viruses (b) DNA viruses
 (c) Retrovirus (d) Bacteriophage
122. The single stranded RNA tumor viruses are:
 (a) Spherical (b) Elongated (c) Spiral (d) Cubical
123. Hepatitis "B" is also called:
 (a) Delta Hepatitis (b) Infectious Hepatitis
 (c) Inclusion Hepatitis (d) Serum Hepatitis
124. Hepatitis is an inflammation of: (1 Time)
 (a) Stomach (b) Pancreas (c) Liver (d) Kidney
125. Hepatitis C is caused by virus:
 (a) DNA-non enveloped (b) DNA enveloped
 (c) RNA non enveloped (d) RNA enveloped
126. Germ theory of disease was formulated by:
 (a) Robert Koch (b) Louis Pasteur

(c) Edward (d) Christian Gram

127. Cell Wall is absent in: (1 Time)

(a) E. Coli (b) Mycoplasma (c) Vibrio (d) Spirochete

128. Curved or comma shaped bacteria are called:

(a) Vibrio (b) Spirillum (c) Spirochetes (d) Bacilli

129. Oval shaped bacteria are:

(a) Spirilla (b) Vibrio (c) Cocci (d) Bacilli

130. A bacteria with single polar flagellum is called:

(a) Atrichous (b) Monotrichous
(c) Lophotrichous (d) Amphitrichous

131. Pili are made up of special protein called:

(a) Pilin (b) Flagellin (c) Tubulin (d) Myosin (2 Time)

132. Bacteria without any flagella are called:

(a) Flagellate (b) Atrichous (c) Tubulin (d) Myosin (5 Time)

133. Rod shaped bacteria are called:

(a) Cocci (b) Bacilli (c) Spirilla (d) Vibrio

134. These are smallest and without cell wall:

(a) Mycoplasma (b) Pseudomonas (c) Spirochete (d) E-Coli (2 Time)

135. Cell wall of gram positive bacteria is stained:

(a) Pink (b) Red (c) Green (d) Purple

136. When flagella surround the whole cell of bacteria, it is termed as:

(a) Atrichous (b) Lophotrichous
(c) Amphitrichous (d) Peritrichous

137. In bacteria when the division is three planes it will produce which arrangement:

(a) Streptococcus (b) Tetrad
(c) Sarcina (d) Diplococcus

138. Which is an aerobic bacterium?

(a) E. Coli (b) Spirochete (c) Campylobacter (d) Pseudomonas (5 Time)

139. Spirochete is a bacterium:

(a) Aerobic (b) Anaerobic (c) Facultative (d) Microaerophilic

140. Asexual reproduction in bacteria occurs by:

(a) Conjugation (b) Transduction
(c) Transformation (d) Binary Fission

141. Rapid phase of growth of Bacteria is:

(a) Lag phase (b) Log phase
(c) Stationary phase (d) Decline phase

142. Conjugation in bacteria is promoted by the structure:

(a) Flagella (b) Pili (c) Cilia (d) Spores

143. The thick walled reproductive cell of cyanobacteria are called:

(a) Heterocyst (b) Trichome (c) Hormogonia (d) Akinete

144. Reserved food material in cyanobacteria is in the form of:

(a) Sucrose (b) Starch (c) Glycogen (d) Proteins (7 Time)

145. All of the following are related to Nostoc except:

(a) Trichome (b) Slimy covering
(c) Branched filaments (d) Heterocyst

146. Which of the following is not present protists?

(a) Flagella (b) Embryo (c) Cilia (d) None of these

147. Trypanosoma is an example of:

(a) Actinopods (b) Zooflagellates (2 Time)
(c) Apicomplexans (d) Ciliates

148. Tests of for a minifera, are made up of: (5 Time)
 (a) Silica (b) Calcium (c) Chitin (d) Magnesium
149. An outer flexible covering of ciliates is: (2 Time)
 (a) Cell wall (b) Pellicle (c) Sheath (d) Cuticle
150. The protozoans having two kids of nuclei: (1 Time)
 (a) Amoeba (b) Zooflagellates
 (c) Ciliates (d) Actinopods
151. African sleeping sickness is transmitted by (9 Time)
 (a) Tse-tse (b) Mosquito
 (c) Trypanosoma (d) Trichonymphas
152. The sexual process is exhibited by most cities by: (1 Time)
 (a) Binary fission (b) Budding
 (c) Conjugation (d) Fertilization
153. Sleeping sickness is spread by: (1 Time)
 (a) Tse-tse fly (b) Trypanosoma (c) Mosquito (d) Plasmodium
154. Amoebas move and obtain food by means of:
 (a) Cilia (b) Flagella (c) Plasmodium (d) Pseudopodia
155. Entamoeba histolytica causes amoebic: (1 Time)
 (a) Cholera (b) Fever (c) Dysentery (d) Migraine
156. Pelomyxalustiris is commonly called:
 (a) Entamoeba (b) Trypanosoma
 (c) Trichonympha (d) Giant amoeba
157. Based on molecular data Euglenoids are thought to be closely related to:
 (a) Brown algae (b) Zooflagellates
 (c) Green algae (d) Diatoms
158. Algae having shells composed of two halves that fit together like petridish belongs to: (1 Time)
 (a) Diatoms (b) Foraminifera (c) Actinopoda (d) Slime molds
159. Diatoms belong to phylum: (1 Time)
 (a) Rhodophyta (b) Phaeophyta
 (c) Chrysophyta (d) Pyrrophyta
160. Ceratium belongs to group of algae called: (1 Time)
 (a) Diatoms (b) Red algae (c) Brown algae (d) Dinoflagellates
161. Algae which take part in building coral reefs along with coral animals are:
 (a) Red algae (b) Brown algae (c) Green algae (d) Diatoms
162. Cell wall of oomycetes contain mostly:
 (a) Chitin (b) Cellulose (c) Glycan (d) Pectin
163. Euglenoids are thought to be closely related to:
 (a) Zooflagellates (b) Dinoflagellates
 (c) Diatoms (d) Brown algae
164. Slime mold feeding state is: (4 Time)
 (a) Blastocyst (b) Sporozoites
 (c) Cystozoid (d) Plasmodium
165. Kelps, the largest known algae belong to group:
 (a) Brown (b) Red (c) Green (d) Euglenoid
166. Example of soil dwelling carnivorous fungus is: (2 Time)
 (a) Arthrotrichum (b) Armillaria
 (c) Pleurotus (d) Penicillium
167. Most of the visible part of lichen is: (2 Time)
 (a) Fungi (b) Algae (c) Bacteria (d) Roots
168. Which one is an example of foliose lichens: (1 Time)

- (a) Ramalina (b) Bacidia (c) Lecanora **(d)** Permelia

169. In fungi spores are produced inside the reproductive structure called:

- (a) Conidia **(b)** Sporangia (c) Basidia (d) Ascocarps

170. Sexual reproduction is absent in:

(1 Time)

- (a)** Deuteromycota (b) Zygomycota
(c) Ascomycota (d) Basidiomycota

171. All fungal nuclei are haploid except for transient diploid.

- (a) Spores **(b)** Zygote (c) Conidia (d) Zygozores

172. The most common fungi are:

(1 Time)

- (a)** Ustilago (b) Gymnosperms
(c) Mosses (d) Angiosperms

173. The most common rust fungi are:

(1 Time)

- (a) Ustilago **(b)** Puccinia (c) Penicillium (d) Yeast

174. Yeasts are unicellular:

- (a) Protozoans (b) Algae **(c)** Fungi (d) Bacteria

175. Loose smut of wheat is caused by the following fungi:

(1 Time)

- (a) Puccinia (b) Penicillium (c) Aspergillus **(d)** Ustilago

176. Colour of spores of smuts is:

- (a) Penicillium (b) Rhizopus (c) Pilobolus **(d)** Mushrooms

177. Lovastatin is used for lowering blood.

(4 Time)

- (a) Pressure (b) Glucose **(c)** Cholesterol (d) Neraspora

178. Reindeer moss used as food for reindeer is:

- (a) Moss **(b)** Lichen (c) Mold (d) Club fungi

179. Poisonous mushrooms are called:

(3 Time)

- (a) Truffles (b) Morels (c) Agaricus **(d)** Toadstools

180. Lovastatin is fungal product which lowers blood:

- (a) Sugar **(b)** Cholesterol (c) Urea (d) Calcium

181. Histoplasmosis is:

(1 Time)

- (a) Heart disease (b) Kidney disease
(c) Lung disease (d) Skin disease

182. Rust disease is caused by:

- (a)** Puccinia (b) Ustilago (c) Rhizopus (d) Yeast

183. Ustilago species are most common:

- (a) Rust fungi **(b)** Smut fungi (c) Mold (d) Yeast

184. A haploid spermatozoid fuses with haploid egg to produce diploid:

- (a)** Oospore (b) Oosphere (c) Spore (d) Gamete

185. Lycopsidea are commonly called:

(1 Time)

- (a) Whisk fern (b) Horse tails **(c)** Club mosses (d) Hornworts

186. Horsetail belongs to subdivision

- (a) Lycopsidea (b) Psilopsida **(c)** Sphenopsida (d) Pteropsida

187. The plant of sphenopsida is also called as:

- (a) Angiosperms (b) Gymnosperms (c) Mosses **(d)** Arthropytes

188. Vascular plants belonging to subdivision sphenopsida are commonly called:

- (a) Whisk ferns (b) Club mosses **(c)** Horsetails (d) Ferns

189. The rhizome in adiantum is protect by:

- (a) Ramenta **(b)** Fronds (c) Stipe (d) Stomium

190. Small leaves having a single undivided vein are called:

- (a)** Microphylls (b) Megaphylls (c) Neutrophylls (d) Heterophylls

191. Which of the following were the first plants that formed true leaves and roots?

(2 Time)

- (a) Microphylls (b) Megaphylls (c) Neutrophylls (d) Ferns

192. Technically are seed may be defined as a fertilized:

- (a) Egg (b) Oospore (c) Ovule (d) Both A & C

193. All seed producing plants are called: (1 Time)

- (a) Bryophytes (b) Pteridophyte (c) Tracheophytes (d) Spermatophytes

194. In Spermatophytes, seed is formed from:

- (a) Ovule (b) Ovary (c) Anther (d) Embryosac

195. Among gymnosperms taxus plant is commonly called as:

- (a) Sago palm (b) pine (c) deodar (d) yew

196. Which of the following is modified leaf? (1 Time)

- (a) Tendril (b) Thorn (c) Flower (d) Both Band C

197. Female gametophyte in flowering plants is:

- (a) Ovary (b) Archegonium (c) Seed (d) Embryo Sac

198. Apple and pear belongs to plant family:

- (a) Solanaceae (b) Fabaceae (c) Poaceae (d) Rosaceae

199. Pulse producing plants are belonging to the family: (1 Time)

- (a) Rosaceae (b) Solanaceae (c) Fabaceae (d) Poaceae

200. The common name of Solanum melangena:

- (a) Onion (b) Brinjal (c) Potato (d) Amaltas

201. The integumentary and nervous system are developed from:

- (a) Endoderm (b) Mesoderm (c) Ectoderm (d) Mesoglea

202. Pseudocoelom is present in:

- (a) Cnidaria (b) Flat worm (c) Round worms (d) Earth worms

203. Pseudocoelom is characteristics feature of: (1 Time)

- (a) Aschelaminthes (Nematoda) (b) Annelida
(c) Mollusca (d) Porifera

204. Portuguese man of war is the name used for:

- (a) Physalia (b) Obelia (c) Hydra (d) Aurelia

205. In mollusca, a blue respiratory pigment is present called: (1 Time)

- (a) Haemoglobin (b) Haemoerythrin
(c) Prothombin (d) Haemocyanin

206. An example of beautiful and delicate sponge called Venus flower basket is: (1 Time)

- (a) Sycon (b) Leucoselenia (c) Euplectella (d) Spngilla

207. The pores by which the water leaves the body of sponges are called: (1 Time)

- (a) Ostia (b) Mouth (c) Anus (d) Osculum

208. The pores by which water enters in the body of sponge is called: (1 Time)

- (a) Osculum (b) Ostia (c) Mouth (d) Springocoel

209. Polymorphism is a characteristic of members of phylum: (5 Time)

- (a) Porifera (b) Cnidaria (c) Annelida (d) Arthotropoda

210. Sea Urchin belongs to phylum: (2 Time)

- (a) Coelenterata (b) Porifera (c) Nematoda (d) Arthropoda

211. In phylum coelenterate special cells cnidocytes give size to:

- (a) NaCO (b) CaCO₃ (c) NaOH (d) Ca(OH)₂

212. The polyp is reduced and medusa is dominant in:

- (a) Actinia (b) Madreporite (c) Aurelia (d) Obelia

213. The member of coelenterate commonly called Portuguese man of war is _____ (2 Time)

- (a) Nephron (b) Nephridia (c) Flame cells (d) Ganglia

214. Flame cells are excretory cells in: (2 Time)

- (a) Flatworms (b) Segmented worms
(c) Round worms (d) Anseets

215. Dugesia is a free-living flatworm with a ciliate outer surface. It is commonly known as: (2 Time)

- (a) Tape worm (b) Liver flake (c) Blood fluke (d) Planaria
- 216. Common name for *Ancylostoma duodenal* is: (2 Time)**
 (a) Pin worm (b) Tape worm (c) Earth worm (d) Hook worm
- 217. The body cavity of Nematoda is: (2 Time)**
 (a) Blastocoel (b) Pseudocoelom (c) Coelom (d) Haemocoelom
- 218. A free swimming trochophore larva is produced during the life cycle of: (2 Time)**
 (a) Coelenterate (b) Porifera (c) Annelida (d) Arthropods
- 219. Neries belongs to class: (1 Time)**
 (a) Sponges (b) Annelids (c) Nephron (d) Malpighian tubule
- 220. Metamerically Segmented animals are belonging to the: (3 Time)**
 (a) Annelids (b) Cnidarians (c) Molluscus (d) Echinoderms
- 221. Aquatic Arthropods respire through: (1 Time)**
 (a) Lungs (b) Skin (c) Gills (d) Spiracles
- 222. Excretory system in arthropods is composed of: (2 Time)**
 (a) Kidney (b) Nephridia (c) Flame cells (d) Malpighian tubules
- 223. Loligo is an animal of phylum mollusca which is commonly called: (1 Time)**
 (a) Slug (b) Garden snail (c) Oyster (d) Squid
- 224. In mollusks, a respiratory pigment of blue colour is present called: (1 Time)**
 (a) Haemoglobin (b) Haemoerydhin
 (c) Haemocyanin (d) None of these
- 225. Garden snails belongs to class: (1 Time)**
 (a) Gastropoda (b) Cephalopoda
 (c) Pelecypoda (d) Drthropoda
- 226. The larva found in echinoderms is: (2 Time)**
 (a) Trochophore (b) Veliger
 (c) Bipinnaria (d) Planaria
- 227. Animals of which phylum have developed bilateral system in their larvae and radial: (1 Time)**
 (a) Nematoda (b) Annelida (c) Mollusca (d) Echinodermata
- 228. The presence of notochord is the character of: (1 Time)**
 (a) Arthropoda (b) Mollusea (c) Nematoda (d) Chordata
- 229. The largest invertebrates is: (1 Time)**
 (a) Earth worm (b) Star fish (c) giant squid (d) Ascarus
- 230. Examples of tunicate is: (1 Time)**
 (a) Amphioxus (b) Molgula (c) Amphibia (d) Reptilia
- 231. Ancient fish that have developed lungs are called: (1 Time)**
 (a) Dipnoi (b) Asterias (c) Thaliacea (d) Leptocardii
- 232. Voice organs of birds: (1 Time)**
 (a) Larynx (b) Pharynx (c) Syrinx (d) Vocal cords
- 233. Syrinx is an organ of voice in: (1 Time)**
 (a) Amphibians (b) Birds (c) Reptiles (d) Mammals
- 234. The sub class that has not primitive mammals is: (1 Time)**
 (a) Prototheria (b) Methatheria (c) Eutheria (d) None of these
- 235. Mammals become dominant in: (2 Time)**
 (a) Paleozoic period (b) Mesozoic period
 (c) Coenozoic period (d) Proterozoic period
- 236. Kangaroo belongs to sub class: (2 Time)**
 (a) Metahteria (b) Prototheria (c) Eutheria (d) Reptilia
- 237. Dolphin is: (1 Time)**
 (a) Fish (b) Bird (c) Mammal (d) Amphibian
- 238. Quantitative study of energy relationship in biological system is called: (4 Times)**

- (a) Bioenergetics (b) Biosynthesis
(c) Biodegradation (d) Biotechnology

239. Oxygen released during photosynthesis comes from:

- (a) Water (b) Carbon Dioxide
(c) Nitrates (d) Glucose

240. A kind of chemical link between anabolism and catabolism. (2 Times)

- (a) Protein (b) Glucose (c) ATP (d) None of these

241. Van Niel hypothesis carried out by terrestrial plants is about:

- (a) 10 (b) 20 (c) 30 (d) 40

242. Van Niel hypothesized that source of oxygen during photosynthesis is:

- (a) Water (b) Carbon Dioxide
(c) Chlorophyll (d) NADP

243. The air space in leaf may comprise up to _____ of the total volume of a leaf:

- (a) 80% (b) 60% (c) 40% (d) 20

244. One of the accessory photosynthetic pigments carotenes are mostly: (1 Times)

- (a) Red to Orange (b) Yellow to Orange
(c) Green to Yellow (d) Orange to Red

245. One of the following is not an accessory pigment:

- (a) Chlorophyll "a" (b) Carotenes
(c) Xanthophyll (d) Chlorophyll "b"

246. Molecular formula for chlorophyll "b" is: (4 Times)

- (a) $C_{55}H_{72}O_5N_4Mg$ (b) $C_{55}H_{70}O_6N_4Mg$
(c) $C_{55}H_{70}O_5N_4Mg$ (d) $C_{55}H_{70}O_6N_6Mg$

247. Chlorophylls are insoluble in:

- (a) Alcohol (b) Acetone
(c) Water (d) Carbon Tetrachloride

248. Magnesium of chlorophyll is replaced in hemoglobin by: (2 Times)

- (a) Calcium (b) Potassium (c) Iron (d) Phosphorus

249. The carotenes are mostly red to:

- (a) Blue (b) Yellow (c) Orange (d) Green

250. Carbon Dioxide enters the leaves through: (1 Times)

- (a) Epidermis (b) Cuticle (c) Airspace (d) Stomata

251. Photosystem II has the form of chlorophyll a which absorb best light of:

- (a) 670 nm (b) 680 nm (c) 690 nm (d) 700 nm

252. The light falling on leaf surface is absorbed about:

- (a) 1% (b) 25% (c) 50% (d) 100%

253. Chlorophyll 'a' of photosystem I absorbs maximum light of. (1 Times)

- (a) Low CO_2 (b) Low O_2 (c) Low ATP (d) Low NADPH

254. The dark reaction occurs in:

- (a) Cytoplasm (b) Chloroplast (c) Stroma (d) Grana

255. In the citric acid cycle acetyl CoA reacts with oxaloacetates of from: (5 Times)

- (a) Pyruvate (b) Citrate (c) NADH (d) ATP

256. The breaking of terminal phosphate of ATP release energy of about: (3 Times)

- (a) 4.5 Kcal (b) 6.5 Kcal (c) 3.7 Kcal (d) 7.3 Kcal

257. The amount of glucose into ATP during anaerobic respiration is:

- (a) 1% (b) 2% (c) 3% (d) 4%

258. The final product of glycolysis by is: (1 Times)

- (a) Citrate (b) Pyruvate (c) Molate (d) Fumarate

259. Pyruvic acid is the end product of: (4 Times)

- (a) Glycolysis (b) Krebs Cycle (c) ETC Cycle (d) Calvin Cycle

260. From one pyruvate passing through Krebs cycle how many FADH₂ molecules are formed? (1 Times)
 (a) 01 (b) 02 (c) 03 (d) 04
261. The first step of krebs cycle is union of acetyl Co-A with oxaloacetate to form:
 (a) Isocitrate (b) α -ketoglutarate (c) Citrate (d) Malate
262. In respiratory chain NADH is oxidized by: (1 Times)
 (a) Cytochrome-b (b) Oxygen
 (c) Coenzyme-Q (d) H₂O
263. Magnesium is an important nutrient ion in green plant as it is an essential component of:
 (a) Cell sap (b) Protein (c) Chlorophyll (d) Glucose
264. Carnivorous plants live in soils that are deficient in:
 (a) Potassium (b) Oxygen (c) Nitrogen (d) Magnesium
265. Certain types of whales are also: (1 Times)
 (a) Detritivore (b) Fluid feeders
 (c) Omnivores (d) Filter feeders
266. In Cockroach the partially digested food is stored in: (1 Times)
 (a) Rectum (b) Gizzard (c) Crop (d) Colon
267. The partly digested food in cockroach is temporarily stored in:
 (a) Crop (b) Gizzard (c) Rectum (d) Stomach
268. Tentacles is a characteristics of: (1 Times)
 (a) Hydra (b) Snail (c) Amoeba (d) Euglena
269. Taste buds of tongue play important role in food:
 (a) Digestion (b) Selection (c) Lubrication (d) Mastication
270. Pepsin is secreted by: (1 Time)
 (a) Mucous cell (b) Zymogen cell
 (c) Parietal cell (d) Oxyntic cell
271. Muscles of stomach are of which type:
 (a) Skeletal (b) Smooth (c) Cardiac (d) Voluntary
272. The carbohydrate digesting enzyme in parcreatic juice is: (1 Time)
 (a) Lipase (b) Amylase (c) Erypsin (d) Trypsin
273. Dipeptides are broken down into amino acids by:
 (a) Erypsin (b) Pepsin (c) Trypsin (d) Lipase
274. Hepatic and pancreatic secretions in man are stimulated by: (1 Time)
 (a) Gastrin (b) Secretin (c) ADH (d) Adrenaline
275. The length of Duodenum of human is about: (1 Time)
 (a) 15-20cm (b) 20-25cm (c) 30-35cm (d) 10-15cm
276. If bile pigments are accumulated in blood condition is known as:
 (a) Gall stone (b) Jaundice (c) Pyrosis (d) Heart Pang
277. Emulsification is the function of:
 (a) Bile (b) Lipase (c) Amylase (d) Protease
278. Excess gastric secretion is an important factor for: (1 Time)
 (a) Water (b) Food (c) Blood (d) Oxygen
279. Water is more viscous than air:
 (a) 10 Times (b) 20 Times (c) 50 Times (d) 100 Times
280. During photorespiration, glycine is converted into serine in the: (4 Times)
 (a) Mitochondria (b) Ribosome
 (c) Golgi Bodies (d) Chloroplast
281. Spiracles are found in: (1 Time)
 (a) Fish (b) Cockroach (c) Leech (d) Earthworm
282. Number of spiracles in Cockroach is: (2 Times)

- (a) 10 (b) 10 Pairs (c) 08 Pairs (d) 06 Pairs
- 283. Lungs of birds have thin walled ducts called: (1 Time)**
 (a) Alveoli (b) Trachea (c) Bronchi (d) Parabronchi
- 284. Parabronchi are present only in the lungs: (2 Times)**
 (a) Man (b) Frog (c) Cat (d) Birds
- 285. Blood is not involved in transport of gases in: (2 Times)**
 (a) Frog (b) Cockroach (c) Earth worm (d) Man
- 286. Pleura is double layered thin membrane that covers:**
 (a) Heart (b) Liver (c) Lungs (d) Kidneys
- 287. Which one is the structure of respiratory system of man?**
 (a) Esophagus (b) Larynx (c) Spleen (d) Duodenum
- 288. Lungs are covered by double layered thin membranous Sacs called:**
 (a) Pleura (b) Air sacs (c) Larynx (d) Diaphragm
- 289. Which help in voice production when vibrated by air?**
 (a) Spinal cord (b) Vocal Cord (c) Trachea (d) Bronchi
- 290. Why hemoglobin is 98% saturated, the oxygen content per 100ml of blood is:**
 (a) 19.6ml (b) 18.6ml (c) 17.6ml (d) 16.6ml
- 291. Emphysema is a disease caused by the breakdown of:**
 (a) Lungs (b) Trachea (c) Bronchi (d) Alveoli
- 292. Asthma is associated with sever paroxym of difficult: (1 Time)**
 (a) Sleeping (b) Speaking (c) Walking (d) Breathing
- 293. How many molecules of oxygen can bind with a molecule of myoglobin**
 (a) 04 (b) 03 (c) 02 (d) 01
- 294. The volume of air taken inside the lungs and expelled during exercise is about: (3 Times)**
 (a) 2.5 Liters (b) 3.5 Liters (c) 1.5 Liters (d) 4.5 Liters
- 295. Total inside capacity of Lungs is about:**
 (a) 1.5L (b) 3.5L (c) 4L (d) 5L
- 296. Casparian strips are present in the cells of root. (11 Times)**
 (a) Endodermis (b) Epidermis (c) Cortex (d) Pith
- 297. The maximum depth of roots of Prosopis is:**
 (a) 40m (b) 50m (c) 60m (d) 70m
- 298. The dew drops on the tip of the grass leaves involves the phenomenon:**
 (a) Imbibition (b) Bleeding (c) Guttation (d) Transpiration pull
- 299. The loss of water through Hydathods in leaves is called: (6 Times)**
 (a) Transpiration (b) Bleeding
 (c) Guttation (d) Imbibitions
- 300. The volume of dry seed may increase up to 200 times after absorbing water by: (2 Times)**
 (a) Diffusion (b) Imbibitions (c) Osmosis (d) Guttation
- 301. The structures involved in guttation are: (1 Time)**
 (a) Lenticels (b) Hydathodes (c) Stomata (d) Cuticle
- 302. Cuticular transpiration takes place at: (1 Time)**
 (a) Morning (b) Noon (c) Evening (d) Night
- 303. The ions involved in the opening and closing of stomata are: (2 Times)**
 (a) Sodium (b) Calcium (c) Potassium (d) Magnesium
- 304. Transpiration takes place through cuticle is about: (2 Times)**
 (a) 5-7% (b) 6-7% (c) 5-6% (d) 2-5%
- 305. The pressure flow theory was first proposed in 1930 by: (1 Time)**
 (a) Ernst Hackel (b) Ernst Munch (c) Hemming (d) Dixon
- 306. Open circulatory system is present in:**
 (a) Man (b) Cockroach (c) Earthworm (d) Leach

307. Single Circuit heart is found in: (9 Time)
 (a) Birds (b) Fishes (c) Reptiles (d) Mammals
308. The left systemic arch disappears in: (4 Time)
 (a) Mammals (b) Fish (c) Reptiles (d) Birds
309. The plasma proteins constitute percent by weight of plasma: (4 Time)
 (a) 7-9% (b) 9-11% (c) 11-13% (d) 13-15%
310. Normal pH of human blood is: (7 Time)
 (a) 4.4 (b) 5.4 (c) 6.4 (d) 7.4
311. Platelets are fragments of large cells called: (2 Time)
 (a) Microkaryocytes (b) Erythrocytes
 (c) Megakaryocytes (d) Leucocytes
312. In the embryonic life red blood cells are formed in the: (2 Time)
 (a) Bone marrow and vertebrae (b) Liver and spleen
 (c) Heart and bone marrow (d) Sternum and Ribs
313. A substance that inhibits blood clotting is: (5 Time)
 (a) Heparin (b) Fibrinogen (c) Fibrin (d) Thrombin
314. Antiserum is a serum containing: (1 Time)
 (a) Hormones (b) Antigen (c) Enzyme (d) Antibodies
315. The uncontrolled production of white blood cells result in: (1 Time)
 (a) Leucaemia (b) Thalassaemia
 (c) Oedema (d) Asthma
316. The renal vein brings the impure blood form: (4 Time)
 (a) Brain (b) Kidney (c) Lungs (d) Liver
317. One complete heart beat consist of one systole and one diastole, and last for about: (4 Time)
 (a) 0.2 sec (b) 2 sec (c) 0.8 sec (d) 1.0 sec
318. The valves present in the veins are: (2 Time)
 (a) Bicuspid (b) Tricuspid (c) Semi lunar (d) Aortic
319. Discharge of Blood from Blood vessel is called as: (4 Time)
 (a) Stroke (b) Heart attack
 (c) Thrombosis (d) Hemorrhage
320. A condition of high blood pressure is known as:
 (a) Hypertension (b) Hemorrhage
 (c) Hypotension (d) Arteriosclerosis
321. Which is found in herestitial fluid?
 (a) Large Proteins (b) White Blood Cells
 (c) Red Blood Cells (d) Platelets

(SUBJECTIVE PART)

SECTION-I

SHORT QUESTIONS (SQs)

1. What is Biochemistry? Give its importance.
2. Define Metabolism and name its two processes.
3. What is heat capacity of water? Give its importance.