

GPLUS EDUCATION

Date :
Time :
Marks :

BIOLOGY

THE LIVING WORLD

Single Correct Answer Type

- Biosystematics aims at
 - The classification of organism based on their evolutionary history and establishing their phylogeny on the totality of various parameters from all fields of studies
 - Identification and arrangements of organism on the basis of their cytological characteristics
 - The classification of organisms based on broad morphological characters
 - Delimiting various taxa of organisms and establishing their relationships
- Phenetic classification of organism is based on
 - Observable characteristics of existing organisms
 - The ancestral lineage of existing organism
 - Dendrogram based on DNA characteristics
 - Sexual characteristics
- ...A... is a collection of pressed, dried and preserved plants ...B... labelled arranged systematically for further reference
A and B in the above statement refers to
 - A-Herbarium; B-mounted on thin film
 - A-herbarium; B-mounted on a paper sheet
 - A-Museum; B-mounted on a iron sheet
 - A-Garden; B-mounted on a paper sheet
- Arrange the following in the ascending order of Linnaean hierarchy.
 - Kingdom-Order-Species-Genus-Class-Family-Phylum
 - Kingdom-Family-Genus-Species-Class-Phylum-Order
 - Kingdom-Phylum-Class-Order-Family-Genus-Species
 - Species-Genus-Family-Order-Class-Phylum-Kingdom
- Where was the first herbarium set up?
 - London in Great Britain
 - Pisa in Italy
 - New York in USA
 - Tokyo in Japan
- Animal of the same phylum are grouped below. Choose the incorrect group from given below option
 - Shark, snake, whale, reptiles
 - Insect, spider, shrimp
 - Snail, squid, slug
 - Earthworm, millipede, leech
- Systematic botany means
 - System analysis
 - Systematic arrangement of organs of plants
 - Systematic study of organelles and tissues
 - Methodical study of plants, dealing with identification, naming and classification
- What is the symbol of Bombay Natural History Society?
 - Kingfisher
 - Eagle
 - Hornbill
 - Hawaiin Goose
- Which is called 'sexual system' of classification?
 - Bentham and Hooker
 - Tippos
 - Linnaeus
 - Takhtajan
- Identify from the following the only taxonomic category that has a real existence.
 - Genus
 - Species
 - Phylum
 - Kingdom
- Process of metabolism leads to

- a) Growth
b) Development
c) Functions of living body
d) All of these
12. Which of the following taxonomic ranks contain organism most similar to one another?
a) Class b) Genus c) Family d) Species
13. Which is first step in taxonomy?
a) Description of the organism
b) Identification of the organism
c) Nomenclature of the organism
d) Classification of the organism
14. What is the prime source of taxonomic studies?
a) Collection of actual specimens of organisms species
b) Identification of actual specimen of organism species
c) Both (a) and (b)
d) None of the above
15. ... is a book (taxonomic acid) which contain information about habitat, distribution, climate description and index of plant found in a particular area
a) Manual b) Flora c) Monograph d) Key
16. In hierarchial classification, class occupied a place between
a) Kingdom and phylum b) Order and family c) Phylum and order d) Family and genus
17. Select the correct option from the following
a) Mule can reproduce
b) Worker bee undergoes reproduction to generate new progeny
c) Mule and worker bee do not reproduce
d) None of the above
18. Why hierarchiral taxonomic system is used?
a) As each higher taxonomic category contains its below groups groups/categories
b) It is helpful to established classifications
c) All taxonomic categories reflect common habitats
d) Taxonomic group shows similar characters and have no evolutionary relationship
19. Biological organization in living state is at
a) Sub-microscopic level b) Atomic level c) Cellular level d) Mixture level
20. Arrange the following in ascending similar characteristic
I. Family II. Genus III. Class IV. Species
a) Class < Family < Genus < Species b) Family < Class < Genus < Species
c) Species < Genus < Family < Class d) Class < Genus < Species < Family
21. Among the following choose the properties shown by the living organism exclusively?
I. growth
II. increase in mass
III. self-replication ability
IV. response to touch stimuli
a) I and II b) I, II and III c) I, III and IV d) I, II, III and IV
22. Which one of the following feature is shared by all living organism at all hierarchial level
a) Mode of nutrition
b) Cellular organization
c) Nature of protoplasmic-composition
d) Growth by cell division
23. ...A... is a collection of pressed, dried and preserved plants ...B... labelled arranged systematically for further reference
A and B in the above statement refers to
a) A-Herbarium; B-mounted on thin film

- b) A-herbarium; B-mounted on a paper sheet
 c) A-Museum; B-mounted on a iron sheet
 d) A-Garden; B-mounted on a paper sheet
24. By which chemical specimen for herbaria are treated to prevent fungal attack
 a) 0.1% mercuric chloride
 b) 0.1% mercurous chloride
 c) Carbon disulphide
 d) Acetic acid
25. Who proposed binomial system of nomenclature?
 a) Candolle b) Linnaeus c) Bentham d) Hutchinson
26. Term 'Taxonomy' was coined by
 a) De Candolle b) Takhtajan c) Linnaeus d) Aristotle
27. A group of interconnected genera is called a
 a) Family b) Class c) Phylum d) Order
28. True regeneration is found in
 a) *Amoeba* b) *Hydra* c) *Planaria* d) Bacteria
29. Select true statement from the following and choose the right answer from the option given below
 I. Human's scientific name is *Homo sapiens*
 II. *Genera Plantarum* is written by John Ray
 III. Highest taxonomic categories is division
 IV. Taxonomic group of any rank is taxon
 V. A group of closely related species of organism represent genus
 VI. The term 'systematic' was coined by de Candolle
 a) II, III, IV and VI b) I, III, V and VI c) I, IV and V d) II, III and VI
30. Third name in trinomial nomenclature indicate
 a) Species
 b) Sub-species
 c) Sub-genus
 d) Ecotype of organism
31. Who first proved that virus was made up of a nucleic acid and protein?
 a) Griffith b) WM Stanley
 c) Dr Salvador Huria and Dr Max Delbruk d) Dr NW Pjrie and Dr FC Bawden
32. The suffix 'phyta' indicates
 a) Family b) Class c) Order d) Division
33. The genus *Felis* includes
 a) Tiger b) Fish c) Cat d) Frog
34. Who proposed binomial system of nomenclature?
 a) Candolle b) Linnaeus c) Bentham d) Hutchinson
35. Where was the first herbarium set up?
 a) London in Great Britain
 b) Pisa in Italy
 c) New York in USA
 d) Tokyo in Japan
36. A group of organisms with similar trait of any rank is
 a) Taxon b) Family c) Genus d) Species
37. Term 'New Systematic' was given by
 a) Julian Huxley b) Bateson c) Linnaeus d) Darwin
38. A genus with a single species is called
 a) Typical b) Polytype c) Monotype d) Syntype
39. MABP stands for

- a) Man and Biosphere Programme
 b) Man and Biosphere Protection
 c) Man and Biosphere Conservation and Protection
 d) All of the above
40. Which of the following is correctly sequenced?
 a) Phylum, class, order, family
 b) Phylum, order, class, genus
 c) Phylum, class, family, order
 d) Phylum, order, family, class
41. A germplasm is a
 a) Collection of seeds or plants consists diverse alleles of all genes in a crop
 b) Collection of specimens of all the species of botanical garden
 c) Collection of hybrid varieties of plants
 d) Seed or pollar collection of threatened species of a group
42. Species is considered as
 a) Largest taxon of taxonomy/classification
 b) Key of taxonomy/classification
 c) Smallest taxon of taxonomy/classification
 d) Both small and largest unit of taxonomy/classification
43. Two or more species which occupy the same or overlapping area are known as
 a) Sympatric
 b) Allotropic
 c) Sibling
 d) Sub-species
44. Who coined the term 'Phylum'?
 a) Cuvier
 b) Aristotle
 c) Ernst Haeckel
 d) Hooker
45. Which of the following statements regarding universal rules of nomenclature is wrong?
 a) The first word in a biological name represents the genus
 b) The first word denoting the genus starts with a capital letter
 c) Both the words in a biological name, when handwritten are separately underlined
 d) Biological names are generally in Greek and written in italics
46. Category among following is
 a) Species
 b) Malvaceae
 c) Thalmiflorae
 d) Dicotyledonae
47. 'Systema Naturae' was written by
 a) Ernst Mayr
 b) Carolus Linnaeus
 c) R H Whittaker
 d) W M Stanley
48. What is the symbol of Bombay Natural History Society?
 a) Kingfisher
 b) Eagle
 c) Hornbill
 d) Hawaiiin Goose
49. Two different genera are classified in the same taxonomic category family. Which statement is correct about their classification?
 a) The same class, but different species
 b) A different class and different order
 c) The same phylum, but different class
 d) A different kingdom and different phylum
50. Metabolism can be best defined as
 a) The process in which a chemical is formed inside a body
 b) The process in which a chemical is destroyed inside a body
 c) The sum total all of chemical reactions only occurring in a body
 d) A complex construction process only
51. Among the following choose the properties shown by the living organism exclusively?
 I. growth
 II. increase in mass
 III. self-replication ability
 IV. response to touch stimuli
 a) I and II
 b) I, II and III
 c) I, III and IV
 d) I, II, III and IV
52. In hierarchial classification, class occupied a place between
 a) Kingdom and phylum
 b) Order and family
 c) Phylum and order
 d) Family and genus
53. Choose the wrong statements regarding universal rules of nomenclature

- a) The first word in a biological name represents the genus
 b) The first word denoting the genus starts with a capital letter
 c) Both the words in a biological name, when handwritten are separately underlined
 d) Biological names are generally in English and written in italics
54. Who set up the first herbarium?
 a) Engler and Pranti b) Bentham c) Luca Ghini d) Theophrastus
55. Who is regarded as Father of Zoology and Biology?
 a) Aristotle b) Theophrastus c) Darwin d) Linnaeus
56. Among the following which is a common phenomenon exhibited by living and non-living organisms to show the feature of growth?
 a) Increase in mass b) By cell division
 c) Increase in replication rate d) By cell differentiation
57. A group of interconnected genera is called a
 a) Family b) Class c) Phylum d) Order
58. Arrange the following in ascending similar characteristic
 I. Family II. Genus III. Class IV. Species
 a) Class < Family < Genus < Species
 b) Family < Class < Genus < Species
 c) Species < Genus < Family < Class
 d) Class < Genus < Species < Family
59. In five kingdom classification the unicellular prokaryotic organisms were classified under kingdom
 a) Protista b) Monera c) Animalia d) Plantae
60. Largest herbarium in India is
 a) Madras Herbarium Coimbatore (TN)
 b) Central, National Herbarium (Indian Botanical Garden) Sibpur, Kolkata (WB)
 c) Herbarium of National Botanical Research Institute, Lucknow (UP)
 d) Forest Research Institute, Dehradun (UA)
61. In which of the following, the usual taxonomic hierarchy is not followed?
 a) Polypetalae and Gamopetalae b) Gamopetalae and Monochlamydae
 c) Monochlamydae and monocots d) None of the above
62. Scientific name are printed (with english) and derived from
 a) Bold and English
 b) Italics and Latin
 c) Italics and German
 d) Italics and French
63. What is the basic unit of classification?
 a) Family b) Order c) Species d) Genus
64. *Solanum* and *Panthera* are
 a) Genus and species b) Genus and genus c) Species and species d) Only species
65. The biological concept of species was formulated by
 a) Mayr b) Stebbins c) Heywood d) Love
66. National wildlife protection act came into force in/was inacted in
 a) 1978 b) 1982 c) 1972 d) 1986
67. Biodiversity can be best defined as
 a) Occurrence of number and type of organisms
 b) Species and ecosystem of a region
 c) Variety of life in an ecosystem
 d) Totality of genes, species and ecosystem of a given region
68. Who had written *Systema Naturae*?
 a) Ernst Mayr b) Carolus Linnaeus c) RH Whittaker d) WM Stanley

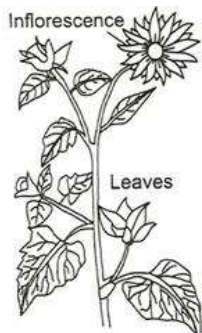
69. Among the following which is a common phenomenon exhibited by living and non-living organisms to show the feature of growth?
- Increase in mass
 - By cell division
 - Increase in replication rate
 - By cell differentiation
70. Who coined the term 'Species'?
- John ray
 - Aristotle
 - Linnaeus
 - Cuvier
71. Binomial nomenclature means that every organism has
- Two names one scientific and other popular
 - One scientific name consisting of a generic and a specific epithet
 - One name given by two scientist
 - Two names, one Latinize and other of the person
72. Which one among the following is accurately arranged in descending specificity
- Species → Family → Class → Order → Division
 - Species → Genus → Division → Class → Kingdom
 - Species → Genus → Family → Order → Class
 - Class → Order → Family → Genus → Species
73. What is illustrated by the statement 'Nothing lives forever, yet life continues'?
- Metabolism
 - Embryogenesis
 - Reproduction
 - Replication
74. Regeneration was first discovered in
- Hydra*
 - Planaria*
 - Sponges
 - Amoeba*
75. Select the correct statement from the following statements
- Increase in mass and increase in number of individuals are twin characteristics of growth
 - Metabolic reactions can also be demonstrated outside the body in isolated cell-free systems
 - 'Response to stimuli' is a defining property of living organisms
- I and II
 - II and III
 - I and III
 - I, II and III
76. Which one of the following has a real existence?
- Genus
 - Species
 - Family
 - Order
77. In plants growth occur by ... throughout their life span.
Choose an appropriate option to complete the given NCERT statement
- Cell dedifferentiation
 - Cell differentiation
 - Cell multiplication
 - None of these
78. In which of the following, metabolic reactions take place?
- In living organism only
 - Both in living and non-living organism
 - In isolated cell free systems
 - Both (a) and (c)
79. Two or more species which occupy the same or overlapping area are known as
- Sympatric
 - Allotropic
 - Sibling
 - Sub-species
80. Third name in trinomial nomenclature indicate
- Species
 - Sub-species
 - Sub-genus
 - Ecotype of organism
81. Family placed between
- Genus and species
 - Order and class
 - Class and genus
 - Order and genus
82. A defining property or characteristic of living organisms is
- Increase in mass
 - Development
 - Response to external stimuli
 - Growth
83. ... is a book (taxonomic acid) which contain information about habitat, distribution, climate description and index of plant found in a particular area
- Manual
 - Flora
 - Monograph
 - Key
84. Natural system of classification is given by

- a) Bentham and Hooker b) Carolus Linnaeus c) Charles Darwin d) Engler and Prantl
85. Five kingdom scheme to classify living being was given by
a) J B S Haldane b) G G Simpson c) E Mayr d) R H Whittaker
86. In majority of higher animals and plants reproduction and growth are
a) Mutually exclusive events b) Synonymous events
c) Both (a) and (b) d) None of the above
87. Which of the following classification is based in some morphological characters?
a) Artificial b) Natural c) Phylogenetic d) Both (A) and (c)
88. New systematic introduced by Sir Julian Huxley is also called
a) Phenetics b) Cladistics c) Biosystematics d) Numerical taxonomy
89. Who coined the term 'Phylum'?
a) Cuvier b) Aristotle c) Ernst Haeckel d) Hooker
90. Evolutionary history of an organism is known as
a) Phylogeny b) Ancestry c) Paleontology d) Ontogeny
91. Distinction of prokaryota and eukaryote is based on
a) Cell organelles only b) Chromosome only c) Nucleus only d) All of these
92. The phylogenetic system of classification was put forth by
a) Carolus Linnaeus b) George Bentham and Joseph Dalton Hooker
c) Aristotle d) Adolf Engler and Karl Prantl
93. Term 'Taxonomy' was coined by
a) De Candolle b) Takhtajan c) Linnaeus d) Aristotle
94. Largest herbarium in India is
a) Madras Herbarium Coimbatore (TN)
b) Central, National Herbarium (Indian Botanical Garden) Sibpur, Kolkata (WB)
c) Herbarium of National Botanical Research Institute, Lucknow (UP)
d) Forest Research Institute, Dehradun (UA)
95. Who set up the first herbarium?
a) Engler and Pranti b) Bentham c) Luca Ghini d) Theophrastus
96. Phylogenetic system of classification is based on
a) Evolutionary relationships b) Morphological features
c) Chemical constituents d) Floral characters
97. A living organism can be easily distinguished from non-living on the basis of
a) Responsiveness to touch stimuli
b) Movement and growth
c) Reproduction
d) Interaction with environment and progressive evolution
98. The term 'Taxonomy' was introduced by
a) de Candolle b) Bentham and Hooker c) Linnaeus d) Huxley
99. A species is a group of organisms which
a) Can interbreed freely
b) Do not interbreed
c) Can live together
d) Can interbreed occasionally
100. Which branch of taxonomy is based on the determination of genetic relationship?
a) Experimental taxonomy
b) Numerical taxonomy
c) Cytotaxonomy
d) Biochemical taxonomy
101. Who coined the term 'Species'?
a) John ray b) Aristotle c) Linnaeus d) Cuvier

102. Which one of the following branch is applicable to both plants and animals?
 a) Herpetology b) Saurology c) Taxonomy d) Ichthyology
103. Which of the following set of organisms reproduce by fragmentation (asexual mode of reproduction)?
 a) *Amoeba*, fungi and earthworm
 b) Fungi, filamentous algae and protonema of mosses
 c) *Hydra*, fungi, *Amoeba* and bacteria
 d) Earthworm, bacteria and fungi
104. Which one of the taxonomic aids can give comprehensive account of complete compiled information of any one genus or family at a particular time?
 a) Taxonomic key b) Flora c) Herbarium d) Monograph
105. A 'texas' differ from 'taxon' due to
 a) Being a higher taxonomic category than taxon
 b) Being a lower taxonomic category than taxon
 c) Being a plural of taxon
 d) Being singular of taxon
106. What name would be suggested for phylum in classification of plants?
 a) Phylum b) Sub-division c) Division d) Both (b) and (c)
107. Taxon is a/an
 a) Group of same species b) Any rank in taxonomic hierarchy
 c) Group of similar genera d) Sub-division of kingdom
108. Phylogenetic system of classification was proposed by
 a) Linnaeus b) Bentham c) Hutchinson d) Theophrastus
109. Who has written the book *Historia Generalis Plantarum*?
 a) Hutchinson b) Lamarck c) John Ray d) Linnaeus
110. A taxon is a
 a) Group of related species b) Group of related families
 c) Type of living organism d) Taxonomic group of any ranking
111. The genus *Felis* includes
 a) Tiger b) Fish c) Cat d) Frog
112. Who is regarded as Father of Zoology and Biology?
 a) Aristotle b) Theophrastus c) Darwin d) Linnaeus
113. Where labelling is done/pasted on herbarium sheet?
 a) Lower RHS b) Lower LHS c) Upper RHS d) Upper LHS
114. A germplasm collection is a
 a) Collection of specimens of all the species of an area in a herbarium or botanical garden
 b) Collection of modern varieties of a crop
 c) Collection of plants or seeds having diverse alleles of all genes in a crop
 d) Collection of seeds or pollen of rare and threatened species of a group or area
115. 'Ordines Anomali' of Bentham and Hooker includes
 a) Seed plants showing abnormal forms of growth and development
 b) Plants represented only in fossil state
 c) Plants described in the literature but which Bentham and Hooker did not see in original
 d) A few orders which could not be placed satisfactorily in the classification
116. Growth in unicellular organisms can be observed by
 a) Counting the mass of cultured cells
 b) Analysing the amount of nutrient absorb by living organism
 c) Growth can not be observed
 d) *In vitro* culture by simply counting the number of cells under microscope
117. Which of the following are considered as the twin characteristics of growth?
 I. Responses to stimuli

- II. Increases in mass
 III. Increases in the number of individuals
 IV. Increases in width
 a) II and IV b) III and IV c) II and III d) I, II, III and IV
118. Biodiversity can be best defined as
 a) Occurrence of number and type of organisms
 b) Species and ecosystem of a region
 c) Variety of life in an ecosystem
 d) Totality of genes, species and ecosystem of a given region
119. Scientific name are printed (with english) and derived from
 a) Bold and English b) Italics and Latin c) Italics and German d) Italics and French
120. A living organism can be easily distinguished from non-living on the basis of
 a) Responsiveness to touch stimuli b) Movement and growth
 c) Reproduction d) Interaction with environment and progressive evolution
121. In five kingdom classification the unicellular prokaryotic organisms were classified under kingdom
 a) Protista b) Monera c) Animalia d) Plantae
122. In angiosperms floral features are commonly used for identification, why?
 a) Flower can be preserved easily
 b) Flower are attractive to work with
 c) Flower have aroma and different colour
 d) Reproductive parts are more conservative
123. True regeneration is found in
 a) *Amoeba* b) *Hydra* c) *Planaria* d) Bacteria
124. The basic unit of classification is
 a) Species b) Genus c) Family d) Phylum
125. Where is Biosphere Reserve Simlipal located?
 a) Kerala b) Odisha c) Asom d) Sikkim
126. Where labelling is done/pasted on herbarium sheet?
 a) Lower RHS b) Lower LHS c) Upper RHS d) Upper LHS
127. Who is regarded as Father of Taxonomy?
 a) Hooker b) Linnaeus c) Aristotle d) De Candolle
128. Binomial nomenclature was first issued in
 a) *Systema Naturae* b) *Genera Plantarum* c) *Genera Animalium* d) *Species Plantarum*
129. National wildlife protection act came into force in/was enacted in
 a) 1978 b) 1982 c) 1972 d) 1986
130. A taxon is a
 a) Group of related species
 b) Group of related families
 c) Type of living organism
 d) Taxonomic group of any ranking
131. A 'taxa' differ from 'taxon' due to
 a) Being a higher taxonomic category than taxon
 b) Being a lower taxonomic category than taxon
 c) Being a plural of taxon
 d) Being singular of taxon
132. Correct name is
 a) *brassica indica* b) *Magnifera Indica*
 c) *SOLANUM MELONGINA* d) *Mimosa Pudica*
133. Increase in body mass can be considered a criterion for growth

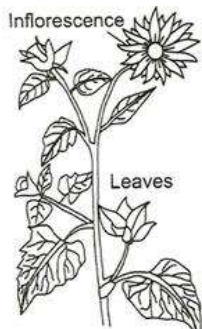
- a) In living being b) Non-living being c) Both (a) and (b) d) None of these
134. Who is regarded as Father of Taxonomy?
 a) Hooker b) Linnaeus c) Aristotle d) De Candolle
135. Which one of the following taxonomic categories top the hierarchy of categories?
 a) Order b) Division c) Class d) Family
136. In five kingdom classification, the eukaryotes were assigned under how many kingdoms?
 a) Only four kingdom
 b) All five kingdom
 c) Only two kingdom
 d) Only three kingdom
137. Which taxonomical aid provide all information about a particular taxon like order or family
 a) Herbarium b) Catalogue c) Taxonomic key d) Monograph
138. Binomial system of nomenclature was given by
 a) Engler b) Linaeus c) Prantl d) Both (a) and (C)
139. In which of the following, metabolic reactions take place?
 a) In living organism only
 b) Both in living and non-living organism
 c) In isolated cell free systems
 d) Both (a) and (c)
140. What is the old name of Indian Board of wildlife
 a) National Board of Wildlife Animal
 b) Central Board of Wildlife
 c) Board of Wildlife
 d) Wildlife Protection Board
141. According to binomial nomenclature, scientific name of an organism consists of
 a) Generic name b) Specific epithet c) Both (a) and (b) d) None of these
142. Different (various) group of ranks or levels in classification is known/called as
 a) Category b) Order c) Genera d) Taxon
143. Species is considered as
 a) Largest taxon of taxonomy/classification
 b) Key of taxonomy/classification
 c) Smallest taxon of faxonomy/classification
 d) Both small and largest unit of taxonomy/classification
144. Which one of the following is the feature of phylum-Chordata is also exhibited by adult tunicate?
 a) Possession of visceral slits b) Possession of a ventral chord
 c) Possession of closed vascular system d) Possession of ventral tubular nervous system
145. Choose the correct classification for the given plant



- a) Plantae, Angiosperm, Monocotyledons
 b) Plantae, Angiosperm, Dicotyledons
 c) Plantae, Gymnosperm, Monocot
 d) Plantae, Pteridophytes, Dicot

146. Scientific study of diversity of organisms and their evolutionary relationship is
a) Morphology b) Anatomy c) Taxonomy d) Systematics
147. Different (various) group of ranks or levels in classification is known/called as
a) Category b) Order c) Genera d) Taxon
148. The concept that monocots are more primitive than dicots was proposed by
a) Bentham and Hooker b) Theophrastus c) Aristotle d) Engler and Prantl
149. A defining property or characteristic of living organisms is
a) Increase in mass
b) Development
c) Response to external stimuli
d) Growth
150. What is the old name of Indian Board of wildlife
a) National Board of Wildlife Animal
b) Central Board of Wildlife
c) Board of Wildlife
d) Wildlife Protection Board
151. Species are consider as
a) Artificial concept of human mind which cannot be defined in absolute terms
b) Real units of classification devised by taxonomists
c) Real basic units of classification
d) The lowest units of classification
152. In plants growth occur by ... throughout their life span.
Choose an appropriate option to complete the given NCERT statement
a) Cell dedifferentiation b) Cell differentiation c) Cell multiplication d) None of these
153. Growth in unicellular organisms can be observed by
a) Counting the mass of cultured cells
b) Analysing the amount of nutrient absorb by living organism
c) Growth can not be observed
d) *In vitro* culture by simply counting the number of cells under microscope
154. Largest herbarium in the world is
a) Conservatory and Botanical Garden, Geneva
b) New York Botanical Garden
c) Royal Botanical Garden, Kew (London)
d) British, Museum of Natural History
155. Taxonomic hierarchy refers to
a) Stepwise arrangement of all categories for classification of plants and animals
b) A group of senior taxonomists, who decide the nomenclature of plants and animals
c) A list of botanists or zoologists, who have worked on taxonomy of a species or group
d) Classification of a species based on fossil record
156. A perennial shrub has compound leaves and solitary zygomorphic and epigynous flowers. Each flower reveals dichlamydeous condition with many stamens and multiple fruit with exalbuminous seeds. What is the ratio of advanced and primitive characters in it?
a) 1:2 b) 2:3 c) 1:1 d) 3:2
157. A germplasm is a
a) Collection of seeds or plants consists diverse alleles of all genes in a crop
b) Collection of specimens of all the species of botanical garden
c) Collection of hybrid varieties of plants
d) Seed or pollar collection of threatened species of a group
158. Which one of the following has a real existence?
a) Genus b) Species c) Family d) Order

159. Binomial system of classification was based on
 a) Embryology b) Morphology c) Cytology d) Anatomy
160. Which is not a category?
 a) Asteraceae/Fabaceae b) Species c) Phylum d) Class
161. Select true and false statement and choose correct answer from the option given below
 I. Taxon is a group of related organism
 II. *Homo sapiens* is the scientific name of man
 III. Royal Botanical Garden is located in Bristol (England)
 IV. Dudhwa National Park is located at Lakhimpur in UP
 V. There are about 89 wildlife sanctuaries and 492 National Parks in India
 VI. When specific name is identical to generic name it is an example of tautonym
 a) True-I, III, V, False-II, IV, VI b) True-I, II, III, False-IV, V, VI
 c) True-II, IV, VI, False-V, III, I d) True-VI, V, IV, False-III, II, I
162. Biological organization in living state is at
 a) Sub-microscopic level b) Atomic level
 c) Cellular level d) Mixture level
163. Which of the following are considered as the twin characteristics of growth?
 I. Responses to stimuli
 II. Increases in mass
 III. Increases in the number of individuals
 IV. Increases in width
 a) II and IV b) III and IV c) II and III d) I, II, III and IV
164. Linnaean system of plant classification is based on
 a) Morphological and anatomical characters b) Evolutionary trends
 c) Floral characters d) None of the above
165. A group of inbreeding plant or animals is
 a) Order b) Species c) Family d) Genus
166. Binomial nomenclature means
 a) A scientific name, which consist of two words giving a generic name and a specific name
 b) One name is given by two scientists
 c) Two name, one vernacular and one scientific
 d) Two name, one in Latin and other is a named of person
167. Tautonym is
 a) Unscientific explanation of a phenomenon b) Common name used as a scientific name
 c) Nonlatinised name d) Same name for genus and species
168. What size of herbarium sheet and label is recommended generally?
 a) 30 × 40 cm, 6 × 12 cm b) 29 × 41 cm, 7 × 14 cm
 c) 30 × 45 cm, 7 × 12 cm d) 20 × 30 cm, 5 × 10 cm
169. Choose the correct classification for the given plant



- a) Plantae, Angiosperm, Monocotyledons
 b) Plantae, Angiosperm, Dicotyledons

- d) All of these
185. Cladistics can be defines as
- The relationship between sub-species and species
 - Relationship between two most forward races
 - Relationship between endangered and surviving species
 - Method of classification that attempt to interface phylogenetic relationship
186. Why hierarchiral taxonomic system is used?
- As each higher taxonomic category contains its below groups groups/categories
 - It is helpful to established classifications
 - All taxonomic categories reflect common habitats
 - Taxonomic group shows similar characters and have no evolutionary relationship
187. Which one among the following is accurately arranged in descending specificity
- Species → Family → Class → Order → Division
 - Species → Genus → Division → Class → Kingdom
 - Species → Genus → Family → Order → Class
 - Class → Order → Family → Genus → Species
188. Viral genome when incorporated and integrated with bacterial genome is referred as
- Prophages
 - DNA
 - RNA
 - Both (a) and (c)
189. Process of metabolism leads to
- Growth
 - Development
 - Functions of living body
 - All of these
190. The suffix 'phyta' indicates
- Family
 - Class
 - Order
 - Division
191. A group of organisms with similar trait of any rank is
- Taxon
 - Family
 - Genus
 - Species
192. Ascending or descending arrangement of taxonomic categories is known as
- Classification
 - Key
 - Taxonomy
 - Hierarchy
193. A group of inbreeding plant or animals is
- Order
 - Species
 - Family
 - Genus
194. Regeneration was first discovered in
- Hydra*
 - Planaria*
 - Sponges
 - Amoeba*
195. What is illustrated by the statement 'Nothing lives forever, yet life continues'?
- Metabolism
 - Embryogenesis
 - Reproduction
 - Replication
196. ICVCN stands for
- International Code of Virus Nomenclature
 - International Code of Valuation in Nomenclature
 - International Code of viral Classification and Nomenclature
 - International Code of Virulence Nomenclature
197. In *Solanum tuberosum*, first and second word stand for, respectively
- Genus, generic name
 - Specific epithet species
 - Specific name and generic name
 - Generic name and specific name
198. In *Mangifera indica*, the word *Mangifera* is a
- Genus
 - Species
 - Variety
 - Order
199. An example for the artificial system of classification is
- Betham and Hooker
 - Linnaeus system
 - Engler and Prantl
 - Bessey
200. Select the correct option from the following
- Mule can reproduce
 - Worker bee undergoes reproduction to generate new progeny

- c) Mule and worker bee do not reproduce d) None of the above
201. Which is not a category?
 a) Asteraceae/Fabaceae b) Species c) Phylum d) Class
202. Viral genome when incorporated and integrated with bacterial genome is referred as
 a) Prophages b) DNA c) RNA d) Both (a) and (c)
203. In angiosperms floral features are commonly used for identification, why?
 a) Flower can be preserved easily
 b) Flower are attractive to work with
 c) Flower have aroma and different colour
 d) Reproductive parts are more conservative
204. A place where dried, pressed and preserved plant specimens are kept
 a) Herbarium b) Museum c) Botanical garden d) Both (a) and (c)
205. Which one is the important function of botanical garden?
 a) Allow *ex situ* conservation of germplasm
 b) Are place for recreation
 c) Plant diversity can be observed
 d) Provide natural habitat for wildlife
206. Select true statement from the following and choose the right answer from the option given below
 I. Human's scientific name is *Homo sapiens*
 II. *Genera Plantarum* is written by John Ray
 III. Highest taxonomic categories is division
 IV. Taxonomic group of any rank is taxon
 V. A group of closely related species of organism represent genus
 VI. The term 'systematic' was coined by de Candolle
 a) II, III, IV and VI b) I, III, V and VI
 c) I, IV and V d) II, III and VI
207. Who has proposed five kingdom system of classification?
 a) RH Whittaker b) Simpson c) Haldane d) Bentham and Hooker
208. Which is the only kingdom occupied by BGA, nitrogen fixing bacteria and methanogenic bacteria in five kingdom classification?
 a) Plantae b) Protista c) Monera d) Fungi
209. Increase in body mass can be considered a criterion for growth
 a) In living being b) Non-living being c) Both (a) and (b) d) None of these
210. Animal of the same phylum are grouped below. Choose the incorrect group from given below option
 a) Shark, snake, whale, reptiles b) Insect, spider, shrimp
 c) Snail, squid, slug d) Earthworm, millipede, leech
211. Among the following listed features, which is not a unique feature of living organisms?
 a) Increase in size b) Response to stimuli
 c) Self organisation d) Growth and reproduction
212. The concept of genus was proposed by
 a) John Ray b) Tourne Fort c) Hooker d) Bessey
213. Which one is the correct hierarchical order in Taxonomy?
 a) Genus<species<class<order b) Genus<class<order>family
 c) Species<order<class<phylum d) Genus<class<division<order
214. What size of herbarium sheet and label is recommended generally?
 a) 30 × 40 cm, 6 × 12 cm
 b) 29 × 41 cm, 7 × 14 cm
 c) 30 × 45 cm, 7 × 12 cm
 d) 20 × 30 cm, 5 × 10 cm
215. Which one of the following taxonomic categories can categorized rest all others

- a) Family b) Genus c) Class d) order
216. The number of species classified in "Species Plantarum" is
a) 5000 b) 6000 c) 4000 d) 3800
217. Which of the following set of organisms reproduce by fragmentation (asexual mode of reproduction)?
a) *Amoeba*, fungi and earthworm b) Fungi, filamentous algae and protonema of mosses
c) *Hydra*, fungi, *Amoeba* and bacteria d) Earthworm, bacteria and fungi
218. Which one of the following is the feature of phylum-Chordata is also exhibited by adult tunicate?
a) Possession of visceral slits
b) Possession of a ventral chord
c) Possession of closed vascular system
d) Possession of ventral tubular nervous system
219. Who has proposed five kingdom system of classification?
a) RH Whittaker b) Simpson c) Haldane d) Bentham and Hooker
220. The first phylogenetic system of plant classification was proposed by
a) Engler b) Engler and Prantl c) Eicher d) Bentham and Hooker
221. Biological organisation level of living being can be represented as
a) Sub-cellular → Cellular → Individual → Population
b) Atomic → Molecular → Cellular → Tissue → Organ → Organ systems → Individual
c) Organ system → Tissue → Cellular → Molecular → Atomic
d) Individual → Molecular → Tissue → Organ system → Population
222. Which one of the following taxonomic categories top the hierarchy of categories?
a) Order b) Division c) Class d) Family
223. Which one of the category contain the least similar characteristic to one another?
a) Class b) Order c) Family d) Division
224. Binomial system of nomenclature was given by
a) Julian Huxley b) Bentham and Hooker c) Linnaeus d) Casper Bauhin
225. Which is first step in taxonomy?
a) Description of the organism b) Identification of the organism
c) Nomenclature of the organism d) Classification of the organism
226. Among the following listed features, which is not a unique feature of living organisms?
a) Increase in size
b) Response to stimuli
c) Self organisation
d) Growth and reproduction
227. Which one is species?
a) *Cannis* b) *Pisum* c) *Leo* d) Carnivora
228. Biological organisation level of living being can be represented as
a) Sub-cellular → Cellular → Individual → Population b) Atomic → Molecular → Cellular → Tissue → Organ → Organ systems → Individual
c) Organ system → Tissue → Cellular → Molecular → Atomic d) Individual → Molecular → Tissue → Organ system → Population
229. Nomenclature given by Linnaeus is
a) Binomial b) Trinomial c) Phylogenetic d) Natural
230. Two different genera are classified in the same taxonomic category family. Which statement is correct about their classification?
a) The same class, but different species
b) A different class and different order
c) The same phylum, but different class
d) A different kingdom and different phylum
231. Choose the correct sequence in the hierarchy of taxonomic categories in descending order.

- a) Species-genus-family-order-class-division b) Division-order-class-family-genus-species
 c) Division-class-family-order-genus-species d) Division-class-order-family-genus-species
232. What name would be suggested for phylum in classification of plants?
 a) Phylum b) Sub-division c) Division d) Both (b) and (c)
233. A species is a group of organisms which
 a) Can interbreed freely
 b) Do not interbreed
 c) Can live together
 d) Can interbreed occasionally
234. Which one is the important function of botanical garden?
 a) Allow *ex situ* conservation of germplasm
 b) Are place for recreation
 c) Plant diversity can be observed
 d) Provide natural habitat for wildlife
235. Which one is the first biosphere reserve?
 a) Norkrek Biosphere Reserve
 b) Simlipal Biosphere Reserve
 c) Pachmarhi Biosphere Reserve
 d) Nilgiri Biosphere Reserve
236. Father of botany is
 a) Aristotle b) Robert Hooke c) Darwin d) Theophrastus
237. Two plants can be conclusively said to belong to the same species if they
 a) Can reproduce freely with each other and form seeds
 b) Have more than 90 percent similar genes
 c) Look similar and possess identical secondary metabolites
 d) Have same number of chromosomes.
238. Which one is the first biosphere reserve?
 a) Norkrek Biosphere Reserve b) Simlipal Biosphere Reserve
 c) Pachmarhi Biosphere Reserve d) Nilgiri Biosphere Reserve
239. A place where dried, pressed and preserved plant specimens are kept
 a) Herbarium b) Museum c) Botanical garden d) Both (a) and (c)
240. Which one of the following feature is shared by all living organism at all hierarchial level
 a) Mode of nutrition b) Cellular organization
 c) Nature of protoplasmic-composition d) Growth by cell division
241. Select the wrong statements.
 (I) Lower the taxon, more are the characteristics that the member within the taxon share.
 (II) Order is the assemblage of genera which exhibit a few similar characters.
 (III) Cat and dog are included in the same family-Felidae.
 (IV) Binomial nomenclature was introduced by Carolus Linnaeus.
 a) I, II and III b) II, III and IV c) I and IV d) II and III
242. ICBN stands for
 a) Indian Congress of Biological Name b) International Code for Botanical Nomenclature
 c) International Congress of Biological Name d) Indian Code of Botanical Nomenclature
243. The framework system of classification in which various taxonomic categories are arranged in order of logical sequence is called
 a) Systematics b) Classification c) Hierarchy d) Taxon
244. Which of the following is a merit in the Bentham and Hooker's system of classification?
 a) The position of gymnosperms in between dicots and monocots
 b) Closely related families are placed apart
 c) The placement of family-Asteraceae in the beginning of Gamopetalae

- d) The placement of order-Ranals in the beginning
245. Huxley is father of
 a) Classical taxonomy b) Artificial taxonomy
 c) Neo-taxonomy d) Adansonian taxonomy
246. Classification based on chromosome number is
 a) Cytotaxonomy b) Numerical taxonomy c) Karyotaxonomy d) Biochemistry
247. Which one of the following taxonomic categories can categorized rest all others
 a) Family b) Genus c) Class d) order
248. This of the following taxonomist described classification of plant in 'Families of flowering plants?'
 a) Cronquist b) Thakhtajan c) Benson d) Hutchinson
249. National botanical research Institute is situated at
 a) Lucknow b) Kolkata c) Mumbai d) Chennai
250. What is the prime source of taxonomic studies?
 a) Collection of actual specimens of organisms species
 b) Identification of actual specimen of organism species
 c) Both (a) and (b)
 d) None of the above
251. Choose the wrong statements regarding universal rules of nomenclature
 a) The first word in a biological name represents the genus
 b) The first word denoting the genus starts with a capital letter
 c) Both the words in a biological name, when handwritten are separately underlined
 d) Biological names are generally in English and written in italics
252. The term 'species' was coined by
 a) Aristotle b) Engler c) John Ray d) Linnaeus
253. Which one is correctly written scientific name?
 a) *Panther Tigris* b) *Mangifera indica* c) *Pucnthera Leo* d) *Columnba LIVEA*
254. Metabolism can be best defined as
 a) The process in which a chemical is formed inside a body
 b) The process in which a chemical is destroyed inside a body
 c) The sum total all of chemical reactions only occurring in a body
 d) A complex construction process only
255. MABP stands for
 a) Man and Biosphere Programme
 b) Man and Biosphere Protection
 c) Man and Biosphere Conservation and Protection
 d) All of the above
256. In *Solanum tuberosum*, first and second word stand for, respectively
 a) Genus, generic name
 b) Specific epithet species
 c) Specific name and generic name
 d) Generic name and specific name
257. *Solanum* and *Panthera* are
 a) Genus and species b) Genus and genus c) Species and species d) Only species
258. By which chemical specimen for herbaria are treated to prevent fungal attack
 a) 0.1% mercuric chloride b) 0.1% mercurous chloride
 c) Carbon disulphide d) Acetic acid
259. Which of the following is a category?
 a) Division b) Phylum c) Viruses d) Both (a) and (b)
260. Who has written the book *Historia Generalis Plantarum*?
 a) Hutchinson b) Lamarck c) John Ray d) Linnaeus

261. Read the following features and select the correct option from the options given below with respect to living beings
 I. They reproduce
 II. They metabolise
 III. They have cellular organisation
 IV. They have ability to respond to stimuli
 a) I and III are true b) I and II are true c) Only III is true d) All are true
262. According to binomial nomenclature, scientific name of an organism consists of
 a) Generic name
 b) Specific epithet
 c) Both (a) and (b)
 d) None of these
263. Which one is species?
 a) *Cannis* b) *Pisum* c) *Leo* d) Carnivora
264. New systematics introduced by Sir Julian Huxley is also called as
 a) Phonetics b) Cladistics c) Biosystematics d) Numerical taxonomy
265. Largest herbarium in the world is
 a) Conservatory and Botanical Garden, Geneva
 b) New York Botanical Garden
 c) Royal Botanical Garden, Kew (London)
 d) British, Museum of Natural History
266. Read the following features and select the correct option from the options given below with respect to living beings
 I. They reproduce
 II. They metabolise
 III. They have cellular organisation
 IV. They have ability to respond to stimuli
 a) I and III are true b) I and II are true c) Only III is true d) All are true
267. Abbreviation for International Code of Bacteriological Nomenclature is
 a) ICBN b) IC Bact N c) ICNB d) IC Bati N
268. Abbreviation for International Code of Bacteriological Nomenclature is
 a) ICBN b) IC Bact N c) ICNB d) IC Bati N
269. ICVCN stands for
 a) International Code of Virus Nomenclature b) International Code of Valuation in Nomenclature
 c) International Code of viral Classification and Nomenclature d) International Code of Virulence Nomenclature
270. Select true and false statement and choose correct answer from the option given below
 I. Taxon is a group of related organism
 II. *Homo sapiens* is the scientific name of man
 III. Royal Botanical Garden is located in Bristol (England)
 IV. Dudhwa National Park is located at Lakhimpur in UP
 V. There are about 89 wildlife sanctuaries and 492 National Parks in India
 VI. When specific name is identical to generic name it is an example of tautonym
 a) True-I, III, V, False-II, IV, VI
 b) True-I, II, III, False-IV, V, VI
 c) True-II, IV, VI, False-V, III, I
 d) True-VI, V, IV, False-III, II, I
271. Which branch of taxonomy is based on the determination of genetic relationship?
 a) Experimental taxonomy
 b) Numerical taxonomy

- c) Cytotaxonomy
d) Biochemical taxonomy
272. One of the most important functions of botanical garden is
a) One can observe tropical plants there b) They allow *ex situ* conservation of germplasm
c) They provide the natural habitat for wildlife d) They provide a beautiful area for recreation
273. Reproduction is synonymous with growth in which of the following set of organisms?
a) Bacteria, unicellular algae and *Amoeba*
b) Bacteria, *Amoeba* and fungi
c) Unicellular algae and fungi
d) Unicellular algae and filamentous algae
274. Reproduction is synonymous with growth in which of the following set of organisms?
a) Bacteria, unicellular algae and *Amoeba* b) Bacteria, *Amoeba* and fungi
c) Unicellular algae and fungi d) Unicellular algae and filamentous algae
275. Where is Biosphere Reserve Simlipal located?
a) Kerala b) Odisha c) Asom d) Sikkim
276. Who had written *Systema Naturae*?
a) Ernst Mayr b) Carolus Linnaeus c) RH Whittaker d) WM Stanley
277. A genus with a single species is called
a) Typical b) Polytype c) Monotype d) Syntype
278. Ascending or descending arrangement of taxonomic categories is known as
a) Classification b) Key c) Taxonomy d) Hierarchy
279. Binomial system of classification was based on
a) Embryology b) Morphology c) Cytology d) Anatomy
280. Which series ends with the cohort umbellales in Bentham and Hooker's system of classification?
a) Thalamiflorae b) Disciflorae c) Heteromerae d) Calyciflorae

