

**CLASS-XI (BIOLOGY)**  
**ASSIGNMENT-I (COACHING)**

**CHAPTER-I (LIVING WORLD)**

1. Linnaeus published his concept of binomial nomenclature first in  
(a) systema Naturae (b) Species Plantarum  
(c) Genera Plantarum (c) Philosophia Botanica
2. Common and generic names are similar in case of  
(a) Felis (b) Gorilla  
(c) Mangifera (d) Saccharum
3. A non-obligate component of hierarchy of categories used by Linnaeus was  
(a) Class (b) Genus  
(c) family (d) Variety
4. Taxon Tiger represents  
(a) Species (b) Genus  
(c) Family (d) Class
5. Taxon eucalyptus denotes  
(a) Species (b) Genus  
(c) Class (d) Division
6. Which one has a real existence?  
(a) Phylum (b) Class  
(c) Genus (d) Species
7. A non-obligate category introduced between class and division is  
(a) Tribe (b) Subclass  
(c) Superclass (d) Taxon
8. Keys are required for  
(a) Phylogenetic classification (b) Natural classification  
(c) Identification of organisms (d) Both (2) and (3)
9. Types of keys are  
(a) One (b) Two  
(c) Three (d) Four
10. Indented keys are also known as  
(a) Yoked keys (b) Yolkeed keys  
(c) Bracketed keys (d) None of the above
11. Which one is a taxonomic aid?  
(a) Manual (b) Monograph  
(c) Museum (d) All the above
12. The standard size of herbarium sheet is  
(a) 29 41 cm (b) 1530 cm  
(c) 2136 cm (c) 2538 cm
13. NBRI is located in  
(a) Kolkata (b) Chennai  
(c) Lucknow (d) Darjeeling
14. The largest herbarium of the world is located in  
(a) Royal Botanical Garden, Kew  
(b) Central National Herbarium, Sibpur  
(c) Museum of Natural History, Paris  
(d) Madras Herbarium, Coimbatore

15. Linnaeus is credited with  
(a) Binomial nomenclature (b) Theory of biogenesis  
(c) Discovery of microscope (d) Discovery of blood circulation
16. International Code of 'Biological Nomenclature' is applicable to  
(a) Viruses (b) Plants  
(c) Animals (d) Both (2) and (3)
17. The third name in trinomial nomenclature is  
(a) Species (b) Subgenus  
(c) Subspecies (d) Ecotype
18. In nomenclature  
(a) Both genus and species are printed in italics  
(b) GENus and species may be of same name  
(c) Both in genus and species the first letter is capital  
(d) Genus is written after the species
19. The term species was given by  
(a) John Ray (b) Linnaeus  
(c) Darwin (d) Aristotle

**CLASS-XI (BIOLOGY)**

**ASSIGNMENT-I (COACHING)**

**CHAPTER-II (BIOLOGICAL CLASSIFICATION)**

- Whittaker's system of classification implies that unicellular eukaryotes are primarily precursors of the
  - plants
  - fungi
  - animals
  - plants, fungi and animals
- Which of the following is acellular organism/without cell organisation?
  - Porifers
  - Bacteria
  - Viruses
  - Rickettsia
- HIV is a
  - Retrovirus
  - lenti (slow) virus
  - enveloped, diploid, ribovirus
  - all are correct
- If a virus does not finds its host, it
  - disintegrates
  - grow and divide
  - exists as inert particle for a longer period
  - it undergoes mutation for adaptation
- The term taxon was given by
  - Meyer
  - Linnaeus
  - Lamarck
  - De Candolle
- Hierarchy of cateogries was introduced by
  - Linnaeus
  - De Candolle
  - Bauhin
  - John Ray
- In an artificial system of classification
  - A large number of characters are taken into consideration.
  - Correlated characters are more important
  - Physiological characters are relied upon
  - One or a few morphological characters are considered
- Binomial nomenclature is
  - Not applicable to cyanobacteria
  - Not accepted by a number of countries
  - Universal with one specific name to each organism
  - Universal with two specific names to each organism
- NBRI is located in
  - Kolkata
  - Chennai
  - Lucknow
  - Darjeeling
- The largest botanical gardens of India is
  - National Botanical Garden, Lucknow
  - Indian Botanical Garden, Sibpur
  - Lalbagh Gardens, Bangalore
  - Botanical Garden, Ootachomand
- Ingestive nutrition is
  - Holozoic
  - Absoptive
  - Both A and B
  - Holophytic

12. The suffix aceae indicates
  - (a) Family
  - (b) Order
  - (c) Class
  - (d) Division
13. Natural system of classification differs from artificial system in
  - (a) Employing only one floral trait.
  - (b) Taking only one vegetative trait
  - (c) Bringing out similarities and dissimilarities
  - (d) Developing evolutionary trends
14. Sequence of taxonomic categories is
  - (a) Class - Phylum - Tribe- Order-Family - Genus - Species
  - (b) Division- Class - Family- Tribe- Order - Genus- Species
  - (c) Division- Class- Order- Family-Tribe- Genus- Species
  - (d) Phylum - Order -Class-Tribe-Family- Genus- Species
15. Human genome project was launched by
  - (a) Khorana and others
  - (b) Bhabha Institute
  - (c) U.S. Department of Energy and National Institute of Health.
  - (d) NASA
16. Norman Borlaug was given Nobel Prize in 1970 for
  - (a) Discovery of dwarf Rice
  - (b) Development of dwarf wheat varieties
  - (c) Ushering in green revolution
  - (d) Both B and C

## CLASS-XI (BIOLOGY)

# ASSIGNMENT-II (COACHING)

## CHAPTER-II (BIOLOGICAL CLASSIFICATION)

1. A parasitic fungus for its attachment with the host produces
  - (a) Haustoria
  - (b) Appessoria
  - (c) Both of these
  - (d) None of these
2. The term lichen was first used by
  - (a) Aristotle
  - (b) Acharius
  - (c) Theophrastus
  - (d) Bonnier
3. The largest bacterium among these is a
  - (a) *Vibrio*
  - (b) *Coccus*
  - (c) *Bacillus*
  - (d) *Spirillum*
4. The smallest bacterium is a species of
  - (a) *Spirillum*
  - (b) *Mycobacterium*
  - (c) *Dialister*
  - (d) *Treponema*
5. The first cyanophage was discovered by
  - (a) *Hershey and Chase*
  - (b) *Shafferman and Morris*
  - (c) *Gierere and Schramm*
  - (d) *Brenner*
6. The largest bryophyte is a
  - (a) *Fontinalis sp.*
  - (b) *Dawsonia sp.*
  - (c) *Polytrichum sp.*
  - (d) *Plageochila*
7. Mark the smallest bryophyte
  - (a) *Monoclea sp.*
  - (b) *Zoopsis*
  - (c) *Fontinalis sp.*
  - (d) *Dawsonia sp.*
8. Which of the following pteridophyte shows climbing habit?
  - (a) *Cyathea*
  - (b) *Actinopteris*
  - (c) *Lygodium*
  - (d) *Botrychium*
9. Heterospory is the production of :
  - (a) *Sexual and asexual spores*
  - (b) Large and small spores
  - (c) Haploid and diploid spores
  - (d) Diploid and tetraploid spores
10. A gymnosperm is a plant which
  - (a) Bears flowers
  - (b) Produces seeds in cones
  - (c) Does not produce seeds in cones
  - (d) Exhibits no vascular tissues.
11. The gymnosperms do not have
  - (a) Shrubs
  - (b) Lianas
  - (c) Trees
  - (d) Herbs
12. The function of the root cap is
  - (a) To absorb nutrients
  - (b) Storage of end products

- (c) Protection of root tip and control of geotropic movement
  - (d) Nothing
13. True roots are present
- (a) Only in phanerogams
  - (b) In phanerogams and some cryptogams
  - (c) Only in cryptogams
  - (d) Wherever absorption of water is taking place.
14. A corm is
- (a) A swollen root
  - (b) A compressed swollen vertical underground stem.
  - (c) Swollen horizontal underground stem.
  - (d) The swollen end of an underground stem.
15. Lyrate leaves are found in
- (a) Mustard      (b) Potato
  - (c) Orange        (d) Onion
16. The tendrils of pea plant are modified
- (a) Axillary buds
  - (b) Stipules
  - (c) Terminal leaflets of compound leaf
  - (d) Aerial roots

## CLASS-XI (BIOLOGY)

# ASSIGNMENT-I (COACHING)

### CHAPTER-III (PLANT KINGDOM)

- The lomasomes found in the fungal cell lie associated to
  - Plasma membrane
  - Mitochondrion
  - Nucleus
  - Endoplasmic reticulum
- Heterothallism was discovered in
  - Mucor*
  - Aspergillus*
  - Puccinia*
  - Albugo*
- The composite nature of lichens was first established by
  - Morrison
  - Pliny
  - Schwander
  - Reinke
- The term microbe was first used by
  - Pasteur
  - Se'dillot
  - Leeuwenhoek
  - Koch
- Gram staining involves colouring a bacterium with
  - Crystal violet and erythrosin
  - Iodine followed by crystal violet
  - Gentian violet followed by iodine
  - Saffranin followed by iodine
- Viral cancer in primates was discovered by
  - Hruby
  - Brenner
  - Sinsheimer
  - Schidolovski
- The plant used as an alternative of cotton
  - Sphagnum*
  - Polytrichum*
  - Pogonatum*
  - Rhodobryum*
- The most appropriate definition of a seed in terms of its homologous organs found in spore producing land plants is
  - A seed is an integumented sporangium with a single functional spore.
  - A seed is an integumented indehiscent megasporangium with a single functional megaspore.
  - A seed is an integumented megasporangium
  - A seed is an integumented bud containing an egg.
- The pteridophytes as a group differ from bryophytes and thallophytes in having
  - Vascular tissue
  - Motile sperms
  - Alternation of generations
  - Archegonia
- The 'endosperm' of a gymnosperm represents
  - Gametophytic tissue
  - Sporophytic tissue
  - Tissue formed by double fertilization
  - Polyploid tissue
- Which of the following is the tallest plant among gymnosperms?
  - Cycas revoluta*
  - Pinus trifolia*
  - Ginkgo*

- (d) Cedrus
12. Pneumatophores are the organs used in
- (a) Photosynthesis
  - (b) Respiration
  - (c) Protein synthesis
  - (d) Secretion of salts
13. The edible portion in beet comprises
- (a) *Root only*
  - (b) *Root and hypocotyl*
  - (c) *Hypocotyl and stem*
  - (d) *Root and stem*
14. Bulbs of garlic and onion have
- (a) Feebly developed root system
  - (b) No leaves
  - (c) No stems
  - (d) Greatly reduced stem.
15. If a leaf segment of Bryophyllum is planted in soil and it produces new plants. This is because its leaf has
- (a) Higher concentration of auxins and cytokinins
  - (b) Higher concentration cytokinins
  - (c) Small embryos
  - (d) Buds
16. The occurrence of more than one type of leaves on the same plant is known as
- (a) Vernation
  - (b) Venation
  - (c) Aestivation
  - (d) Heterophylly



CLASS-XI (BIOLOGY)

ASSIGNMENT-II (COACHING)

CHAPTER-III (PLANT KINGDOM)

1. Pinus differs from an angiosperm in
  - (a) Tree habit
  - (b) Green leaves
  - (c) Presence of wood
  - (d) Ovules without an enclosing ovary
2. Meiosis occurs in the zygote in
  - (a) Chlamydomonas
  - (b) Funaria
  - (c) Dryopteris
  - (d) Marchantia
3. Archegonial neck has 6 and 4 rows of cells in
  - (a) Gymnosperms
  - (b) Pteridophytes and gymnosperms
  - (c) Bryophytes and Pteridophytes
  - (d) Gymnosperms and angiosperms
4. Fern prothallus is
  - (a) Protonema
  - (b) Gametophyte
  - (c) Sporophyte
  - (d) Rhizoid
5. Multicellular rhizoids and leafy gametophytes occur in
  - (a) Some pteridophytes
  - (b) All pteridophytes
  - (c) All bryophytes
  - (d) Some bryophytes
6. Bryophytes require water in their habitat for
  - (a) Filling of archegonia for fertilization
  - (b) Vegetative propagation
  - (c) Swimming of sperm to egg in archegonium
  - (d) Their homosporous nature
7. Walking Fern, Adiantum caudatum is known so because of
  - (a) Ability of its spores to walk
  - (b) Vegetative propagation by leaf tips
  - (c) Ability to creep
  - (d) Its dispersal through agency of walking animals
8. In gymnosperms, the endosperm is
  - (a) Haploid
  - (b) Diploid
  - (c) Triploid
  - (d) Polyploid
9. Vascular plants lacking seeds are
  - (a) Algae
  - (b) Bryophytes
  - (c) Pteridophytes
  - (d) Gymnosperms
10. Phycoerythrin, chlorophyll a and chlorophyll d occur in
  - (a) Chlorophyceae
  - (b) Phaeophyceae

- (c) Xanthophyceae  
(d) Rhodophyceae
11. Which one produces seeds but not fruits?  
(a) Pinus (b) Pipal  
(c) Maize (d) Mint
12. Plants which produce spores and embryo but lack vascular tissue and seeds are  
(a) Bryophytes  
(b) Pteridophytes  
(c) Gymnosperms  
(d) Algae
13. In Ulothrix, meiosis occurs in  
(a) Green cells  
(b) Zoospores  
(c) Zygote  
(d) Holdfast
14. Conifers differ from grasses in the  
(a) Formation of endosperm before fertilisation  
(b) Production of seeds from ovules  
(c) Lack of xylem tracheids  
(d) Absence of pollen tube
15. In gymnosperms, the pollen chamber represents  
(a) Microsporangium in which pollen grains develop  
(b) A cell in pollen grain that forms the sperms  
(c) Opening in megagametophyte through which the pollen tube approaches the egg  
(d) A cavity in the ovule in which pollen grains are kept after pollination.
16. Which of the following is a living fossil?  
(a) Ginkgo (b) Ephedra  
(c) Taxus (d) Abies

CLASS-XI (BIOLOGY)

ASSIGNMENT-I (COACHING)

CHAPTER-IV (ANIMAL KINGDOM)

- Which of the following statements is false
  - The body cells of animal form tissue
  - Animals get carbon and energy by ingesting other organisms
  - Animals are motile, possess active movement during some stage in their life cycle
  - Meiotic cell divisions transform the animal zygote into a multicellular embryo.
- Embryologically speaking, coelom arise from a split in the mesodermal bands, plates or masses in
  - nematoda
  - some chordata
  - platyhelminthes
  - most protostomia
- M cells (Mesoblast cells) play an important role in the development of which body cavity?
  - Schizocoelome
  - Pseudocoelome
  - Enterocoelome
  - Coelenteron
- Which of the following is wrongly matched?
  - Arthropoda - Cockroach
  - Annelida - Hydra
  - Echinodermata - Starfish
  - Nemathelminthes - Ascaris
- Match the various classes of animal given under column I with the examples listed in column II. Choose the answer which gives the correct combination of alphabets of the two columns

Column I	Column II
A. Polychaeta	p. Scorpion
B. Trematoda	q. Pila
C. Arachnida	r. Liver fluke
D. Gastropoda	s. <i>Nereis</i>
	t. Star fish

  - A=s, B=r, C=p, D=q
  - A=r, B=s, C=p, D=t
  - A=q, B=s, C=t, D=p
  - A=t, B=q, C=s, D=r
- Tendon connects is
  - Ligament with muscle.
  - Bone with muscle
  - Cartilage with muscle
  - Bone with bone
- Neuroglia in nervous system is a type of
  - Vascular tissue
  - Epithelial tissue
  - Muscular tissue

- (d) Connective tissue
8. What is true about the biceps and triceps
- (a) These are under the control of will, not liable to fatigue
  - (b) These are involuntary, liable to fatigue
  - (c) These are found in hindlimbs, not enclosed by sarcolemma
  - (d) These are enclosed by sarcolemma, liable to fatigue.
9. Megakaryocytes:
- (a) produce leucocytes
  - (b) are called bone cells
  - (c) are carries of oxygen
  - (d) produce blood platelets
10. Major protein of connective tissue is
- (a) Myosin      b) Melanin
  - (c) Collagen    d) Keratin.
11. Sarcomere is a segment of striated muscle fibre between
- (a) M-lines      b) Z-lines
  - (c) H-zones     d) I-bands
12. Which of the following does not match?
- (a) Thyroid      - Goitre
  - (b) Enzyme       - Substrate
  - (c) Antigen      - Antibody
  - (d) Pancreas    - Glisson' capsule
13. How many lateral "hearts" are found in earthworm?
- (a) 8 (four pairs)
  - (b) 6 (three pairs)
  - (c) One pair
  - (d) 12 (six pairs)
14. In *Metaphire* oxygen carrying haemoglobin occurs in
- (a) Plasma
  - (b) Corpuscles
  - (c) Both plasma and corpuscles
  - (d) The statement is wrong
15. In a copulating pair of earthworm which of the two processes take place?
- (a) Reciprocal fertilization and internal fertilization
  - (b) Cross fertilization and reciprocal fertilization
  - (c) Internal fertilization and cross fertilization
  - (d) External fertilization and internal fertilization
16. Biggest class in animal kingdom is
- (a) Arthropoda    (b) Mollusca
  - (c) Pisces            (d) Insecta

## CLASS-XI (BIOLOGY)

# ASSIGNMENT-II (COACHING)

### CHAPTER-IV (ANIMAL KINGDOM)

- Distinct somatic and reproductive cells are found in
  - Amoeba*
  - Volvox
  - Paramecium*
  - Proterospongia*
- Metazoans without tissue grade organization are called
  - Protozoa
  - Parazoa
  - Duterostomia
  - Eumetazoa
- Choose the correct combination :
  - Annelida and Porifera - Phyla
  - Oligochaeta and Arthropoda - Phyla
  - Mollusca and Hydrozoa - Classes
  - Aves and Chordata - Classes
- In which one of the following groups, all animals are hermaphrodites?
  - Tapworm, Toad, Starfish
  - Hydra*, Leech, Tapworm
  - Hydra*, *Ascaris*, *Pheretima*
  - Hydra*, *Homo sapiens*, Leech
- Which of the following is a species?
  - Dipnoi
  - Mammalia
  - Canis familiaris*
  - Carnivora
- Which one of the following proteins is found in the thick filaments of skeletal muscle?
  - Myosin
  - Actin
  - Tropomyosin
  - Troponin
- Cardiac muscle is structurally different from smooth muscle because :
  - it has single nucleus
  - it is involuntary
  - it is branched
  - it does not fatigue fast
- Transitional epithelium is found in
  - Urinary bladder
  - bronchi
  - Lymphocyte
  - Monocyte
- Of the total inorganic components, bone has calcium phosphate
  - 62%
  - 85%
  - 10%
  - 5%
- 0.04 g glucose is present in 50 g of blood. The concentration of glucose in ppm is equal to
  - 8
  - 80
  - 800
  - 8000.

11. In mammals, histamine is secreted by  
 (a) fibroblasts (b) histiocytes  
 (c) lymphocytes (d) mast cells
12. Match the types of WBC listed in Column I with shape of nucleus given under Column II. Choose the answer which gives the correct combination of alphabets of the two columns:
- | Column I       | Column II        |
|----------------|------------------|
| A. Neutrophils | p. kidney shaped |
| B. Eosinophils | q S-shaped       |
| C. Basophils   | r. 3 to 5 lobes  |
| D. Monocytes   | s 2 lobes        |
|                | t. disc-shaped   |
- (a) A = r, B = s, C = q, D = p  
 (b) A = r, B = t, C = p, D = q  
 (c) A = t, B = r, C = q, D = s  
 (d) A = q, B = p, C = t, D = r
13. Earthworm eats on  
 (a) Grass (b) Soil  
 (c) Insects (d) Humus
14. Haemoglobin is found dissolved in blood plasma of  
 (a) Earthworm (b) Cockroach  
 (c) Rabbit (d) Frog
15. The blood pigment of earthworm is  
 (a) Haemocyanin  
 (b) Haemoglobin  
 (c) Haemin  
 (d) Cyanin
16. Glow-worm is  
 (a) An annelid (b) A mollusc  
 (c) An insect (d) A helminth

CLASS-XI (BIOLOGY)

ASSIGNMENT-III (COACHING)

CHAPTER-IV (ANIMAL KINGDOM)

1. Blubber is a term for
  - (a) Subcutaneous fat of whale
  - (b) Irregular heart beat
  - (c) Artificial rubber
  - (d) None of these
2. Which of the following is not a snake?
  - (a) Viper            (b) krait
  - (c) Rattle snake    (d) Glass snake
3. In Whale, the testes are
  - (a) Extraabdominal (external)
  - (b) Abdominal (internal)
  - (c) Half external, half internal
  - (d) None of these
4. Which of the following is not a trait of prototherians?
  - (a) Egg laying (ovipary)
  - (b) Lack of teats
  - (c) Absence of corpus callosum
  - (d) Extraabdominal testes.
5. Croacking of frog is
  - (a) Hunger call
  - (b) Sex call for female
  - (c) Danger call
  - (d) Musical note
6. The sharpest vision is found in
  - (a) Vulture            (b) Bat
  - (c) Shark            (d) Owl
7. Cassowary is found in
  - (a) Australia
  - (b) New Guinea and Australia
  - (c) New Zealand
  - (d) Africa
8. Which of the following does not apply to the coelenterates?
  - (a) Nematoblasts
  - (b) Coelenteron
  - (c) Choanocytes
  - (d) Radial symmetry
9. Amphids of Ascaris are
  - (a) Tangoreceptors
  - (b) Chemoreceptors
  - (c) Tactoreceptors
  - (d) Olfactoreceptors
10. Secondary host of Taenia solium is
  - (a) Man            (b) Cow
  - (c) Sheep(d) Pig.
11. Nephridia of earthworm are analogous to
  - (a) Tracheae of insects

- (b) Gills of prawn
  - (c) Nematoblasts of Hydra
  - (d) Flame cells of Dugesia.
12. Sponges seem to have evolved from
- (a) Flagellates
  - (b) Ciliates
  - (c) Choanoflagellates
  - (d) Amoebae
13. Life span of Ascaris is
- (a) 6-9 months (b) 9-12 months
  - (c) 4-10 years (d) 10-12 years
14. Typhlosole of earthworm's intestine is a device for
- (a) Additional secretion of digestive enzymes
  - (b) Increasing absorptive surface
  - (c) Slowing down Passage of food
  - (d) Crushing food
15. Animal having both setae and nephridia is
- (a) Sea anemone (b) Sea pen
  - (c) Sea mouse (d) Sea urchin
16. Tick the correct matching
- (a) Arachnida- ticks, mites
  - (b) Prototheria- scaly anteater
  - (c) Prokaryotes- green algae.
  - (d) Annelida- Ascaris, Taenia