XI-OT BIO-1

Name: T.V.Naveen Raj Section: XI - A Reg. No. 1 1 0 2 8

One Mark Test - 1

Standard XI
BIOLOGY

Time : 1.00 hr. Marks : 50

BIO-BOTANY

Choose and write the correct answer : 50x1=50

1. Choose the incorrect pair.
   a) ds - DNA virus - Adeno virus b) ss - DNA virus - Parvo virus
   c) ds - RNA virus - Rhabdo virus d) ss - RNA virus - Toga virus ☐
2. Assertion (A) : In west coast of Florida in the year 1982, hundreds and thousands of fishes died.
   Reason (R) : It is due to the Red tide by toxic bloom of *Gymnodinium breve*.
   a) Both assertion and reason are correct b) Both assertion and reason are wrong
   c) Assertion is correct, but the reason in wrong d) Assertion is wrong but the reason is correct ☐
3. Which statement is wrong about plasmid?
   a) *It is bacterial single strand* b) It is circular
   c) It is self-replicating d) It is bacterial extra chromosomal ☐
4. Which one of the following bacteria is chemolithotrophs?
   a) *Acetobacter* b) *Lactobacillus* c) *Methanococcus* d) *Hydrogenomonas* ☐
5. "Bird's nest fungi" belongs to which class?
   a) Oomycetes b) Zygomycetes c) Basidiomycetes d) Ascomycetes ☐
6. Assertion (A) : In the year of 1943-45 more than million deaths occur in Ireland.
   Reason (R) : The late blight disease of potato by a bacteria *Phytophthora infestans*.
   a) Both assertion and reason are correct b) Both assertion and reason are wrong
   c) Assertion is correct, but the reason is wrong d) Assertion is wrong but the reason is correct ☐
7. Who discovered viroid in the year of 1971?
   a) J.W. Randles b) T.O. Diener c) S.B. Prusiner d) Safferman ☐
8. Statement I : Agar Agar is derived from the cytoplasm of *Gracilaria*.
   Statement II : It is used for media preperation in microbiology lab.
   a) Both statements are correct b) Both statements are wrong
   c) Only 1st statement is correct d) Only the 2nd statement is correct ☐
9. Who published the book "Liverworts of Western Himalayas and Punjab Plains"?
   a) Shiv Ram Kashyap b) Birbal Sahni c) Parthasarathy d) Desikachary ☐
10. Which statement is wrong about siphonostele?
    a) Xylem is surrounded by phloem b) Pith is in the centre
    c) Xylem plates alternates with phloem plates d) Phloem is present on both sides of the xylem ☐
11. Choose the correct pair.
    a) Tannins - Varnish
    b) Taxol - Cancer treatment
    c) Turpentine - Asthma treatment
    d) Ephedrine - Leather industries ☐
12. Assertion (A) : Water is not essential for fertilization of angiosperm.
    Reason (R) : Ovary is helping for fertilization.
    a) Both reason and assertion are correct b) Both assertion and reason are wrong
    c) Only the assertion is correct d) Only the reason is correct ☐

13. Match the following and choose the correct answer.

1) Shiwalik fossil park	-	i)	Jharkhand
2) Mandla fossil park	-	ii)	Tamil Nadu
3) Rajmahal hills	-	iii)	Himachal Pradesh
4) Ariyalur park	-	iv)	Madhya Pradesh

	1	2	3	4
a)	(iv)	(i)	(iii)	(ii)
b)	(iii)	(i)	(iv)	(ii)
c)	(i)	(iii)	(iv)	(ii)
d)	(iii)	(iv)	(i)	(ii)

14. Which one of the following is used as single cell protein?

a) *Chlorella* b) *Gracilaria* c) *Laminaria* d) *Chlamydomonas*

15. Which one of the following is not belongs to pteridophytes?

a) *Lycopodium* b) *Equisetum* c) *Azolla* d) *Anthoceros*

16. Which one is having chlorophyll a, carotenoids and xanthophylls

a) Rhodophyceae b) Chlorophyceae c) Phaeophyceae d) Paephyceae

17. Match the following and choose the correct answer.

1) Mesophytes	-	i)	*Opuntia*
2) Xerophytes	-	ii)	*Lichens*
3) Psammophytes	-	iii)	*Azadirachta indica*
4) Lithophytes	-	iv)	*Ipomea pes - caprae*

	1	2	3	4
a)	(iii)	(i)	(iv)	(ii)
b)	(iv)	(i)	(iii)	(ii)
c)	(iii)	(i)	(ii)	(iv)
d)	(iv)	(i)	(iii)	(ii)

18. Choose the perennial plant in the following.

a) Peas b) Sunflower c) *Lettuce* d) *Musa*

19. Statement I : Bulbils are modified and enlarged bud meant for propagation.
Statement II : Bulbils serve as a means of vegetative propagation.

a) Both statements are correct b) Both statements are wrong
c) First statement only correct d) First statement only wrong

20. Which of the statement is wrong based on venation.

a) Craspedodromous - Secondary veins terminate at the leaf margin
b) Camptodromous - Secondary veins do not terminate at the margin
c) Hyphodromous - Secondary veins are either absent very reduce or hidden
d) Parallellodromous - Primary or secondary veins run cross to one another and terminate at the margin

21. Which one of the following is example of cladode?

a) *Asparagus* b) *Opuntia* c) *Phyllocactus* d) *Muhlenbergia*

22. The purpose of phyllotaxy is .....

a) to strengthern the stem branches b) to reduce the water evaporation
c) to expose maximum sunlight d) to differentiate the plants

23. Choose the incorrect pair.
    a) Alternate phyllotaxy - *Hibiscus*
    b) Opposite phylloaxy - *Scholaris*
    c) Ternate phyllotaxy - *Nerium*
    d) Whorled phyllotaxy - *Allamanda*

24. Which of the following is bipinnate?
    a) *Rosa* b) *Mimosa* c) *Azadirachta* d) Murraya

25. Stems are
    a) Descending, negatively geotrophic, positively phototrophic
    b) Descending, positively geotrophic, negatively phototrophic
    c) Ascending, positively geotrophic, negatively phototrophic
    d) Ascending, negatively geotrophic, positively, phototrophic

BIO-ZOOLOGY

1. Who introduced the term "Biodiversity"?
    a) Tansley b) Walter Rosen c) Wilson d) Brenden

2. Which one of the following is anima
    a) Liver fluke b) Earthworm c) Neeris d) Leech

3. Choose the mismatched pair.
    1) horse × donkey = mule 2) donkey × horse = hinny
    3) lion × tiger = liger 4) tiger × lion = tigon
    a) only 1 b) 1 and 2 c) only 4 d) 3 and 4

4. Choose the correct taxonomic hierarchy.
    a) Kingdom, phylum, order, class, family, genus, species
    b) Kingdom, phylum, family, class, order, genus, species
    c) Kingdom, class, family, order, phylum, genus, species
    d) Kingdom, phylum, class, order, family, genus, species

5. You have seen an animal with 70s ribosome and without any other membrane bound organelles, in which domain you have catagories that in three domains of life?
    a) Archaea b) Bacteria c) Eukarya d) Protista

6. Choose the correct expansion of 'DAISY'.
    a) Digital Automated Identification System b) Digital Anatomical Identification System
    c) Digital Automated Instrument System d) Digital Anatomical Instrument System

7. It is based on comparative analysis of the similarities and dissimilarities of organism.
    a) Printed Taxonomical tools b) Taxonomical keys
    c) Neo taxanomical tools d) All the above

8. Who coined the term "species"?
    a) Carl Linnaeus b) Charles Darwin c) Johan Mendel d) John Ray

9. Choose the incorrect statement about ctenophora:
    a) Bioluminescence is well marked
    b) Digestion is both intercellular and intracellular
    c) Reproduce only by sexual means
    d) Direct development is occur

10. ***Phylum*** - ***Larva***

1) Platyhelminthes - i) Veliger
2) Annelida - ii) Redia
3) Mollusca - iii) Tornaria
4) Hemichordata - iv) Trochophore

	1	2	3	4
a)	(i)	(iii)	(iv)	(ii)
b)	(ii)	(iv)	(i)	(iii)
c)	(iii)	(ii)	(iv)	(i)
d)	(iv)	(ii)	(i)	(iii)

11. Assertion (A) : All the coelenterates are called as cnidaria.
Reason (R) : It is having cnidoblasts as stinging cells.
a) Both assertion and reason are correct b) Both assertion and reason are wrong
c) Assertion is correct but reason is wrong d) Assertion is wrong but reason is correct

12. Example of Aschelminthes
a) Tapeworm b) Hookworm c) Earthworm d) Liver fluke

13. Identify the incorrect pair.
a) *Corvus* - Crow
b) *Columba* - Pigeon
c) *Psittacula* - Penguin
d) *Pavo* - Peacock

14. Identify the wrong statement about reptilia.
a) Body is covered by dry and cornified skin b) Three chambered heart
c) All are homeothermic (warm blooded) d) Egg is cleidoic type

15. Which one of the following possess notochord during embryonic stage only
a) *Hippocampus* b) *Ascidia* c) *Amphioxus* d) *Salpa*

16. Which of the following possess notochord throughout their lifespan?
a) *Labeo* b) *Echenesis* c) *Pterophyllum* d) *Trygon*

17. Which one of the following develops from mesoderm?
a) Simple epithelial tissue b) Compound epithelial tissue
c) Connective tissue d) Nervous tissue

18. Which part is do not contains ciliated epithelium?
a) Uterus b) Urinary duct c) Digestive tract d) Respiratory tract

19. Which one involved in functions like diffusion and filteration.
a) Cuboidal epithelium b) Columnar epithelium
c) Squamous epithelium d) Ciliated epithelium

20. Which one is Autoimmune connective tissue disorder?
a) Ehler's - Danlos Syndrome b) Stickler Syndrome
c) Rhabdomyosarcoma d) Sjogren's Syndrome

21. Dissection of a dead body examination to discover the cause of death is known as .....
a) Autopsy b) Biopsy c) Lithopsy d) Anapsy

22. Identify the nervous system disease
a) Parkinson's disease b) Rheumatoid arthritis
c) Rhabdomyosarcoma d) Stickler syndrome

23. Which one helps the cells to communicate with each other?
a) Tight junction b) Adhering junction c) Gap junction d) Elastic junction

24. Pneumatic bones are present in .....
a) Mammals b) Birds c) Reptiles d) Sponge

25. Metameric segmentation is the main feature of .....
a) Annelida b) Echinodermata c) Arthropoda d) Coelenterata

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XI-OT BIO-2

Name: R.U. Naveen Raj Section: XI - A Reg. No. 1 1 0 2 8

One Mark Test - 2

Standard XI
BIOLOGY

Time : 1.00 hr. Marks : 50

BIO-BOTANY

Choose and write the correct answer : 50x1=50

1. The bracteole of a sessile flower is called
   a) Palea b) Glume c) Lemma d) Lodicule
2. Syconus type of multiple fruit develops from the ..... inflorescence.
   a) Coenanthium b) Hypanthodium c) Cyathium d) Capitulum
3. The symbol A_0 in a floral formula denotes.
   a) pistillode b) apocarpous c) staminode d) syncarpous
4. The internodal elongation between the corolla and androecium is called
   a) anthophore b) androphore c) gynophore d) gynandrophore
5. Stamens are of different lengths in the same flower is called
   a) tetradynamous b) heterostamonous c) didynamous d0 syngenesious
6. In *Tridax*, the pappus hairs are the modificiations of
   a) sepals b) petals c) stamens d) carpels
7. Flower symmetry in *Canna indica* is
   a) actinomorphic b) zygomorphic c) radial symmetry d) amorphic
8. The entire inflorescence is covered by brightly coloured bract called spathe is
   a) catkin b) spadix c) umbel d) corymb
9. The type of placentation seen in the members of the family Fabaceae is
   a) marginal b) basal c) axile d) superficial
10. Systematics means
    a) classification + nomenclature b) taxonomy + classification
    c) phylogeny + taxonomy d) taxonomy + phylogeny
11. In the type concept, specimen selected from original material serves as a type, when no holotype was designated at the time of publication is called
    a) isotype b) lectotype c) epitype d) neotype
12. Royal Botanical Garden, Kew is situated at
    a) America b) Australia c) England d) Russia
13. Artificial system of classification was proposed by
    a) George Bentham b) Joseph Dalton Hooker c) Carolus Linnaeus d) Arthur Cronquist
14. The classification of very similar plants by means of differences in the proteins they contain, to solve taxonomic problem is called
    a) cytotaxonomy b) Karyotaxonomy c) Serotaxonomy d) Chemotaxonomy

15. Stamens and pistil are enclosed by this petal of the papilionaceous corolla
a) vexillum b) standard petal c) carina d) alae

16. Roots of this plant is used to treat cough and rheumatism
a) *Solanum trilobatum* b) *Withania somnifera*
c) *Datura stramonium* d) *Atropha belladonna*

17. In this plant, stem is modified into cladode and the leaves are reduced to scales.
a) *Aloe* b) *Smilax* c) *Yucca* d) *Asperagus*

18. In a microscope, secondary magnification is done by
a) eye piece b) objective lens c) condenser lens d) mirror

19. By using this type of microscope, we get 3D images.
a) Phase contrast microscope b) Scanning electron microscope
c) Transmission electron microscope d) Dark field microscope

20. Assertion (A) : Viruses, viroids and prions are exception to cell theory.
Reason (R) : They lack protoplasm and they exist as obligate parasites.
a) Both (A) and (R) are correct. (R) is the correct explanation of (A)
b) Both (A) and (R) are correct. (R) is not the correct explanation of (A)
c) (A) is correct, (R) is wrong d) Both (A) and (R) are wrong

21. This is a example for mesokaryote
a) bacteria b) dinoflagellates c) archaea d) fungi

22. Pits in a plant cell are seen only in the
a) primay cell wall b) middle lamella c) secondary cell wall d) cell membrane

23. This cell organelle detoxify drugs, chemicals and other harmful compounds
a) golgi complex b) lysosomes
c) vacuoles d) smooth endoplasmic reticulum

24. Mitochondria is semi-autonomous organelle, because they possess
a) crystae b) matrix c) enzymes d) DNA

25. Nucleus and chromosomes are stained by using this stains for microscopical studies.
a) Janus green b) Methylene blue c) Haematoxylin d) Sudan IV

BIO-ZOOLOGY

1. One of the following earthworm species is found in the upper layers of the soil
a) *Lampito mauritii* b) *Octochaetona thurstoni*
c) *Perioynx excavatus* d) *Eudrillus eugeniae*

2. Brown and purple colour of the earthworm is due to the presence of this pigment
a) melanin b) porphyrin c) anthocyanin d) haemocyanin

3. In earthworms, the coelomocytes are known to play a major role in regeneration, immunity and wound healing are found in
a) Coelom b) Hydrostatic skeleton c) Coelomic fluid d) All the above

4. Chlorogogen cells are present here, which extract the nitrogenous waste from the blood
a) nephridia b) coelom c) nephrostome d) intestinal wall

5. In cockroaches, hypognathous means the mode of
   a) attachment of head b) attachment of mouth parts
   c) attachment of head and thorax d) attachment of legs with throax

6. This is not the excretory organ of cockroach
   a) urecose gland b) spiracles c) nephrocytes d) cuticle

7. In the female cockroach the egg case is formed by
   a) gonapophyses b) conglobate gland c) collaterial gland d) vestibulum

8. The kind of vision in cockroach is mosaic vision with
   a) less sensitivity, less resolution b) more sensitivity, more resolution
   c) less sensitivity, more resolution d) more sensitivity, less resolution

9. Cutaneous respiration in frogs takes place through skin when the frog
   a) on land b) in water c) on land and in water d) hibernate

10. What is wrong with the RBC of frog?
    a) non-nucleated b) nucleated
    c) oval d) loaded with red pigment

11. Peripheral nervous system in frog consists of ..... pairs of spinal nerves.
    a) 8 b) 10 c) 12 d) 31

12. The nephrons in the frog separates this waste material from the blood and send them out
    a) ammonia b) uric acid c) urea d) all the above

13. In man cardiac sphincter regulate the open of ..... into the .....
    a) stomach, duodenum b) oesophagus, stomach
    c) bile duct, stomach d) bile duct, duodenum

14. Caecum and vermiform appendix are large in herbivores and acts as an important site for ..... digestion with the help of symbiotic bacteria.
    a) carbohydrate b) protein c) pectin d) cellulose

15. This duct carries saliva from the sub-mandibular gland into the buccal cavity
    a) Stenson's duct b) Bartholin's duct c) Wharton's duct d) Duct of Rivinis

16. This is the outermost layer in the wall of alimentary canal which made up of this squamous epithelium
    a) mucosa b) submucosa c) serosa d) muscularis

17. Castle's intrinsic factor secreted by this cells help in the absorption of vitamin B_{12}
    a) Zymogen cells b) Oxyntic cells c) Goblet cells d) Parietal cells

18. Glisson's capsule covers this organ
    a) Kidney b) Pancreas c) Liver d) Spleen

19. In man one of the following is a compound gland
    a) salivary glands b) intestinal glands c) gastric glands d) pancreas

20. What reduces the surface tension of the fat droplets and break them into small globules?
    a) bile salts b) bile pigments c) cholesterol d) mucus

21. In human being, absorption of simple sugars, alcohol and medicines takes place here
    a) mouth b) stomach c) small intestine d) large intestine ☐
22. Vomitting is controlled by
    a) cerebrum b) cerebellum c) medulla oblongata d) pons ☐
23. Oral hydration therapy is done in
    a) appendicitis b) constipation c) peptic ulcer d) diarrhoea ☐
24. Haustra are pouch like dilation present in the
    a) stomach b) colon c) small intestine d) duodenum ☐
25. All the following causes liver cirrhosis. Except
    a) alcoholism b) consumption of poison c) infection d) smoking ☐

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XI-OT BIO-3

Name: T.V. Naveen Raj Section: XI-A Reg. No. 1 1 0 2 8

One Mark Test - 3

Standard XI

BIOLOGY

Time : 1.00 hr. Marks : 50

BIO-BOTANY

Choose and write the correct answer : 50x1=50

1. Regarding the meristems, which statement is wrong?
   a) Ground meristem gives rise to all tissues except epidermis and vascular strands
   b) Procambium gives rise to primary vascular tissues
   c) Secondary meristem is responsible for secondary growth
   d) Primary meristem differentiated into primary permanent tissues ☐
2. Find out the mismatched pair.

Type of sclereids		*Example*
a) Osteosclereid	-	*Pisum*
b) Trichosclereids	-	*Nymphaea*
c) Asterosclereids	-	*Crotolaria*
d) Brachysclereids	-	Pulp of *Pyrus* ☐

3. Axial parenchyma and ray parenchyma are the two types of
   a) Phloem parenchyma b) Prosenchyma
   c) Stellate parenchyma d) Xylem parenhyma ☐
4. All the following are living. Except
   a) Collenchyma b) Phloem sieve tubes c) Tracheids and vessels d) Companion cells ☐
5. Bulliform cells are present in the epidermis of
   a) monocot leaf b) dicot stem c) dicot leaf d) monocot stem ☐
6. Reentry of water from the vascular bundle, back into the cortex is prevented by
   a) passage cells b) border parenchyma c) casparian strips d) subsidiary cells ☐
7. Phloem occurs on both the outer and inner sides of xylem is called ..... vascular bundle.
   a) conjoint b) bicollateral c) collateral d) concentric ☐
8. Vascular bundles are scattered in the parenchymatous ground tissue is called
   a) eustele b) atactostele c) amphivasal d) leptocentric ☐
9. Idioblasts are a type of ....., which store resin, tannins, crystals of calcium carbonate, calcium oxalate
   a) angular collenchyma b) annular collenchyma
   c) lamellar collenchyma d) parenchyma ☐
10. Albuminous cells in Conifers are analogous to ..... of angiosperms and it is also called as .....
    a) passage cells, bulliform cells b) companion cells, silica cells
    c) parenchyma, sieve cells d) companion cells, strasburger cells ☐
11. This mineral is essential for fixation of nitrogen by enzyme nitrogenase
    a) cobalt b) boron c) molybdenum d) manganese ☐
12. This is not a primary metabolite
    a) protease b) curcumin c) lactic acid d) proline ☐

13. Starch is a storage polysaccharide made up of repeated units of ..... and amylopectin.
a) glucose b) saccharides c) amylose d) lactose

14. Glycogen is a storage polysaccharide present in all. Except
a) fungi b) liver cells c) brain d) skeletal muscles

15. One of the following statement is incorrect
a) Sucrose is a reducing sugar
b) Herbivores can easily digest cellulose
c) Polysaccharides also known as glycans
d) Peptidoglycan is a heteropolysaccharide

16. This is a cell wall deficient bacteria called mycoplasma which lack ..... in its cell membrane.
a) lecithin b) cholesterol c) lipid d) glycerol

17. Antibodies are complex ..... with specific regions of attachment for various organisms.
a) mucoprotein b) glycoprotein c) lipoprotein d) amyloprotein

18. Salivary amylase activity is increased in the presence of ..... ions.
a) Zinc b) Copper c) Manganese d) Chloride

19. Left handed type of helix is seen in
a) B-DNA b) Z-DNA c) A-DNA d) C-DNA

20. A unique enzyme called anaphase - promoting complex cyclosome causes degradation of the key regulatory proteins at the transition of metaphase and anaphase is
a) cellullase b) ligase c) pectinase d) peptidase

21. Pairing of homologous chromosomes takes place during ..... is known as .....
a) leptotene, chiasma
b) zygotene, synapsis
c) pachytene, synapse
d) diplotene, crossing over

22. Which statement is incorrect regarding the endomitosis?
I. Chromonema do not separate to form chromosomes
II. No sprindle formation here
III. Occurs in the salivary gland cells of *Drosophila*
IV. As a result giant chromsomes are formed
a) II, IV b) I, III c) I, IV d) None

23. The amount of DNA in the cells of G_1 is
a) 1C b) 2C c) 3C d) 4C

24. Reduced rate of RNA and protein synthesis is seen in
a) G_1 cells b) G_2 cells c) G_0 cells d) S cells

25. The morphology of a chromosome can be easily studied during the
a) prophase b) metaphase c) anaphase d) telophase

BIO-ZOOLOGY

1. Under normal physiological conditions, every 100ml of oxygenated blood can deliver about ..... of O_2 to the tissues
a) 4 m*l* b) 5 m*l* c) 10 m*l* d) 15 m*l*

2. High concentration of carbonic anhydrase is present in the
a) Plasma b) WBC c) RBC d) Plasma protein

3. Nitrogen narcosis arises when a person
   a) ascends quickly up in a deep sea
   b) moves quickly from sea level to elevated area
   c) descends deep into the sea
   d) moves quickly to the foot hill

4. The enzyme carboxy anhydrase catalyse which reaction?
   I. $CO_2 + H_2O \rightarrow H_2CO_3$
   II. $H_2CO_3 \rightarrow CO_2 + H_2O$
   III. $H_2CO_3 \rightarrow HCO3^- + H^+$
   IV. $HCO_3 + H^+ \rightarrow H_2CO_3$
   a) I, III, IV b) I, II, III c) II, III, IV d) I, II, III, IV

5. The hormone erythropoietin is secreted by
   a) lungs b) liver c) pituitary d) kidneys

6. Addiction of this substance acts as stimulant and makes the heart beat faster.
   a) alcohol b) smoking c) nicotine d) drugs

7. Inflammatory condition of the lungs is called
   a) Emphysema b) Pneumonia c) Bronchitis d) Pulmonary edema

8. Methaemoglobin does not bind with
   a) carbon dioxide b) oxygen c) carbon monoxide d) sulphur dioxide

9. Partial pressure of carbondioxide in tissues is
   a) 45 mm Hg b) 40 mm Hg c) 85 mm Hg d) 159 mm Hg

10. TV + IRV is the formula to find out ..... of the lung.
    a) vital capacity
    b) inspiratory capacity
    c) total lung capacity
    d) inspiratory reserve volume

11. Assertion (A) : Lungs expands and contracts by the movement of the ribs, intercostal muscles and diaphragm.
    Reason (R) : Lungs do not contain muscle fibre.
    a) Both (A) and (R) are correct. (R) is the correct explanation to (A)
    b) Both (A) and (R) are correct. (R) is not the correct explanation to (A)
    c) (A) is correct (R) is wrong
    d) Both (A) and (R) are wrong

12. Skin is the respiratory structure seen in
    a) earthworm b) sponges c) coelenterates d) flatworms

13. Assertion (A) : The rate of breathing in aquatic animal is slow than land animals.
    Reason (R) : The amount of dissolved oxygen is very low in water compared to the amount of oxygen in the air.
    a) Both (A) and (R) are correct. (R) is the correct explanation to (A)
    b) Both (A) and (R) are correct. (R) is not the correct explanation to (A)
    c) (A) is wrong, (R) is correct
    d) (A) is correct, (R) is wrong

14. This is not a extracellular fluid
    a) interstitial fluid b) plasma c) blood d) lymph

15. Because of the absense one of the following, RBC accommodates more haemoglobin which carries more oxygen
    a) nucleus b) mitochondria c) endoplasmic reticulum d) all the above

16. The human O blood group is called universal donor because they
    a) lack WBC b) lack antigen c) lack antibody d) lack Rh antigen

17. The lacteals are nothing but ..... which absorb ..... in the intestinal Villi.
    a) arteries, glucose b) capillaries, amino acids
    c) arteoioles, vitamins d) lymph ducts, fatty acid

18. Which statement is not true about the veins?
    I. Pulmonary veins carry deoxygenated blood to the heart
    II. Pulmonary artery carry oxygenated blood to the heart
    III. Tunica media is thin in veins IV. Semilunar valves are present here
    a) I, II b) II, III c) III, IV d) I, IV

19. The waves in a ECG occur due to the
    a) depolarisation b) repolarisation
    c) contraction of the heart d) relaxation of the heart

20. In the human heart chordea tendinae is seen here
    a) blood vessels b) auricle c) ventricle d) auricle and ventricle

21. Semilunar valve is seen in all these place of the heart. Except
    I. Opening of the right ventricle into the aorta
    II. Opening of the left ventricle into the pulmonary artery
    III. All the veins IV. All the capillaries
    a) I, II b) II, IV c) III, IV d) I, II, IV, III

22. Which one of the following causes vasodilation?
    a) Vasopressin b) Natriuretic peptide hormone
    c) Angiotensin II d) Parasympathic nerves

23. Find out the type of circulation given below.
    Left ventricle → aorta → arteries → arterioles → capillaries → venules → veins → venacava → right auricle.
    a) single circulation b) pulmonary circulation
    c) double circulation d) systemic circulation

24. Tachycardia means
    a) increase of heart rate b) increase of blood pressure
    c) descrease of heart rate d) decrease of blood pressure

25. Which one of the following has no interventricular septum and incomplete interventricular septum?
    a) fishes, crocodiles b) amphibians, mammals
    c) reptiles, mammals d) amphibians, crocodiles

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XI-OT BIO-4

Name: T. U. Naveen Raj Section: XI - A Reg. No. 1 1 0 2 8

One Mark Test - 4

Standard XI
BIOLOGY

Time : 1.00 hr. Marks : 50

BIO-BOTANY

Choose and write the correct answer : 50x1=50

1. Bark of a tree is produced by
   a) Cork cambium b) Vascular cambium
   c) Intrafascicular cambium d) Interfascicular cambium
2. The dye, haematoxylin is used to stain this organelle.
   a) mitochondria b) nucleus c) chloroplast d) chromosomes
3. Phelloids are phellem like cells which lack ..... in their walls.
   a) cellulose b) hemicellulose c) suberin d) pectin
4. Polyderm, a special type of protective tissue found in
   a) aerial stem b) leaf c) aerial roots d) underground stems
5. Complementary cells in the lenticel region is nothing but
   a) parenchyma b) collenchyma c) sclerenchyma d) meristems
6. The vascular cambium is the lateral meristem that produces this secondary tissues
   a) protoxylem b) metaxylem c) secondary xylem d) metaphloem
7. The lumen of the ..... are blocked by balloon like ingrowths called tyloses.
   a) xylem vessels b) tracheids c) sieve elements d) xylem parenchyma
8. The periderm is formed by all. Except
   a) phellem b) phellogen c) phelloderm d) cuticle
9. Tylosoids are present in this plant group
   a) angiosperms b) gymnosperms c) spermatophyta d) pteridophyta
10. The quality of a timber can be ascertained by
    a) early wood b) late wood c) annual rings d) heart wood
11. This membrane allows diffusion of solvent molecules but do not allow the passage of solute molecules is called
    a) selective permeable b) permeable c) semi permeable d) impermeable
12. Absorption of water by roots at the initial stage is by
    a) diffusion b) osmosis c) imbibition d) reverse osmosis
13. Porin is present in the membrane of all. Except
    a) plasma membrane b) outer membrane of plastids
    c) outer membrane of mitochondria d) outer membrane of bacteria
14. Transport of two different molecules in opposite direction, across the membrane is called
    a) symport b) antiport c) uniport d) co-transport

15. Which statement is correct when the cell is placed in a hypertonic solution?
    a) Endosmosis will takes place b) Cell will turgid
    c) Plasmolysis will occur d) Diffusion of water into the cell

16. The cytoplsmic channel that inter connects two adjacent cell is
    a) apoplast b) plasmodesmata c) uniport d) symplast

17. Crescograph, invented by J.C. Bose, is used to demonstrate the
    a) transpiration rate b) ascent of sap c) root pressure d) active absorption

18. Foliar spray of this substance induces partial closure of stomata
    a) abscisic acid b) phenyl mercuric acetate c) cobalt chloride d) calcium chloride

19. Phloem unloading of food substance takes place here. Except.
    a) roots b) leaves c) tubers d) fruits and flowers

20. Transport of water and minerals across the tonoplast is a ..... transport.
    a) transmembrane route b) symplast
    c) apoplast d) plasmodesmata

21. Match the following minerals and their functions correctly.

	Minerals		*Functions*
I.	Manganese	a)	Stomatal movement
II.	Magnesium	b)	Photolysis of water
III.	Pottassium	c)	Nitrogenase action
IV.	Molybdenum	d)	Formation of chlorophyll

	I	II	III	IV
a)	d	a	b	c
b)	b	d	a	c
c)	c	b	d	a
d)	a	d	c	b

22. Leghaemoglobin in a root nodule acts as
    a) Oxygen carrier b) Oxygen scavenger
    c) Maintain aerobic atmosphere d) Causes oxidation

23. Insectivorous plants resolves ..... deficiency by trapping insects.
    a) Calcium b) Nitrogen c) Boron d) Potassium

24. Whiptail of cauliflower and cabbage is caused due to the deficiency of
    a) Zinc b) Copper c) Molybdenum d) Sulphur

25. Which mineral plays a key role in maintaing osmotic potential?
    a) Phosphorous b) Magnesium c) Potassium d) Copper

BIO-ZOOLOGY

1. One of the following animal is an example for both ammonotelism and ureotelism
    a) Amphibians b) Reptiles c) Tapeworm d) Earthworm

2. Green glands are the excretory organs of
    a) Nematodes b) *Amphioxus* c) Insects d) Crustaceans

3. Podocytes are present here
    a) Outer layer of Bowmann's capsule b) Inner layer of Bowmann's capsule
    c) Found in the glomerulus d) Inner layer of malpighian capsule

4. Juxta medullary nephron is present in the
   a) Cortex of the kidney b) Medulla of the kidney
   c) Outside the medulla d) Both in the cortex and medulla of the kidney ☐
5. Ammonia is formed in the
   a) Liver b) Mitochondria c) Endoplasmic reticulum d) Spleen ☐
6. Ascending limb of Henle's loop permits all. Except.
   a) Sodium b) Chloride c) Potassium d) Water ☐
7. Atrial natriuretic factor is secreted by
   a) Kidney b) Nephron c) Malpighian capsule d) Cardiac atrial cells ☐
8. For haemodialysis, blood drawn from the ..... of a patient.
   a) artery b) vein c) capillaries d) venacava ☐
9. Sterols, hydrocarbons and waxes excreted by
   a) Salivary glands b) Sweat glands c) Sebaceaous glands d) Skin ☐
10. In the nephron glucose, lactate, aminoacids and sodium are absorbed here
    a) Urinary bladdes b) Proximal convoluted tubule
    c) Vasa recta d) Distal convoluted tubule ☐
11. Amphibians and fresh water fishes produce dilute urine because they
    a) Lack glomerulus b) Lack Henle's loop
    c) Lack collecting duct d) Lack proximal convoluted tubule ☐
12. Kidneys produce about ..... of glomerular filtrate in 24 hrs.
    a) 150 lit b) 180 lit c) 202 lit d) 220 lit ☐
13. ADH causes the reabsorption of water in this part of the nephron
    a) Proximal convoluted tubule b) Henle's loop
    c) Distal convoluted tubule d) Collecting duct ☐
14. Vasa recta is absent or reduced in
    a) Cortical nephrons b) Juxta medullary nephrons
    c) Metanephridia d) Protonephridia ☐
15. Diabetes insipidus is caused due to the deficiency of this hormone
    a) insulin b) glucagon c) antidiuretic hormone d) renin ☐
16. In the sarcomere, each dark band has a lighter region in its middle, called
    a) Z- disc b) H - zone c) T- tubules d) I band ☐
17. Glycosomes are ..... granules stored in the muscles
    a) Starch b) Glycogen c) Carbohydrate d) Protein ☐
18. Which statement is incorrect regarding the glycolytic muscle fibre?
    a) they have few number of mitochondria
    b) they have high concentration of glycolytic enzymes
    c) they lack myoglobin d) they have large stores of glycogen ☐
19. When a impulse reaches neuromuscular junction, ... ions are released from the sarcoplasmic reticulum.
    a) sodium b) potassium c) calcium d) magnesium ☐

20. This muscle protein is made up of a large number of monomers called meromyosin
    a) Actin b) Myosin c) Troponin d) Tropomyosin
21. This is a only movable bone present in the skull
    a) maxilla b) temporal c) frontal d) mandible
22. The floating ribs do not directly joined with this
    a) scapula b) sternum c) sacrum d) sphenoid
23. The bone forming cells in the bones are
    a) osteoblasts b) osteocytes c) osteoclasts d) bone marrow
24. This type of joint is seen in between the carpal and metacarpal
    a) pivot joint b) gliding joint c) saddle joint d) plane joint
25. In the gouty arthritis, the inflammation of joints is due to the accumulation of
    a) ammonia b) urea c) uric acid crystals d) creatinine

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