

XI - STD ONE MARK TEST NO : 1	2018 - 2019	
	XI - Std]	BIOLOGY [TIME : 1.00 Hr. (Maximum Marks : 50)
	BIO - BOTANY (Marks : 25)	Unit -1 : Diversity of Living World 1. Living World 2. Plant Kingdom

Choose the correct answer :

25 x 1 = 25

- The haploid number of chromosome for an Angiosperm is 14, the number of chromosome in its endosperm is
(a) 7 (b) 28 (c) 14 (d) 42
- Endosperm in Gymnosperm is formed
(a) Before fertilization (b) After fertilization
(c) At the time of fertilization (d) Along with the development of embryo
- Identify the Archaeobacterium
(a) Acetobacter (b) Methanobacterium (c) Treponema (d) Erwinia
- Identify the correctly matched pair
(a) Actinomycete - (a) Late blight
(b) Mycoplasma - (b) Lumpy jaw
(c) Bacteria - (c) Crown gall
(d) Fungi - (d) Sandal spike
- Identify the incorrect statement about the Gram positive bacteria
(a) Teichoic acid absent
(b) High percentage of peptidoglycan is found in cell wall
(c) Cell wall is single layered (d) Lipopolysaccharide is present in cell wall
- Which of following represent gametophytic generation in pteridophytes
(a) Thallus (b) Cone (c) Prothallus (d) Rhizophore
- Which of the plant group has gametophyte as a dominant phase
(a) Pteridophytes (b) Gymnosperm (c) Angiosperm (d) Bryophytes
- Earth was formed billion years ago.
(a) 4.6 (b) 5.5 (c) 4.8 (d) 2.2
- Viruses were classified into seven classes by
(a) Twort (b) David Baltimore (c) Ethrenberg (d) Alexopoulos
- Virus that infects bacteria is called
(a) Mycophage (b) Lactophage (c) Bacteriophage (d) Cyanophage
- Monotropa derives nutrition by
(a) Root Nodules (b) Lichens (c) Roots (d) Mycorrhizae
- Sac fungi refers to
(a) Zygomycetes (b) Basidiomycetes (c) Ascomycetes (d) Deuteromycetes

- 2 -

- The fungal cell wall is made up of
(a) Chitin (b) Cellulose (c) Peptidoglycan (d) Pectin
- is the branch of science that deals with the study of fungi.
(a) Phycology (b) oncology (c) psychology (d) mycology
- Air bladders are seen in
(a) Fucus (b) Ulva (c) Sargassum (d) Vaucheria
- Stone wort refers to
(a) Chara (b) Gelidium (c) Chadophore (d) Anabaena
- are called vascular cryptogams.
(a) Fungi (b) Algae (c) Bryophytes (d) Pteridophytes
- A pteridophytes fern as a biofertilizer
(a) Marsilea (b) Azolla (c) Equisetum (d) Lycopodium
- Drug used for cancer treatment plant
(a) Taxus brevifolia (b) Gerardiana (c) Balssamea (d) Roxburgh
- One of the following organism is a scp
(a) Nostoc (b) Rhizobium (c) Diatom (d) Chlorella
- The correct statement regarding Blue green algae is
(a) presence of floridean starch (b) lack of motile structures
(c) presence of cellulose in cell wall
(d) absence of mucilage around the thallus
- Which one of the following statement about virus is correct ?
(a) They contain DNA or RNA
(b) Enzymes are present
(c) Possess their own metabolic system
(d) They are facultative parasites
- An example of colonial alga is
(a) Chlorella (b) Volvox (c) Ulothrix (d) Spirogyra
- Viroids differ from viruses in having
(a) DNA molecules with protein coat
(b) DNA molecules without protein coat
(c) RNA molecules without protein coat
(d) RNA molecules with protein coat
- Select the mismatch
(a) Cycas - Dioecious
(b) Pinus - Dioecious
(c) Salvinia - Heterosporous
(d) Equisetum - Homosporous

- 3 -

BIO - ZOOLOGY (Marks : 25)

Unit-1: Ch 1: The Living World 2. Kingdom Animalia

Choose the correct answer :

25 x 1 = 25

- In which of the following organisms self fertilization is seen
(a) Earthworm (b) Round worm (c) Liver fluke (d) Fish
- Which of the following is correctly matched ?
(a) Whale - Ammonotelic (b) Lizards - Uricotelic
(c) Birds - Uricotelic (d) Humans - Ureotelic
- Scientific name of king cobra is
(a) *Naja Naja* (b) *Naja Hannah* (c) *Amphiliabs* (d) *Vipera russell*
- New systematic and the concept of life was given by
(a) Odom (b) Elton (c) Huxley (d) Linnaeus
- Reproduction in paramecium is controlled by
(a) Micronucleus (b) Flagella (c) Cell wall (d) Macronucleus
- Sea anemone belongs to phylum
(a) Protozoa (b) Porifera (c) Echinodermata (d) Coelenterata
- Four chambered heart is present in
(a) Snake (b) Scorpion (c) Crocodile (d) Lizard
- Which of the following is a crustacean ?
(a) Snail (b) Sea anemone (c) Hydra (d) Prawn
- The respiratory pigment in cockroach is
(a) Haemoglobin (b) Haemocyanin
(c) Haemoerythrin (d) Oxyhaemoglobin
- The symmetry exhibited in Cnidarians is
(a) Bilateral (b) Radial (c) Asymmetrical (d) Pentamerous radial
- Which of the following is an egg laying mammal ?
(a) Equus (b) Macropus (c) Ornithorhynchus (d) Delphinus
- Pneumatic bones are seen in
(a) Aves (b) Reptilia (c) Sponges (d) Mammalia

- 4 -

- Who coined the term biodiversity ?
(a) Walter Rosen (b) AG Tansley (c) Aristotle (d) AP de Candole
- A group of organisms having similar traits of a rank is
(a) Species (b) Genus (c) Family (d) Taxon
- A living organism is differentiated from non-living structure based on
(a) Growth (b) Movement (c) Metabolism (d) Reproduction
- What taxonomic aid gives comprehensive information about a taxon ? ..
(a) Flora (b) Monograph (c) Taxonomic key (d) Herbarium
- Which of the following animals has a true coelom ?
(a) Sycon (b) Pheretima (c) Taenia solium (d) Ascaris
- Sea anemone belongs to phylum
(a) Porifera (b) Coelenterata (c) Protozoa (d) Echinodermata
- Exoskeleton of which phylum consists of chitinous cuticle ?
(a) Porifera (b) Arthropoda (c) Echinodermata (d) Annelida
- Which of the following have the highest number of species in nature ? ...
(a) Insects (b) Angiosperms (c) Birds (d) Fungi
- Molecular taxonomic tool consists of
(a) DNA and RNA (b) Mitochondria and Endoplasmic reticulum
(c) Cell wall and membrane proteins (d) All the above
- The smallest unit of classification is
(a) Class (b) Genus (c) Sub-species (d) Species
- The excretory cells, that are found in platyhelminthes
(a) Flame cells (b) Protonephridia (c) Solenocytes (d) All of these
- Medusa is the Reproductive organs of
(a) Hydra (b) Aurelia (c) Sea anemone (d) Obelia
- Which of the following respire through gills ?
(a) Prawns (b) Whale (c) Turtle (d) Frog

XI - STD ONE MARK TEST NO : 2	2018 - 2019	
	XI -Std]	BIOLOGY [TIME : 1.00 Hr. (Maximum Marks : 50)
	BI(1 - BOTANY (Marks : 25)	
	Unit -2 : Plant morphology and Taxonomy of Angiosperm Chapter : 3, 4, 5	

Choose the correct answer :

25 x 1 = 25

- Example for negatively geotrophic roots
 (a) *Avicennia*, *Rhizophora* (b) *Ipomoea*, *Dahlia*
 (c) *Asparagus*, *Ruellia* (d) *Vitis*, *Portulaca*
- When the root is thick and fleshy, but does not take a definite shape, it said to be
 (a) Nodulose root (b) Moniliform root
 (c) Fasciculated root (d) Tuberous root
- An example of edible underground stem
 (a) Carrot (b) Potato (c) Sweet potato (d) Groundnut
- Bryophyllum and Dioscorea are example for
 (a) Foliar bud, apical bud (b) Cauline bud, apical bud
 (c) Foliar bud, cauline bud (d) Cauline bud, foliar bud
- Aggregate fruit develops from
 (a) Multicarpellary apocarpous ovary (b) Whole inflorescence
 (c) Multicarpellary ovary (d) Multicarpellary syncarpous ovary
- Vexillary aestivation is characteristic of the family
 (a) Asteraceae (b) Fabaceae (c) Solanaceae (d) Brassicaceae
- In an inflorescence where flowers are borne laterally in an acropetal succession the position of the youngest floral bud shall be
 (a) Distal (b) Intercalary (c) Proximal (d) Anywhere
- A true fruit is the one where
 (a) Ovary and calyx of the flower develops into fruit
 (b) Only ovary of the flower develops into fruit
 (c) Ovary, calyx and thalamus of the flower develops into fruit
 (d) All floral whorls of the flower develops into fruit.
- Gynoecium with united carpels is termed as ...
 (a) Apocarpous (b) Multicarpellary (c) Syncarpous (d) None of the above
- The book species plantarum was written by (a) Gaspard Bauhin
 (b) Carolus Linnaeus (c) Theophrastus (d) Dioscorides
- The standard size of herbarium sheet is (a) 29 cm X 40 cm
 (b) 39 cm X 41 cm (c) 49 cm X 41 cm (d) 29 cm X 41 cm

- Gymnospermae is
 (a) Cycadaceae (b) Coniferae (c) Gnetaceae (d) All the above
- Inferia includes
 (a) 3 orders and 9 families (b) 3 orders and 8 families
 (c) 4 orders and 19 families (d) 6 orders and 9 families
- Flowers are zygomorphic in
 (a) Mustard (b) Gulmohar (c) Tomato (d) Datura
- Specimen derived from non-original collection serves as the nomenclatural type when original specimen is missing. It is known as
 (a) Holotype (b) Isotype (c) Paratype (d) Neotype
- Curcuma amada*, *Maranta* are example of (a) Tuberous root
 (b) Beaded root (c) Moniliform root (d) Nodulose root
- Placentation in tomato and Lemon is
 (a) Axile (b) Marginal (c) Parietal (d) Free central
- Which of the following is a flowering plant with nodules containing filamentous nitrogen fixing micro - organisms ? (a) *Crotalaria juncea*
 (b) *Cicer arietinum* (c) *Cycas revoluta* (d) *Casuarina equisetifolia*
- Phylogenetic classification is the most favoured classification because it reflects
 (a) Evolutionary relationships (b) Comparative cytology
 (c) Comparative Anatomy (d) Number of flowers produced
- The taxonomy which involves the similarities and dissimilarities among the immune system of different taxa is termed as
 (a) Chemotaxonomy (b) Serotaxonomy
 (c) Molecular systematics (d) Numerical taxonomy
- The botanist who introduced binomial system is (a) Carolus Linnaeus
 (b) Dalton Hooker (c) Adolf Engler (d) Gaspard Bauhin
- The floral formula of *Clitoria ternatea*
 (a) $Br, Ebrl, \oplus, \overset{\curvearrowright}{\underset{\curvearrowleft}{K(5) C(5) A5 G(2)}}$ (b) $Br, Brcl, \oplus, \overset{\curvearrowright}{\underset{\curvearrowleft}{K(5) C5, A(a) + 1, G1}}$
 (c) $Br Ebrl, \oplus, \overset{\curvearrowright}{\underset{\curvearrowleft}{K, P3+3 A3+3 G(3)}}$ (d) $Br, Brcl, \oplus, \overset{\curvearrowright}{\underset{\curvearrowleft}{K(4) C(4) A+ G(2)}}$
- The floral formula of *Ixora coccinea*
 (a) $Br, Brcl, \oplus, \overset{\curvearrowright}{\underset{\curvearrowleft}{K(4) C(4) A4 G(2)}}$ (b) $Br Brcl, \oplus, \overset{\curvearrowright}{\underset{\curvearrowleft}{K(5) C5 A(D) G(5)}}$
 (c) $Br, Brcl, \oplus, \overset{\curvearrowright}{\underset{\curvearrowleft}{K2+2 C2 + 2 A2+4 G(2)}}$ (d) $Br, Ebrl, \oplus, \overset{\curvearrowright}{\underset{\curvearrowleft}{K, P3+3 A(3) G0}}$
- The use of an alkaloid atropine is
 (a) to treat asthma (b) to treat nervous disorder
 (c) to treat cough (d) for relieving muscular pain
- Liliaceae includes about
 (a) 15 genera (b) 90 genera (c) 82 genera (d) 72 genera

[PTO]

- 3 -

BIO - ZOOLOGY (Marks : 25)

3. Tissue Level of organisation 4. Organ and organ systems in Animals

Choose the correct answer :

25 x 1 = 25

- How many abdominal segments are present in male and female cockroaches
(a) 9, 10 (b) 9, 9 (c) 10, 10 (d) 8, 10
- Which of the following does not have circulatory system ?
(a) Earthworm (b) Cockroach (c) Frog (d) Pigeon
- Kidney of frog is
(a) Pronephros (b) Metanephros (c) Archinephros (d) Mesonephros
- Sexually earthworm are (a) Parthenogenic (b) Sexes are separate
(c) Hermaphroditic and self - fertilizing
(d) Hermaphroditic but not self - fertilizing
- The type of vision in cockroach is (a) Two dimensional
(b) Three dimensional (c) Cockroach do not have vision (d) mosaic
- The ciliated epithelium lines the
(a) Digestive tract (b) Skin (c) Gall bladder (d) Trachea
- Prevention of substances leaking across the tissue is provided by
(a) Adhering junction (b) Tight junction
(c) Gap junction (d) Elastic junction
- What type of fibres are found in connective tissue matrix ?
(a) Tubular (b) Collagen (c) Areolar (d) Cartilage
- The main function of the cuboidal epithelium is
(a) Protection (b) Secretion (c) Absorption (d) Both (b) and (c)
- Non shivering thermogenesis neonates produces heat through
(a) Yellow fat (b) Brown fat (c) White fat (d) Colourless fat
- Which of the following blood cells help in blood coagulation
(a) Thrombocytes (b) Lymphocytes (c) RBCs (d) Basophils
- Which one of the following plasma proteins is involved in the coagulation of blood
(a) globulin (b) albumin (c) Fibrinogen (d) Serum amylase
- Skin is (a) Cuboidal epithelium (b) Columnar epithelium
(c) Pseudostratified epithelium (d) Stratified epithelium
- Which of the following is not a connecting tissue
(a) Blood (b) Nerve (c) Bone (d) Lymph
- The body cells in cockroach discharge their nitrogenous waste in the haemolymph mainly in the form of
(a) Potassium urate (b) Urea (c) Calcium carbonate (d) Ammonia

- 4 -

- Choose the wrong statement among the following
(a) In earthworm a single male genital pore is present
(b) Setae help in locomotion of earthworms.
(c) Typhlosole is part of the intestine of earthworm
(d) Muscular layer in the body wall of earthworm is made up of only circular muscles.
- The location and numbers of malpighian tubules in periplaneta
(a) Surrounding gizzard eight
(b) At the junction of colon and rectum eight
(c) At the junction of midgut and hindgut about 150
(d) At the junction of foregut and midgut about 150
- Buccopharyngeal respiration in frog
(a) is increased when nostrils are closed
(b) stops when there is pulmonary respiration
(c) is increased when it is catching fly (d) stops when mouth is opened
- The clitellum is a distinct part in the body of earthworm *Lampito mauritii*, it is found in ? (a) Segments 12-13 (b) Segments 13-17
(c) Segments 14-16 (d) Segment 14-17
- Transitional epithelium occurs in
(a) Ureter / Urinary bladder (b) Blood vessels (c) Trachea (d) Kidney
- Multi-lobed nucleus and granular cytoplasm are characteristics of which of the WBCs
(a) Monocytes (b) Neutrophils (c) Lymphocytes (d) Eosinophils
- Find out the wrong match
(a) Monocytes secrete heparin (b) Eosinophils Allergic response
(c) Basophils secrete histamine and serotonin
(d) Lymphocytes Immune response
- The outer covering of cartilage is called
(a) Perichondrium (b) Peritoneum (c) Periosteum (d) Endosteum
- Fibroblasts macrophages and most cells are present in
(a) Cartilage tissue (b) Adipose tissue
(c) Areolar tissue (d) Glandular epithelium
- The study of tissues is known as
(a) Physiology (b) Ecology (c) Anatomy (d) Histology

XI - STD ONE MARK TEST NO : 3	2018 - 2019	
	XI - Std]	BIOLOGY [TIME : 1.00 Hr (Maximum Marks : 50)
	BIO - BOTANY (Marks : 25)	Unit -3 : Cell biology and biomolecules Chapter : 6, 7, 8

Choose the correct answer :

25 x 1 = 25

- Who invented electron microscope ?
(a) Jansen (b) Edison (c) Landsteiner (d) Knoll and Ruska
- A quantosome is present in
(a) Chloroplast (b) Mitochondria (c) Golgibodies (d) ER
- Sequences of which of the following is used to know the phylogeny
(a) mRNA (b) tRNA (c) rRNA (d) HnRNA
- Major sit for the synthesis of Lipids
(a) Rough ER (b) Smooth ER (c) Centriole (d) Lysosome
- Which Organelle is present in higher number in secretory cell
(a) Dictyosomes (b) Nucleus (c) Mitochondria (d) Chloroplast
- The most basic amino acid is
(a) Histidine (b) Arginine (c) Glycine (d) Glutamine
- Enzymes that catalyse interconversion of optical geometrical or positional isomers are
(a) Ligases (b) Lyases (c) Hydrolases (d) Isomerases
- The correct sequence in cell cycle is (a) G1 - S - G2 - M
(b) S - M - G1 - G2 (c) S - G1 - G2 - M (d) M - G - G2 - S
- In meiosis crossing over is initiated at
(a) Diplotene (b) Leptotene (c) Zygotene (d) Pachytene
- Anastral mitosis is the characteristic feature of (a) Lower animals
(b) Higher animals (c) All living organisms (d) Higher plants
- If mitotic division is restricted in G1 phase of the cell cycle then the condition is known as
(a) S phase (b) G₀ phase (c) G₂ phase (d) M phase
- Centromere is required for
(a) movement of chromosome towards pole (b) transcription
(c) crossing over (d) Cytoplasmic cleavage
- Colchicine prevents the mitosis of the cells at which of the following stage ?
(a) metaphase (b) prophase (c) Anaphase (d) interphase

- 2 -

- Synapsis occur between
(a) two homologous chromosomes (b) mRNA and ribosomes
(c) spindle fibres and centromeres (d) a male and a female gamete
 - The two subunits of ribosomes remain united at critical level of
(a) Calcium (b) Sodium (c) Magnesium (d) Ferrous
 - Match the columns and identify the correct option
(a) Thylakoids - (i) Disc - shaped sacs in Golgi apparatus
(b) Cristae - (ii) Condensed structure of DNA
(c) Cisternae - (iii) Flat membranous sacs in stroma
(d) Chromatin - (iv) Infoldings in mitochondria
- | | | | | |
|-----|-----|-----|----|----|
| | A | B | C | D |
| (a) | iii | iv | ii | i |
| (b) | iv | iii | i | ii |
| (c) | iii | iv | i | ii |
| (d) | iii | i | iv | ii |
- Many cells function properly and divide mitotically even though they do not have
(a) Plasma membrane (b) Cytoskeleton (c) Mitochondria (d) Plastids
 - Polytene chromosomes were observed by
(a) Flemming (b) Waldeyar (c) Balbiani (d) Bridges
 - The percentage of tRNA of the total RNA of the cell is
(a) 15% (b) 5% (c) 80% (d) 88%
 - The diameter of DNA molecule of DNA is
(a) 18Å° (b) 34Å° (c) 20Å° (d) 35Å°
 - The number of chromosome present in the mouse
(a) 16 (b) 46 (c) 30 (d) 40
 - An example of feedback inhibition is
(a) Allosteric inhibition of hexokinase by glucose - 6 - phosphate
(b) Cyanide action of cytochrome
(c) Sulpha drug of folic acid synthesiser bacteria
(d) The inhibition of succinic dyhydrogenase by malonate
 - The paring of homologous chromosomes of meiosis is known as
(a) Bivalent (b) Disjunction (c) Synapsis (d) Synergids
 - In S phase of the cell cycle
(a) Amount of DNA doubles in each cell
(b) Amount of DNA is reduced to half in each cell
(c) Amount of DNA remains same in each cell
(d) Chromosome number is increased

- 3 -

BIO - ZOOLOGY (Marks : 25)

Unit : 3 Chapter : 5, 6, 7

Choose the correct answer :

25 x 1 = 25

- Which of the following human organs is often called the "graveyard" of RBC
(a) Kidney (b) Spleen (c) Pancreas (d) Liver
- What P indicates in ECG ?
(a) End of atrium systole (b) End of ventricle systole
(c) Starting of atrium systole (d) Starting of ventricle systole
- Respiratory movements are controlled by
(a) Cerebellum (b) Cerebrum (c) Crura cerebri (d) Medulla oblongata
- Blood circulation that starts in capillaries and ends in capillaries is called
(a) Hepatic circulation (b) Cardiac circulation
(c) Portal circulation (d) None of these
- SARs is caused by a variant of
(a) *Pneumococcus pneumonia* (b) Common cold by corona virus
(c) Asthma (d) Bronchitis
- Both of the crown and root of a teeth is covered by a layer of bony hard substance called
(a) Cementum (b) Enamel (c) Dentin (d) Bony Socket
- Largest gland in human body is
(a) Pancreas (b) Pituitary (c) Thyroid (d) Liver
- Asthma is caused due to
(a) Infection of lungs (b) infection of nose
(c) damage of diaphragm (d) Bleeding in pleural cavity
- The respiratory structures of insects are
(a) tracheal tubes (b) gills (c) green glands (d) lungs
- The Tidal volume of a normal person is
(a) 800 ml (b) 1200 ml (c) 1100 - 1200 ml (d) 500 ml
- Vital capacity is
(a) $TV + IRV$ (b) $TV + IRV + ERV$ (c) $RV + ERV$ (d) $TV + ERV$
- Which of the following WBCs are found in more numbers ?
(a) Eosinophil (b) Basophil (c) Neutrophil (d) Monocyte
- A person having both antigen A and antigen B on the surface of RBCs belongs to blood group
(a) AB (b) A (c) B (d) O

- 4 -

- Which one of the following plasma proteins is involved in the coagulation of blood ?
(a) Globulin (b) Albumin (c) Serum amylase (d) Fibrinogen
- A patient's chart reveals that he has a cardiac output of 7500 mL per minute and a stroke volume of 50 mL what is his pulse rate [in beats / min] ?
(a) 100 (b) 50 (c) 150 (d) 400
- Which of the following is not the function of liver ?
(a) Detoxification (b) Production of insulin
(c) Storage of glycogen (d) Production of bile
- Which one is incorrectly matched ?
(a) Pepsin - stomach (b) Trypsin - Intestine (c) Renin - Liver (d) Ptyalin - mouth
- The sphincter of Oddi guards
(a) Cystic duct (b) Pancreatic duct (c) Hepatopancreatic duct (d) Common bile duct
- Match column I with column II and choose the correct option

Column I	Column II
(P) Small intestine	(i) 23 cm
(Q) Large intestine	(ii) 4 meter
(R) Oesophagus	(iii) 12.5 cm
(S) Pharynx	(iv) 1.5 meter

 (a) (P-ii), (Q-iv) (R-i), (S-iii) (b) (P-iv), (Q-ii), (R-i), (S-iii)
 (c) (P-i), (Q-iii), (R-ii), (S-iv) (d) (P-iii), (Q-i), (R-ii), (S-iv)
- First step in digestion of fat is
(a) Enzyme action (b) Storage in adipose tissue
(c) Absorption by lacteals (d) Emulsification
- In small intestine, active absorption occurs in case of
(a) Amino acids (b) Glucose (c) Na^+ (d) All three above
- Absorption of glycerol, fatty acids and monoglycerides takes place by
(a) Colon (b) Walls of stomach
(c) Lymph vessels within villi (d) Capillaries within villi
- During inspiration the diaphragm
(a) Contracts and flattens (b) Expands (c) Unchanged (d) Relaxes to become dome-shaped
- Intercostal muscles are found between the
(a) Vertebral column (b) Sternum (c) Glottis (d) Ribs
- Which of the following substances in tobacco smoke damage the gas exchange system ?
(a) nicotine and tar (b) Carbon monoxide and nicotine
(c) Carbon monoxide and carcinogens (d) carcinogens and tar

XI - STD ONE MARK TEST NO : 4	2018 - 2019	
	XI - Std]	BIOLOGY [TIME : 1.00 Hr
	(Maximum Marks : 50)	
	BIO-BOTANY (Marks : 25)	Unit -4 : Plant Anatomy
	9. Tissue and Tissue System 10. Secondary Growth	

Choose the correct answer :

25 x 1 = 25

- The function of sieve tubes are believed to be controlled by
(a) Phloem parenchyma (b) Companion cells
(c) Albuminous cells (d) Sieve cells
- Ribosomes were first observed by (a) George palade
(b) A.Kolliken (c) A.F.U. Schimper (d) Christian de Duve
- In Gymnosperms, the activity of sieve tubes are controlled by
(a) Nearby sieve tube members (b) Phloem parenchyma cells
(c) Nucleus of albuminous cells (d) Nucleus of companion cell
- Refer to the given figure and select the correct statement
(i) A, B, and C are histogen of shoot apex
(ii) A Gives rise to medullary rays
(iii) B Gives rise to cortex
(iv) C gives rise to epidermis
(a) (i) and (ii) only (b) (ii) and (iii) only
(c) (i) and (iii) only (d) (iii) and (iv) only
- The type of parenchyma seen in the petioles of banana and canna
(a) Storage (b) Stellate (c) Chlorenchyma (d) Arenchyma
- The inner most layer the cortex is
(a) epidermis (b) rhizodermis (c) endodermis (d) pericycle
- Isobilateral leaf is present in
(a) Cocurbita (b) Sunflower (c) Bean (d) Grass
- The lameller collenchyma is seen in the hypodermis of
(a) Datura (b) Ipomoea (c) Gelianthus (d) Nicotiana
- The type of meristematic tissue found in the nodal region of stem
(a) Apical meristem (b) Lateral meristem
(c) Simple tissue (d) Intercalary meristem
- The plant having multiple perforation plate in their vessels
(a) Liriodendron (b) Mangifera (c) Gnetum (d) Neprolepis
- The common Bottle cork is a product of
(a) Dermatogen (b) Phellogen (c) Xylem (d) Vascular cambium



- 2 -

- Usually the monocotyledons do not increase their girth because
(a) They possess actively dividing cambium (b) Ceases activity of cambium
(c) They do not possess actively dividing cambium (d) All are correct
- What is the fate of primary xylem in a dicot root showing extensive secondary growth ?
(a) It is retained in the center of the axis (b) may or may not get crushed
(c) It gets crushed (d) It gets surrounded by primary phloem
- The father of plant Anatomy
(a) Esau (b) Nehemiah (c) Linnaeus (d) Leeuwenbock
- The pith is also known as
(a) Medulla (b) Cortex (c) Supporting tissue (d) Hypodermis
- In mature sieve elements the pores in the sieve plate are blocked by a substances called
(a) Tylosus (b) Petmose (c) Silica (d) Callose
- The chief water conducting elements in Gnetum are
(a) Sieve tubes (b) tracheids (c) Vessels (d) Xylem parenchyma
- Libriform fibres refer to (a) Tracheids (b) Phloem fibres
(c) Xylem fibres (d) Sclerenchyma fibres
- Which one of the following is not correct statement ?
(a) Sieve tubes occur in angiosperms (b) Sieve cells occur in gymnosperms
(c) Vessels are present in Gnetum (d) Sieve tubes are absent in angiosperms
- The tissue mainly concerned with photosynthetic process in
(a) Epidermis (b) Palisade parenchyma
(c) Spongy parenchyma (d) Guard cells
- The lateral roots are said to be endogenous in origin because they arise from (a) Cortex (b) Pith (c) Pericycle (d) Endodermis
- Nucleus is absent in (a) Matured sieve tubes
(b) Meristematic cells (c) Companion cells (d) Parenchyma cells
- An example for dorsiventral leaf is
(a) Grass (b) Sunflower (c) Sugarcane (d) Paddy
- B1 collateral vascular bundles are seen in the numbers of
(a) Cucurbitaceae (b) Euphorbiaceae (c) Solanaceae (d) Musaceae
- The root hairs are produced from
(a) rhizodermis (b) trichomes (c) accessory cells (d) Trichoblasts

[PTO]

- 3 -

BIO - ZOOLOGY (Marks : 25)

Unit III, Cha : 8 Excretion Unit : II, Chap : 8 Locomotion and Movement

Choose the correct answer :

25 x 1 = 25

- The end product of excretion cycle is
(a) Carbon dioxide (b) Urea (c) Uric acid (d) Ammonia
- Mulphighian tubules remove excretory products from
(a) Mouth (b) Alimentary canal (c) Oesophagus (d) Haemolymph
- Podocytes are the cells present on the
(a) Inner wall of Bowman's capsule (b) Outer wall of Bowman's capsule
(c) Neck of nephron (d) Wall glomerular capillaries
- Kidney stones are produced due to deposition of uric acid and
(a) Silicates (b) Calcium oxalate (c) minerals (d) Calcium carbonate
- Identify the wrong match
(a) Bowman's capsule - Glomerular filtration
(b) PCT - Absorption of glucose
(c) Henle's loop - Concentration of urine
(d) DCT - Absorption of Na^+ and K^+ ions
- Normal urea level in human blood is about
(a) 20-25 gms./100 ml (b) 17-25 gms./100 ml
(c) 17-21 gms./100 ml (d) 25-25 gms./100 ml
- Acetabulum is located in
(a) Hip bone (b) Collar bone (c) Shoulder bone (d) Thigh bone
- Inflammation of joints due to accumulation of uric acid crystals is called as
(a) myosinoma glands (b) osteoporosis (c) osteomalacia (d) Gout
- ATPase enzyme needed for muscle contraction is located in
(a) actinin (b) Myosin (c) Actin (d) Troponin
- Name of the joint present between the atlas and axis is
(a) Synovial joint (b) Saddle joint (c) Hinge joint (d) Pivot joint
- The hormone which helps in the reabsorption of water in kidney tubules is
(a) Antidiuretic hormone
(b) Cholecystokinin (c) Angiotensin (d) Pancreozymin
- Aldosterone acts at the distal convoluted tubule and collecting duct resulting in the absorption of water through
(a) Spectrin (b) Aquaporins (c) GLUT (d) Chloride channels

- 4 -

- Concentration of urine depends upon which part of the nephron
(a) Bowman's capsule (b) P.C.T (c) Length of Henle's loop
(d) Network of capillaries arising from glomerulus
- The pigment present in the muscle fibre to store oxygen is
(a) Troponin (b) Myosin (c) Actin (d) Myoglobin
- The protein present in the thick filament is
(a) Myosin (b) Actin (c) Pectin (d) Leucin
- The pointed portion of the elbow is (a) Glenoid cavity
(b) Acromion process (c) Olecranon process (d) Symphysis
- Appendicular skeleton is
(a) Vertebrae (b) Skull and vertebral column
(c) Sternum and their ribs (d) Ribs and Sternum
- Muscles are formed by
(a) Leucocytes (b) Myocytes (c) Osteocytes (d) Lymphocytes
- The functional unit of a muscle fibre is
(a) Sarcolemma (b) Myosin (c) Actin (d) Sarcomere
- Each skeletal muscle is covered by
(a) Peritendrium (b) Endomysium (c) Epimysium (d) Epitendrium
- The region between two successive I discs is called a
(a) Sarcomere (b) Microtubule (c) Myoglobin (d) Actin
- The protein present in the thin filament is
(a) myosin (b) pectin (c) Actin (d) Leucin
- Glomerular filtrate contains
(a) Plasma without sugar (b) Blood without blood cells and proteins
(c) Blood without urea (d) Blood with proteins but without cells
- If Henle's loop were absent from mammalian nephron, which one of the following is to be expected ? (a) The Urine will be more dilute
(b) There will be no urine formation (c) The urine will be more concentrated
(d) There will be hardly any change in the quality and quantity of urine formed
- A person who is on a long hunger strike and is surviving only on water, will have
(a) Macula densa cells (b) Less urea in his urine
(c) More sodium in his urine (d) Less amino acids in his urine

11-06-2018 - 09:01:14

XI - STD ONE MARK TEST NO : 5	2018 - 2019	
	XI -Std]	BIOLOGY [TIME : 1.00 Hr (Maximum Marks : 50)
	BIO - BOTANY (Marks : 25)	Unit V - Plant Physiology Cha : 11. to 15

Choose the correct answer : **25 x 1 = 25**

- What type of transpiration is possible in the Xerophyte opuntia ?
(a) Stomatal (b) Lenticular (c) Cuticular (d) All the above
- In a fully turgid cell
(a) $DPD = 0 \text{ atm}$; $OP = 10 \text{ atm}$ $TP = 10 \text{ atm}$
(b) $DPD = 10 \text{ atm}$; $OP = 5 \text{ atm}$ $TP = 10 \text{ atm}$
(c) $DPD = 0 \text{ atm}$; $OP = 5 \text{ atm}$ $TP = 10 \text{ atm}$
(d) $DPD = 20 \text{ atm}$; $OP = 20 \text{ atm}$ $TP = 10 \text{ atm}$
- Stomata of a plant open due to
(a) Influx of Cl^- (b) Influx of OH^- (c) Influx of K^+ (d) Efflux of K^+
- Pulsation theory was proposed by
(a) Strasburger (b) Stephen Hales (c) J.C. Bose (d) Godlewski
- Exanthema in citrus caused by the deficiency of
(a) Copper (b) Boron (c) Manganese (d) Iron
- The element which is not remobilized
(a) Phosphorous (b) Calcium (c) Potassium (d) Sulphur
- Match the correct combination

	Minerals	Role
A	molybdenum	1) Chlorophyll
B	Zinc	2) Methionine
C	Magnesium	3) Auxin
D	Sulphur	4) Nitrogenase

(a) A - 1, B - 3, C - 4, D - 2 (b) A - 4, B - 3, C - 1, D - 2
(c) A - 2, B - 1, C - 3, D - 4 (d) A - 4, B - 2, C - 1, D - 3
- Which chlorophyll molecule doesnot have a phytol tail
(a) Chl - C (b) Chl - a (c) Chl - b (d) Chl - d
- For every CO_2 molecule entering the C_3 Cycle, the number of ATP & NADPH required (a) 2 ATP + 2 NADPH
(b) 2ATP + 3NADPH (c) 3ATP + 2NADPH (d) 3ATP + 3NADPH
- The compound which links glycolysis and Krebs cycle is
(a) succinic acid (b) acetyl COA (c) Pyruvic acid (d) Citric acid
- The number of ATP molecules formed by complete oxidation of one molecule of pyruvic acid is
(a) 14 (b) 12 (c) 15 (d) 13

- During oxidation of two molecules of cytosolic NADH + H^+ number of ATP molecules produced in plants are
(a) 3 (b) 6 (c) 4 (d) 8
- Seed dormancy allows the plants to (a) develop healthy seeds
(b) reduce viability (c) prevent deterioration of seeds
(d) Overcome unfavourable climatic conditions
- In unisexual plants sex can be changed by the application of
(a) Ethanol (b) Cytokinins (c) Auxin (d) ABA
- If the diameter of the pulley is 6 inches length of pointer is 10 inches and distance travelled by pointer is 5 inches. Calculate the actual growth in length of plant
(a) 3 inches (b) 1.5 inches (c) 6 inches (d) 30 inches
- Ripening of fruits are enhanced by
(a) Absciscic acid (b) Cytokinin (c) Ethylene (d) Gibberellin
- The respiratory quotient of glucose in anaerobic respiration
(a) 1.33 (b) α (c) 1 (d) 0.36
- Generally a chloroplast contains grana.
(a) 40 - 60 (b) 10 - 20 (c) 20 - 40 (d) 60 - 100
- Which of the following is a short day plant
(a) Wheat (b) Sunflower (c) Tobacco (d) Maize
- Which of the following is referred to as EMP pathway ?
(a) Krebs cycle (b) Electron transport chain
(c) Pentose phosphate pathway (d) Glycolysis
- Oxygen is evolved during photosynthesis can be demonstrated by
(a) Ganong's light screen experiment (b) Test tube and funnel experiment
(c) Ganong's respiroscope (d) Lever auxonometer
- The term vernalization was first introduced by
(a) T.D.Lysenko (b) Miller (c) Dickens (d) Butleretal
- The non - cyclic electron transport is also called as
(a) Y - Scheme (b) Photolysis (c) M - Scheme (d) Z - Scheme
- Growth in length OS plants can be measured by
(a) Ganong's potometer (b) Lever auxanometer
(c) Respiroscope (d) Ganong's light screen
- Select the wrong statement from the following
(a) Formative phase of the cells retain the capability of cell division
(b) In elongation phase development of central vacuole takes place
(c) In maturation phase, the cells grow further
(d) In maturation phase thickening and differentiation takes place. PTO

- 3 -

BIO - ZOOLOGY (Marks : 25)

Unit IV. Chap : 10, 11 to Unit V : Chap : 12

25 x 1 = 25

Choose the correct answer :

- Induced breeding technique is used in
(a) Marine fishery (b) Inland fishery
(c) Capture fishery (d) Culture fishery
- Silk is obtained from (a) *Artacus ricini* (b) *Nosema bombycis*
(c) *Laccifer lacca* (d) *Attacus mylitta*
- Isinglass is used in (a) Preparation (b) Distillation of wines
(c) Clearing of wines (d) Preservation of wines
- Pearl oyster belongs to the class
(a) *Gastropoda* (b) *Scaphapoda* (c) *Cephalopoda* (d) *Pelecypoda*
- Prawn belongs to the class
(a) *Annelida* (b) *Crustacea* (c) *Scaphapoda* (d) *Echinodermata*
- Which one of the following is not an endemic species of earthworm ?
(a) *Perionyx* (b) *Lampito* (c) *Eudrillus* (d) *Octochaetona*
- Match the following

1. <i>Bombyx mori</i>	- (a) Champa	- (i) Muga
2. <i>Antheraea asamensis</i>	- (b) Mulberry	- (ii) Eri
3. <i>Antheraea mylitta</i>	- (c) Arjun	- (iii) Tassar
4. <i>Attacus ricini</i>	- (d) Castor	- (iv) Mulberry

 (a) 1 - b - IV (b) 2 - a - i (c) 3 - C - iii (d) 4 - d - ii (e) All options are correct
- Rearing of honey bee is called
(a) Sericulture (b) Lac culture (c) Apiculture (d) Vermiculture
- Which of the statement regarding Lac insect is TRUE ?
(a) The male lac insect is responsible for large scale production of lac
(b) A microscopic resinous crawling scale insect
(c) Inserts its proboscis into plant tissue suck juices and grows
(d) Secretes lac from the hind end of body
- Which of the following gland is related with immunity
(a) Pineal (b) Adrenal (c) Parathyroid (d) Thymus
- Hypersecretion of GH in children leads to
(a) Gigantism (b) Cretinism (c) Graves disease (d) Tetany
- The maintenance of constant internal environment is referred as
(a) Homeostasis (b) Co - ordination
(c) Regulation (d) Hormonal control
- Iodised salt is essential to prevent
(a) Rickets (b) Scurvy (c) Acromegaly (d) Goitre

- 4 -

- Serum calcium level is regulated by
(a) FSH (b) Thyroid and parathyroid (c) Pancreas (d) Thyroxine
- Spermatogenesis in mammalian testes is controlled by
(a) Luteinising hormone (b) Prolactin
(c) Follicle stimulating hormone (d) GH and prolactin
- The structure which connects the hypothalamus with anterior lobe of pituitary gland is the (a) Hypophysial portal system
(b) Axons of neurohypophysis (c) Dendrites of neuro hypophysis
(d) Bands of white fibers from cerebellar region
- Which of the given option shows all wrong statements for thyroid gland ...
(i) It inhibits process of RBC formation
(ii) It helps in maintenance of water and electrolytes
(iii) Its more secretion can reduce blood pressure
(iv) It Stimulates osteoblast
(a) (i) and (ii) (b) (iii) and (iv) (c) (i) and (iv) (d) (i) and (iii)
- Which of the following pairings is correct ?
(a) Sensory nerve - afferent (b) Sensory nerve - ventral
(c) motor nerve - dorsal (d) motor nerve - afferent
- Which structure in the ear converts pressure waves to action potentials
(a) Organ corti (b) Tympanic membrane
(c) Oval window (d) Semicircular canal
- Examine the diagram of the two cell types A and B given below and select the correct options
(a) Cell - A is the rod cell found evenly all over retina
(b) Cell - A is the cone more concentrated in the fovea centralis
(c) Cell - A is sensitive to bright light intensities
(d) Cell - B is concerned with colour vision in bright light
- The respiratory centre is present in the
(a) Cerebellum (b) Medulla oblongata (c) Thalamus (d) Hypothalamus
- Which part of the human brain is concerned with regulation of body temperature
(a) Medulla oblongata (b) Hypothalamus (c) Cerebellum (d) Thalamus
- The abundant intracellular cation is
(a) H^+ (b) Na^+ (c) K^+ (d) Ca^{++}
- Which of the following cranial nerve controls the movement of eye ball
(a) Optic nerve (b) Olfactory nerve (c) Vagus nerve (d) Trochlear nerve
- During synaptic transmission of nerve impulse, neurotransmitter P is released from synaptic vesicles by the action of ions Q. Choose the correct P and Q
(a) P = Acetylcholine Q = Ca^{++} (b) P = Acetylcholine Q = Na^{++}
(c) P = GABA Q = Na^+ (d) P = Cholinesterase Q = Ca^{++}



XI - STD -ONE MARK TEST - KEYS, 2018 - 2019

BIOLOGY

KEYS TEST NO : 1

- BIO-BOTANY :** 1. (d) 2. (a) 3. (b) 4. (c) 5. (a) 6. (c) 7. (d) 8. (a) 9. (b) 10. (c)
 11. (d) 12. (c) 13. (a) 14. (d) 15. (c) 16. (a) 17. (d) 18. (b) 19. (a) 20. (d)
 21. (b) 22. (a) 23. (b) 24. (c) 25. (b)
- BIO-ZOOLOGY :** 1. (c) 2. (c) 3. (a) 4. (c) 5. (a) 6. (d) 7. (c) 8. (d) 9. (c) 10. (b)
 11. (c) 12. (a) 13. (a) 14. (d) 15. (d) 16. (c) 17. (d) 18. (c) 19. (b) 20. (c)
 21. (a) 22. (d) 23. (a) 24. (d) 25. (a)

KEYS TEST NO : 2

- BIO-BOTANY:** 1. (a) 2. (d) 3. (b) 4. (c) 5. (a) 6. (b) 7. (c) 8. (b) 9. (c) 10. (b)
 11. (d) 12. (d) 13. (a) 14. (d) 15. (d) 16. (d) 17. (a) 18. (c) 19. (a) 20. (b)
 21. (d) 22. (b) 23. (a) 24. (d) 25. (a)
- BIO-ZOOLOGY :** 1. (c) 2. (a) 3. (d) 4. (d) 5. (d) 6. (d) 7. (b) 8. (b) 9. (d) 10. (b)
 11. (a) 12. (c) 13. (d) 14. (b) 15. (a) 16. (c) 17. (c) 18. (a) 19. (d) 20. (a)
 21. (b) 22. (a) 23. (a) 24. (c) 25. (d)

KEYS TEST NO : 3

- BIO-BOTANY:** 1. (d) 2. (a) 3. (c) 4. (b) 5. (a) 6. (b) 7. (c) 8. (a) 9. (d) 10. (d)
 11. (b) 12. (a) 13. (a) 14. (a) 15. (c) 16. (c) 17. (d) 18. (c) 19. (a) 20. (c)
 21. (d) 22. (a) 23. (c) 24. (b) 25. (d)
- BIO-ZOOLOGY :** 1. (b) 2. (c) 3. (d) 4. (c) 5. (b) 6. (a) 7. (d) 8. (a) 9. (a) 10. (d)
 11. (b) 12. (c) 13. (a) 14. (d) 15. (b) 16. (b) 17. (c) 18. (c) 19. (b) 20. (d)
 21. (b) 22. (c) 23. (a) 24. (d) 25. (d)

KEYS TEST NO : 4

- BIO-BOTANY:** 1. (b) 2. (a) 3. (c) 4. (c) 5. (b) 6. (c) 7. (d) 8. (c) 9. (d) 10. (a)
 11. (b) 12. (c) 13. (c) 14. (b) 15. (a) 16. (d) 17. (c) 18. (c) 19. (d) 20. (b)
 21. (c) 22. (a) 23. (b) 24. (a) 25. (d)
- BIO-ZOOLOGY :** 1. (b) 2. (d) 3. (a) 4. (b) 5. (b) 6. (c) 7. (a) 8. (d) 9. (b) 10. (d)
 11. (a) 12. (b) 13. (c) 14. (d) 15. (a) 16. (a) 17. (c) 18. (b) 19. (d) 20. (c)
 21. (a) 22. (c) 23. (b) 24. (a) 25. (b)

KEYS TEST NO : 5

- BIO-BOTANY:** 1. (c) 2. (a) 3. (c) 4. (c) 5. (a) 6. (b) 7. (b) 8. (a) 9. (c) 10. (b)
 11. (c) 12. (b) 13. (d) 14. (d) 15. (b) 16. (c) 17. (c) 18. (a) 19. (c) 20. (d)
 21. (b) 22. (a) 23. (d) 24. (b) 25. (c)
- BIO-ZOOLOGY :** 1. (b) 2. (a) 3. (c) 4. (d) 5. (b) 6. (c) 7. (e) 8. (c) 9. (a) 10. (d)
 11. (a) 12. (a) 13. (d) 14. (b) 15. (c) 16. (a) 17. (b) 18. (d) 19. (a) 20. (d)
 21. (b) 22. (b) 23. (c) 24. (a) 25. (a)