

**Class : 11**Register  
Number**REVISION EXAMINATION - 2023**

Time Allowed : 3.00 Hours]

**BIOLOGY**

[Max. Marks : 70

Part - I (Bio-Botany) (Marks : 35)

## Section - I

**Note. (i) Answer All the questions.****8×1=8****(ii) Choose the most appropriate answer from the given four alternatives and write the option code and corresponding answer.**

- are called as Club fungi.  
a) Ascomycetes      b) Zygomycetes      c) Basidiomycetes      d) Deuteromycetes
- The fruit wall is differentiated into leathery epicarp with oil glands is -----  
a) Hesperidium      b) Pome      c) Ballista      d) Peppo
- takes part in photo respiration and associated with glycolate metabolism.  
a) Mitochondria      b) Lysosomes      c) Ribosomes      d) Peroxisomes
- Assertion (A) :** Increase in proton gradient inside lumen responsible for ATP synthesis.  
**Reason (R) :** Oxygen evolving complex of PSI located on thylakoid membrane facing stroma releases H<sup>+</sup> ions.  
a) Both (A) and (R) are True      b) (A) is True, (R) is False.  
c) (R) is True, (A) is False      d) Both (A) and (R) are false.
- Condensation of chromosomes takes place in .....  
a) Leptotene      b) Zygotene      c) Pachytene      d) Diplotene
- Identify correct match**
  - Die back disease of Citrus – (i) Mo
  - Whip tail disease – (ii) Zn
  - Brown heart of turnip – (iii) Cu
  - Little leaf – (iv) B

a) 1 (iii), 2 (ii), 3 (iv), 4 (i)      b) 1 (iii), 2 (i), 3 (iv), 4 (ii)  
c) 1 (i), 2 (iii), 3 (ii), 4 (iv)      d) 1 (iii), 2 (iv), 3 (ii), 4 (i)
- The water potential of pure water is  
a) Less than zero      b) more than zero but less than one  
c) More than one      d) Zero
- Which of the following reaction is not involved in Kerb's cycle.  
a) Shifting of phosphate from 3C to 2C  
b) Splitting of fructose 1,6 bisphosphate into two molecules of 3C compounds  
c) Dephosphorylation from the substates      d) All of these

**SECTION – II****II. Answer any four of the following questions.****4×2=8**

- Bryophytes need water for fertilization. Justify your answer
- Differentiate between racemose and cymose.
- List out the functions of cell wall.
- What is the importance of studying growth rings?
- Define Photoperiodism
- What is Guttation?

**SECTION – III****III. Answer any three of the following questions including. Q.No.18 is compulsory.****3×3=9**

- Write the similarities and differences between Phylloclade and Cladode
- Write short notes on Storage roots.
- Describe the Structure of Stomata
- Write the physiological effects of Cytokinin
- Draw neat labelled diagram of T.S. of Dicot leaf.

**SECTION – IV****IV. Answer all the questions.****2×5=10**

- Explain the steps involved in Gram Staining. (OR)
  - Give the floral characters of Allium cepa.
- Why is meiosis essential in sexually reproducing Organisms.  
ii) Differentiate between S-phase and G<sub>2</sub>- phase. (OR)
  - Draw Krebs's cycles or TCA cycle (Flow Chart only)

**PART – II ( BIO-ZOOLOGY) (Max. Marks: 35)**

**SECTION – A**

**I. Choose the correct answer.**

**8x1=8**

- The cross between male lion and female tiger results in production of .....  
a) Hinny                      b) Mule                      c) Tigon                      d) Liger
- Choose the wrong statement among the following  
a) In earthworm, a pair of male genital pore is present  
b) Setae helps in locomotion of earthworms  
c) Muscular layer in the body wall of earthworms is made up of circular muscles and longitudinal muscles  
d) Typhlosole is part of the intestine of earthworm.
- Which acts as a reflex centre for vision and hearing?  
a) Emotional brain              b) Brain stem              c) Mid brain              d) Corpora quadrigemina
- Assertion (A)** : Nuptial flight is a unique flight taken the queen bee followed by several drones.  
**Reason (R)** : The queen bee produces a chemical substance called pheromone. The drones in that area are attracted to the pheromone and then mating takes place.  
a) Both (A) and (R) are True                      b) (A) is True, (R) is False.  
c) (R) is True, (A) is False                      d) Both (A) and (R) are false.
- In human, the glomerular hydrostatic pressure is estimated to be .....  
a) 60mm/Hg                      b) 55mm/Hg                      c) 110mm/Hg                      d) 75mm/Hg
- Match the Column I with Column II and choose the correct answer**  

Column I	Column II
1. Small Intestine	- (i) Largest factory
2. Pancreas	- (ii) Absorption of water
3. Liver	- (iii) Carrying electrolytic solution
4. Colon	- (iv) Digestion and absorption
a) 1 (iv), 2 (iii), 3 (i), 4 (ii)	b) 1 (iii), 2 (ii), 3 (i), 4 (iv)
c) 1 (iv), 2 (iii), 3 (ii), 4 (i)	d) 1 (ii), 2 (iv), 3 (iii), 4 (i)
- The mouth parts of cockroaches are directed downwards so it is .....  
a) Hypognathous              b) Mandibulate              c) Orthopterus              d) Prothoracic
- Which character is not included in Cnidarians?  
a) The polyp forms are sessile and cylindrical  
b) The medusa are umbrella shaped and free swimming  
c) Reproduce asexually by fragmentation and sexually by the formation of gametes.  
d) Exhibit alternation of generations in their life cycle (Metagenesis).

**SECTION – II**

**II. Answer any four of the following questions.**

**4x2=8**

- Define cladogram.
- Some epithelia are Pseudostratified. Give reason
- What is Renal Failure. Mention its types
- Distinguish between Frog and Toad
- Write the role of Oestrogen in Ovulation.
- Write the advantages of artificial insemination

**SECTION – III**

**III. Answer any 3 of the following questions including Q.No.19 which is compulsory.**

**3x3=9**

- List three features that characterise bony fishes.
- Write the rules of Nomenclature.
- Describe the Origin and conduction of heart beat.
- Pancreas is an Endocrine gland. Justify your answer.
- Draw and label the structure of Neuron

**SECTION – IV**

**IV. Answer in Detail**

**2x5=10**

- a) Enumerate the characters of Phylum Annelida.  
(OR)  
b) Explain how digestion takes place in small intestine.
- a) Explain the mechanism of muscle contraction (Flow chart).  
(OR)  
b) Describe the life cycle of Bombyx mori.