

<b>SECOND REVISION TEST - 2024</b>	<b>11 - STD</b>	
<b>BIOLOGY</b> YouTube/ Akwa Academy	Marks <b>70</b>	Time <b>3.00 Hrs.</b>

**PART - I (Bio-Botany) Marks : 35**

8 x 1 = 8

**I. Answer all the questions.**

- Root butters are seen in  
a) Bombax      b) Neem      c) Banyan      d) Mango
- Identify the true statements regarding light reaction of photosynthesis  
i) splitting of water molecule is associate with PS II  
ii) only PS I involved in the formation of NADPH + H<sup>+</sup>.  
iii) The reaction centre of PS I is chlorophyll- a with absorption peak at 700 nm.  
iv) The reaction centre of PS II is chlorophyll-a with absorption peak at 680 nm.  
a) i and ii only      b) i, ii and iv only      c) i, iii and iv only      d) All the above
- Geocarpic fruit found in  
a) brassicaceae      b) Fabaceae      c) Asteraceae      d) Solanaceae
- Formation of new chemical bonds using ATP as a source of energy is  
a) iscomerase      b) Lyase      c) Ligase      d) Hydrolase.
- Select the correct matching.  
a) Food plant - Colchichum lateum      b) Medicinal plant - Lilium giganteum  
c) Ornamental plant - Alliumcepa      d) Insecticide - Veratrum album
- The  $\beta - D$  clucose units in cellulose are linked together by  
a) N - acetyl side chains      b) N - acetyl D - glucosamine  
c) 1  $\rightarrow$  3 Linkage      d)  $\beta - (1, 4)$  glycosidic linkage
- The structural elements of cell are  
a) C,H,O,N      b) N,P,K,Ca      c) Ca, Mg, K      d) Ca, Mg, Fe, O
- The diploid number of chromosome for an angiosperm is 16, the number of chromosome in its endosperm would be  
a) 8      b) 48      c) 16      d) 24

**II. Answer any four questions.**

4 x 2 = 8

- Which phytohormone is known as the stress hormone and why?
- Why is the respiratory quotient of anaerobic respiration infinity?
- Draw the diagram and label the parts of conjoint, biocollateral and open vascular bundle.
- What is flagellin?
- Write any two needs for cladistics.
- What is assimilatory roots? given an example.

**III. Answer any three questions. Question No. 19 is compulsory.**

3 x 3 = 9

- Write any three importance of Mycorrhizae.
- Explain the different types of plasmolysis seen in plant cells.
- Describe cyathium inflorescence with neat diagram.
- What is called as 'suicidal bags'? Write any two functions of them.
- Give the molecular structure of 'energy currency of the cell'.

**IV. Answer all the questions.**

2 x 5 = 10

- a) Draw the outline of Bentham and Hooker system of classification.  
(OR)  
b) i) What is the term stele referred to?  
ii) Explain the types of protostele in pteridophytes with diagrams.
- a) Describe the structure of Ganong's potometer with a neat diagram.  
(OR)  
b) What is photoperiodism? Describe the types of plants based on photoperiodism with suitable exmples.

## I. Answer all the questions.

8 × 1 = 8

- Metameric segmentation is the main feature of
  - Annelida
  - Echmodermata
  - Arthropoda
  - Coelenterata
- Breathing is controlled by
  - Cerebrum
  - Medulla oblongata
  - Cerebellum
  - Pons
- An unconscious patient is rushed into the emergency room and it needs a fast blood transfusion. Because there is no time to check her medical history or determine her blood type, Which type of blood should you as her doctor, give her?
  - A<sup>-</sup>
  - AB
  - O<sup>+</sup>
  - O<sup>-</sup>
- In which segment the lateral hearts are situated?
  - 7-13
  - 6-13
  - 6-15
  - 7-15
- Which of the following hormones are secreted by kidney?
  - Renin
  - Gastrin
  - Calcitriol
  - Secretin
  - (ii) and (iii)
  - (i) and (iii)
  - (ii) and (iv)
  - (i) and (iv)
- Knee joint is an example of
  - Synovial joint
  - Pivot joint
  - Saddle joint
  - hinge joint
- The Day and night rhythm is controlled by this hormone.
  - Melanocytes
  - Melanin
  - Melatonin
  - Thyroxine
- Isinglass is used in
  - preparation of wine
  - clearing of wine
  - distillation of wine
  - preservations of wine

## II. Answer any 4 of the following questions.

4 × 2 = 8

- Write the significance of the Goblet cells.
- What is meant by assimilation?
- Write the excretory structures found in the following animal groups of.
  - Platyhelminthes
  - Nematodes
  - Insects
  - Prawn
- Why is the blind spot called so?
- What are the layers of blood vessels?
- What are the advantages of artificial insemination?

## Answer any three of the following questions Q.No. 19 is Compulsory

3 × 3 = 9

- Name some tools for the automated species identification.
- Head of the cockroach is called hypognathous. Why?
- What is cardio pulmonary resuscitation?
- Draw the L.S of human eye and label the parts.
- "Thymus gland act as Endocrine gland as well as Lymphoid organ". Give reasons.

## Answer all the questions.

2 × 5 = 10

- List the general characteristics of the phylum Arthropoda (OR)
  - Describe the process of transport of oxygen.
- Describe the structure of sarcomere. (OR)
  - Give an account of economic importance of fish