

Tsi11Bio

Tenkasi District

Common Half Yearly Examination - December 2024



16-12-24.

Standard 11

Time Allowed: 3.00 Hours

BIOLOGY

Maximum Marks: 70

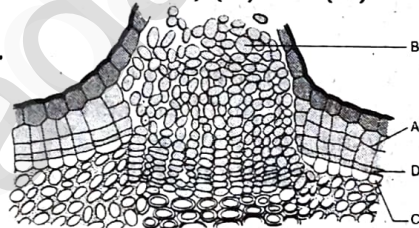
BIO-BOTANY

Marks: 35

8×1=8

I. Answer all the questions:

- Increase in _____ gradient inside lumen responsible for ATP synthesis.
 - Electron
 - Proton
 - lone
 - Water
- Assertion (A)** : Oxidative phosphorylation takes place during the electron transport chain in mitochondria.
Reason (R) : Succinyl CoA is phosphorylated in to succinic acid by substrate phosphorylation.
 - A and R is correct. R is correct explanation of A.
 - A is correct but R is wrong.
 - A and R is correct but R is not the correct explanation of A.
 - A and R is wrong.
- Cytokinin breaks the dormancy of certain light sensitive seeds and induces seed germination in
 - Potato
 - Wheat
 - Maize
 - Tobacco
- The element needed for the production of the amino acids Cystine and Methonine.
 - Sulphur
 - Iron
 - Calcium
 - Magnesium
- Which among the following is correct?
 - Apoplast is fastest and operate in non-living part.
 - Transmembrane route includes vacuole.
 - Symplast interconnect the neary by cell through plasmodesmata.
 - Symplast and transmembrane route are in living part of the cell.
 - (i) and (ii)
 - (i), (ii), (iii), (iv)
 - (ii) and (iii)
 - (iii) and (iv)
- Find A, B, C and D from the following diagram.



- A. Phellem, B. Complementary tissue, C. Phelloderm, D. Phellogen
 - A. Complementary tissue, B. Phellem, C. Phellogen, D. Phelloderm
 - A. Phellogen, B. Phellem, C. Phelloderm, D. Complementary tissue
 - A. Phellogerm, B. Phellem, C. Complementary tissue, Phelleogen
- Bicollateral vascular bundles are present in
 - Cucurbitaceae
 - Lilliaceae
 - Dracena
 - Yucca
 - _____ is the first alkaloid to be found.
 - Morphine
 - Raisin
 - Vinblastin
 - Curcumin

II. Answer any 4 from the following:

4×2=8

- List the duration of the human cell cycle.
- What are the exceptions to cell theory?
- What is Marginal Placentation?
- Differentiate - Radical buds and Foliar buds.
- Bryophytes need water for fertilization - Justify.
- Write any two distinguishing features of Monera.

III. Answer any 3 from the following:

3×3=9

[Q.No. 19 is compulsory]

- What is Allelopathy?
- What are the cell organelles involved in Photorespiration?
- Differentiate Aggregate fruit and Multiple fruit.
- Tabulate any three different shapes of chloroplast in Algae with suitable examples.

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- 19) Explain the diagram displayed below.



IV. Answer all the questions:

2×5=10

- 20) a) Differentiate Prokaryotes and Eukaryotes. (OR)
 b) Explain the Botanical Description of Clitoria ternatea.
 21) a) Draw the flow chart of Glycolysis. (OR)
 b) Differentiate plant cell and animal cell.

BIO-ZOOLOGY

Marks: 35

8×1=8

I. Choose the correct answer:

- What taxonomical aid gives comprehensive information about a taxon?
 a) Taxonomic key b) Herbarium c) Flora d) Monograph
- Which of the following is an egg laying mammal?
 a) Dolphins b) Macropus c) Ornithorhynchus d) Equus
- Non-shivering thermogenesis in neonates produces heat through
 a) White fat b) Brown fat c) Yellow fat d) Colourless fat
- Erythroblastosis foetalis is due to the destruction of
 a) Foetal RBCs b) Foetus suffers from atherosclerosis
 c) Foetal WBCs d) Foetus suffers from mianmata
- What will happen if the stretch receptors of the urinary bladder wall are totally removed?
 a) Micturition will continue
 b) Urine will be continue to collect normally in the bladder
 c) There will be micturition
 d) Urine will not collection the bladder
- The respiratory centre is present in the
 a) Medulla oblongata b) Hypothalamus
 c) Cerebellum d) Thalamus
- The structure which connects the hypothalamus with anterior lobe of pituitary gland is the
 a) Dendrites of neurohypophysis b) Axons of neurohypophysis
 c) Bands of white fibers from cerebellar region
 d) Hypophyseal portal system
- Choose the correctly matched pair:**
 a) Egg layers - Brahma
 b) Broiler types - Leghorn
 c) Dual purpose - White plymouth rock
 d) Ornamental breeds - Silkie

II. Answer ANY FOUR of the following:

4×2=8

- What is the difference between a zoo and wild life sanctuary?
- Compare Schizocoelom with Eterocoelom.
- Comment on the functions of alary muscles.
- Resistance in the airways is typically low. Why? Give two reasons.
- What are the bones that make the pelvic girdle?
- Write the symptoms of cretinism.

III. Answer ANY THREE of the following: [Q.No. 18 is compulsory]

3×3=9

- Write the characteristics that contributes to the success of reptiles on land.
- List the three pairs of salivary gland with their ducts.
- What are the heart sounds? When and how are these sounds produced?
- Define Pacinian Corpuscles.
- Mention the advantages of MOET.

IV. Answer all the questions:

2×5=10

- 20) Explain Domain Archaea. (OR)
 Write the classification of connective tissue and their function.
 21) Differentiate hyperglycemia from Hypoglycemia. (OR)
 Explain the life cycle of bombyx mori.