



Tsi11Bio

Tenkasi District

Common Quarterly Examination - 2023

27-09-2023

Standard 11

Time Allowed: 3.00 Hours

BIOLOGY

Maximum Marks: 70

Note: Candidate should answer Part - I (Bio-Botany) and Part - II (Bio-Zoology) in separate answer sheet.

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 the corresponding answer.

- Which of following represents gametophytic generation in pteridophytes?
a) Prothallus b) Thallus c) Cone d) Rhizophore
- Which of the following in polycarpic plant?
a) Mangifera b) Bambusa c) Musa d) Agave
- Sequences of which of the following is used to know the phylogeny.
a) mRNA b) rRNA c) tRNA d) Hn RNA
- The correct sequence in cell cycle
a) S - M - G₁ - G₂ b) S - G₁ - G₂ - M
c) G₁ - S - G₂ - M d) M - G₁ - G₂ - S
- Protoplasm was first observed by
a) Purkinje b) Hugo Van Mohl c) Corti d) Huxley
- A small, rounded photosynthetic units in thylakoid
a) quantosomes b) stroma c) grana d) Thylakoid lumen
- Find out the wrong pair.
a) Coriandrum - Decomound
b) Tamarindus - Palmately compound
c) Moringa - Tripinnate
d) Delonix - Bipinnate
- Which one is a secondary metabolite?
a) Organic acid b) Alkaloids c) Enzymes d) Amina acid

Section - II**Answer any four of the following questions:****4×2=8**

- What is plectostele? Give example.
- What are the characteristic features of leaf?
- Bring out the significance of Transmission Electron Microscope.
- Draw the structure of Mitochondria and label its parts.
- Write any two difference between plant cell and animal cell.
- What are the properties of Enzymes?

Section - III**Answer any three from the following:****3×3=9****[Question No. 19 is compulsory]**

- Compare sympodial branching with monopodian branching.
- Differentiate Racemose and Cymose Inflorescence.
- Write short notes on Pitcher Plant.
- Write any three economically important plants of Solanaceae (Binomial) and its uses.
- Give an account of G₀ phase.

Section - IV**Answer all questions:****2×5=10**

- List the various steps involved in Gram staining procedure. **(OR)**
Write the Botanical description of clitoria ternatea.
- What is placentation? Explain its types. **(OR)**
Write the characteristic features of DNA.

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PART - II [BIO-ZOOLOGY]**Marks: 35****Part - I****Answer all the questions:****8×1=8**

- A group of organisms having similar traits of a rank is
 - Species
 - Taxon
 - Genus
 - Family
- Lateral line sense organs occur in
 - Salamander
 - Frog
 - Water snake
 - Fish
- What type of fibres are found in connective tissue matrix?
 - Collagen
 - Areolar
 - Cartilage
 - Tubular
- Assertion (A)** : Cockroach can survive without a head.
Reason (B) : Cockroach can live for a week without its head. Due to their open circulatory system and that fact that they breathe through little holes on each of their body segments.
 - A is true but R is wrong.
 - Both A and R are wrong.
 - A is correct and R explains A.
 - R is correct but A is wrong.
- Match Column I with Column II and choose the correct option:**

Column I	Column II
P) Small intestine	i) Largest factory
Q) Pancrease	ii) Absorption of water
R) Liver	iii) Carrying electrolytic solution
S) Colon	iv) Digestion and absorption
a) P-iv, Q-iii, R-i, S-ii	b) P-iii, Q-ii, R-i, S-iv
c) P-iv, Q-iii, R-ii, S-i	d) P-ii, Q-iv, R-iii, S-i
- Vital capacity is
 - TV+IRV
 - TV+ERV
 - RV+ERV
 - TV+IRV+ERV
- Erythroblastosis foetalis is due to the destruction of
 - Foetal RBCs
 - Foetus suffer from athero sclerosis
 - Foetal WBCs
 - Foetus suffers from mian mate
- The hormone which help in the reabsorption of water in kidney tubules is
 - Cholecystokinin
 - Angiotension - II
 - Antidiuretic hormone (ADH)
 - Pancreozymin

Part - II**Answer any four of the following questions:****4×2=8**

- What is the connection between taxonomy and publishing of book 'origin of species'?
- Draw and label a nerve cell.
- What are lateral hearts?
- What is Dental formula?
- State the deficiency disease caused by intake of iron in our diet.
- Why do call cockroach a pest?

Part - III**Answer any three of the following questions:**SIVAKUMAR. M.
Sri Ram Matric HSS
3×3=9**[Question No. 19 is compulsory]**

- What are extra mophiles?
- Difference between Protostomian and Deutero stomian.
- Explain Elastic connective tissue.
- How is urea formed (Ornithine cycle) in the human body?
- Define the term 'Dead space'.

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Part - IV**Answer all the questions:****2×5=10**

- Briefly explain the three fundamental distinct feature of chordates with a neat labelled diagram.
(OR)
Explain the digestion in the small intestine.
- Compare the events in inspiration and expiration.
(OR)

Write note on ECG and what initiates the heart beat.