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Time : 3.00 Hrs.

Register No.

740

Half Yearly Examination- 2024

BIOLOGY

BIO - BOTANY

PART - I

Marks : 70

8 x 1 = 8

I. CHOOSE THE CORRECT ANSWER

- In which plant have multiple root cap
A) Pandanus B) Pistia C) Eichhornia D) Entada
- Identify the Archaeobacterium
A) Acetobacter B) Erwinia C) Treponema D) Methanobacterium
- C_5A_5
A) Sympetalous B) apopetalous C) Epipetalous D) Monoadelphous
- Flowers are zygomorphic in
A) Ceropegia B) Thevetia C) Datura D) Solanum
- Sequences of which of the following is used to know the phylogeny
A) mRNA B) rRNA C) tRNA D) HnRNA
- Oligosaccharides are ————
A) Single sugar molecule B) 2-10 sugar units C) more than 10 sugar units D) All of these
- Which chlorophyll molecule does not have phytol tail?
A) Chl-a B) Chl-b C) Chl-c D) Chl-d
- The compound which links glycolysis and krebs cycle is
A) Succinic acid B) Phruvic acid C) acetyl COA D) Citric acid

PART - II

Answer any 4 of the following questions

4x 2 = 8

- What is Archaeobacteria?
- What is plectostele? Give example
- Write significance of seeds?
- Distinguish between prokaryotes and eukaryotes
- What is Nucleotide?
- What are the parameters which control water potential?

PART - III

Answer any 3 of the following questions. Question No.19 is compulsory.

3 x 3 = 9

- Write the physiological effects of cytokinins
- Write significance of pentose phosphate pathway?
- Differentiate between cyclic and non cyclic photophosphorylation.
- Write short notes on Tyloses.
- Differentiate between Racemose and Cymose Inflorescence

PART - IV

Answer all the questions.

2 x 5 = 10

- Explain the different types of fleshy fruit with suitable example . (OR)
Give the floral characters of clitoria ternatea.
- Explain the insectivorous mode of nutrition in angiosperms? (OR)
Explain EMP pathway.

40

BIO – ZOOLOGY
PART - I

8 x 1 = 8

I. Choose it:

1. Which of the following is a Crustacean?
a) Prawn b) Snail c) Sea Anemone d) Hydra
2. The teeth which is found on each sides of the internal nostrils
a) upper jaw b) vomerine c) lower jaw d) maxillary teeth
3. Prevention of substances from leaking across the tissue is provided by
a) Adhering junction b) Gap junction c) Tight junction d) Elastic junction
4. When 1500 mL air is in the lungs, it is called _____
a) Tidal volume b) Residual volume c) IRV d) vital capacity
5. A person having both antigen-A & antigen-B on his RBC belongs to
a) A b) B c) O d) AB
6. Kidney produce about _____L of glomerular filtrate per day
a) 200 L b) 190 L c) 180 L d) 170 L
7. The bundle of muscle fibres is called ...
a) Myofibril b) Fascicle c) Sarcomere d) Sarcoplasm
8. Which one of the following is not an endemic species of earthworm
a) Eudritus b) Perionyx c) Lampito d) Octochaetona

PART – II**II. Answer Any – 4**

4 x 2 = 8

9. Why mule is sterile in nature?
10. Why blood is considered as a typical connective tissue?
11. Describe shortly about Hiatus hernia?
12. Name the three main hormones involved in the regulation of the renal function?
13. Write the five major regions on vertebral column
14. Write any four symptoms of Cretinism.

PART – III**III. Answer Any – 3 . Question No. 19 compulsroy**

3 x 3 = 9

15. List three features that characterise bony fishes.
16. Distinguish between tergum and sternum
17. Tabulate the Antigens and Antibodies present in the blood
18. Write about the brain lobes and their functions
19. Why is pneumonia considered a dangerous disease?

PART – IV**IV. Answer to all**

2 x 5 = 10

20. Write the basic rules of Nomenclature

(OR)

List the chemical changes that Starch molecule undergoes from the time it reaches the small intestine.

21. What are the benefits of regular exercise?

(OR)

- (i) Give the functions of the CCK – Cholecystokinin
- (ii) Write the advantages of the MOET.