

Half-yearly Common Exam., December - 2018

XI Standard]

Part-III **BIOLOGY**

[Time : 2.30 Hrs

(Maximum Marks : 70)

- Instructions : 1) Check the question paper for fairness of printing. If there is any lack of fairness, inform the Hall Supervisor immediately.
2) Use Blue or Black ink to write and underline and pencil to draw diagrams.

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

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

Section-I

8×1 =8

- Note : i) Answer all the questions.
ii) Choose the most suitable answer from the given four alternatives and write the option code and the corresponding answer.
1. The integrated phage DNA is called
a) prophage b) bacteriophage c) cyanophage d) mycophage
 2. Water is essential for fertilization
a) Angiosperms b) Bryophytes c) Gymnosperms d) Fungi
 3. Buds arising at any part other than stem as known as
a) Apical bud b) Axillary bud c) Adventitious bud d) Accessory bud
 4. Flowers are zygomorphic in
a) Liliaceae b) Solanaceae c) Datura d) Hibiscus
 5. Ribosomes were first observed by
a) Christian de Duve b) George Palade c) A. Kolliker d) A.F.U. Schimper
 6. The function of sieve tubes are believed to be controlled by -----
a) Phloem parenchyma b) sieve cells c) Companion cells d) Albuminous cells
 7. Pulsation Theory was proposed by -----
a) J.C. Bose b) Godlewski c) Strasburger d) Stephen Hales
 8. Exanthema in citrus caused by the deficiency of -----
a) Boron b) Manganese c) Iron d) Copper

Section - II

Write any four of the following :-

4×2=8

9. Differentiate Homoiomerous and Heteromerous lichens.
10. What is epipetalous stamens?
11. Write the properties of water.
12. Draw and label bicollateral vascular bundle.
13. Define ascent of Sap.
14. What is Chlorosis?

Section - III

3×3= 9

Write any three of the following in which question No.18 is compulsory

15. What is Velamen root? Give example.
16. Draw and label the structure of chromosome.
17. What is Synapsis?
18. What is trichoplast?
19. Define respiratory quotient.

Section- IV

2×5= 10

Give the answer for the following questions.

20. Write the characteristic features of stem. (or)
Describe special inflorescence with example.
21. Draw and label the parts of T.S. of Dicot leaf. (or)
Write the flow chart of Glycolysis.

[P.T.O.]

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Part-II (Bio-Zoology) (Marks : 35)

Section-I

8 × 1 = 8

- Note : i) Answer all the questions.
ii) Choose the most suitable answer from the given four alternatives and write the option code and the corresponding answer.
- The beneficial bacteria are known as
a) pathogens b) probiotic c) cyanobacteria d) plasmid
 - Find out the mismatched pair
a) Adhering junction - keep neighbouring cells together
b) Tight junction - Leakage of cellular components
c) Synaptic junction - Junction between neurons
d) Gap junction - Connect cytoplasm
 - Match the following:

A	B
1. Jaundice -	i) Cholesterol
2. Liver cirrhoses -	ii) Asprin
3. Gall stone -	iii) Alcoholism
4. Peptic ulcer -	iv) Viruses

a) 1 (iii) 2 (iv) 3 (i) 4 (ii)
b) 1 (iv) 2 (ii) 3 (iii) 4 (i)
c) 1 (iv) 2 (iii) 3 (i) 4 (ii)
d) 1 (i) 2 (iii) 3 (ii) 4 (iv)
 - Find out the wrong statement :
a) Prothrombin is an inactive protein b) Plasma with fibrinogen is called serum
c) Heparin is an anticoagulant d) Thrombin convert fibrinogen into fibrin
 - Write the correct answer
Assertion: Thalamus is a white matter which act as relay centre
Reason : It coordinate sensory and motor signalling
a) Both Assertion and Reason is correct
b) Both Assertion and Reason is wrong
c) Assertion is correct but Reason is wrong
d) Assertion is wrong but Reason is correct
 - The plasmamembrane of muscle cell is known as sarcolemma
 - Hydrostatic skeleton is stiff bony structure present in fishes
 - The Vertebral ribs are not connected to sternuma) 1 is correct, 2 and 3 are wrong
b) 1 and 2 is correct, 3 is wrong
c) 3 is correct, 1 and 2 are wrong
d) 1 and 3 are correct, 2 is wrong
 - Choose the correct statement
If the vasopressin receptor of a man is defective. Then
a) He suffer from low blood pressure and dehydration
b) Shows hyperglycemic condition
c) Excessive thirst does not occurs
d) The urea level in the urine is higher than the normal
 - Which of the following hormone is not secreted under the influence of pituitary gland a) Thyroxin b) Insulin c) Oestrogen d) Glucocorticoids

Section-II

Answer any four questions :-

4 × 2 = 8

- What are methanogens?
- What are adipocytes?
- What is vermicompost?
- Why more oxygen is transported by haemoglobin than in dissolved form.
- Draw and label reflex arc.
- Write down any two functions of melatonin.

Section-III

Write any three of the following in which question No.18 is compulsory.

3 × 3 = 9

- The first child of Rh+ive father and Rh-ive mother is homozygous recessive condition. Is the next child affected by Erythroblastocis foetalis? Give reason for your answer.
- Name the composition of "Sebum"
- How is mean arterial pressure increases?
- Write any three function of C.S.F.
- How is pelvic girdle is adapted for conception?

Section-IV

2 × 5 = 10

Answer all the questions :

- Explain the fundamental distinct features of chordates. (or)
Explain the digestion and absorption of proteins in human intestine.
- What are the functions of skeletal system ? (or)
Explain the disorders due to hyper and hyposecretion of glucocorticoids.