

**COMMON QUARTERLY EXAMINATION - 2024 - 25**

Time Allowed : 3.00 Hours]

**BIOLOGY**

[Max. Marks : 70

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 corresponding answer.**

1. Identify the Archaeobacterium.  
a) Acetobactor                      b) Erwinia                      c) Treponema                      d) Methanobacterium
2. Which of the following is vascular Phenarogams  
a) Pteridophytes                      b) Bryophytes                      c) Angiosperm                      d) Algae
3. Composite fruit develops from  
a) Multicarpellary ,Opocarpous ovary                      b) Multicarpellarysyncarpousovery  
c) Multicarpellaryovery                      d) Whole Inflorescence with its peduncle.
4. Identify wrongly matched pair.  
a) Buttress root ----- Delonixregia                      b) Pillar root ----- Zea Mays  
c) Clinging root ----- Piper betel                      d) Stilt root ----- Saccharumafficinarm
5. Centromere is required for  
a) Transcription                      b) crossing over  
c) Cytoplasmic cleavage                      d) Movement of chromosome towards pole
6. All are membane bound organelle , except  
a) Mitochondria                      b) lysosomes                      c) Glyoxsomes                      d) Ribosome
7. Which of the following is a flowering plant with nodules containing nitrogen fixing or microorganism?  
a) Crotalaria juncea                      b) Cycusrevoluta                      c) Casuarinaequisetifolia                      d) Cicerarietinum
8. The bond between two amino acid is  
a) Peptide Bond                      b) Glycosidic Bond                      c) Hydrogen bond                      d) Ionic bond

**SECTION - 2****II. Answer any four of the following questions.**

4×2=8

9. What is lichen?
10. What is holo enzyme?
11. Mention two character shared by gymnosomes and angiosperm.
12. Draw floral diagram of Allium cepa
13. How are Geocarpic fruits formed?
14. Differentiate Eusporangiate from leptosporangiate.

**SECTION - 3****III. Answer any three of the following questions. Q.no 19 is compalsary.**

3×3=9

15. Write shorts notes about Go phase.
16. Draw and label the ultra structure of Bacterial cell.
17. Write the properties of Enzyme.
18. Differentiate Racemose and Cymose.
19. What is Placentation? Write its types.

**SECTION - 4****IV. Answer all the Questions.**

2×5=10

- 20.a) Tabulate Bentham Hooker classification.

**(OR)**

- b) Differentiate Gram Positive Bacteria from Gram Negative Bacteria.
21. a) Differentiate Mitosis from Meiosis.

**(OR)**

- b) Explain the structure and Functions of different types of RNA.

V/11/Bio/1

**PART - II ( BIO-ZOOLOGY) (Max. Marks: 35)****SECTION - I****8x1=8****I. Choose the correct answer.**

- A group of organisms having similar traits of a rank is
  - Species
  - Taxon
  - Genus
  - Family
- Sea anemone belongs to phylum
  - Protozoa
  - Porifera
  - Coelenterata
  - Echinodermata
- Match the following columns and select the correct option.**

Column - I	Column - II
(p) Pila	- (i) Devil fish
(q) Dentalium	- (ii) Chiton
(r) Chaetopleura	- (iii) Apple snail
(s) Octopus	- (iv) Tusk shell

  - p-(ii), q-(i), r- (iii), s - (iv)
  - p (iii), q-(iv), r- (ii), s (i).
  - p-(ii), q- (iv), r- (i), s-(iii)
  - p-(i), q-(ii), r- (iii), s- (iv).
- The ciliated epithelium lines the
  - Skin
  - Digestive tract
  - Gall bladder
  - Trachea
- The location and numbers of malpighian tubules in Periplaneta.
  - At the junction of midgut and hindgut, about 150
  - At the junction of foregut and midgut, about 150.
  - Surrounding gizzard, eight
  - At the junction of colon and rectum, eight.
- The sphincter of Oddi guards
  - Hepatopancreatic duct
  - Common bile duct
  - Pancreatic duct
  - Cystic duct
- Which of the following is not the function of liver?
  - Production of insulin
  - Detoxification
  - Storage of glycogen
  - Production of bile.
- It is characterized by Chronic Breathlessness ?
  - Pneumonia
  - Bronchitis
  - Emphysema
  - Tuberculosis

**SECTION - II****II. Answer any 4 Questions :Question NO. 14 is Compulsory.****4x2=8**

- Why mule is Sterile in Nature?
- Write down any two common characterise of Phylum Annelida.
- Why blood is considered as a typical connective Tissue?
- Comment on the functions of Alary Muscles?
- Why do some people Snore?
- How do Proteins differ from fats in their energy value and their role in the body?

**SECTION - III****III. Answer any 3 Questions: Question NO. 19 is Compulsory****3x3=9**

- Differentiate between Probiotics and Pathogenic Bacteria.
- Compare closed and opened Circulatory System.
- Differentiate white Adipose Tissue from brown Adipose Tissue.
- Write down the Economic importance of Frog
- Why is Pneumonia considered a Dangerous Disease?

**SECTION - IV****IV. Answer the Questions :****2x5=10**

- Differentiate between chordates and non-chordates  
(OR)  
b) What is an epithelium? Enumerate the characteristic features of different epithelia.
- List out the function of Liver.  
(OR)  
b) Tabulate the Events in Inspiration and Expiration