



BIO - BOTANY

PART - A

I Choose the correct answer.

3 X 1 = 3

- The number of identical protein subunits found in TMV is approximately
a) 2130 b) 2310 c) 2120 d) 21330
- Identify the correctly matched pair.
a) Actinomycece - Late blight
b) Mycoplasma - Lumpy jaw
c) Bacteria - Crown gall
d) Fungi - Sandal spike
- Endosperm in Gymnosperm is formed
a) at the time of fertilization b) before fertilization
c) after fertilization d) along with the development of embryo

PART - B

II Answer any 2.

2 X 2 = 4

- Write a note on Prophage.
- Mention the uses of Mesosomes in Bacteria.
- Draw and label the diagram of clamydomonas.
- Write a note on Sago.

PART - C

III Answer any 2 question. Question No. 9 is compulsory.

2 X 3 = 6

- List out the importances of Mycorrhizae. - *Fungi*
- Write a note on plectostele. - *xylem - Phloem*
- With suitable example explain the characters of Blue green algae.

PART - D

IV Answer in detail.

1 X 5 = 5

- a) Describe the distinguishing features of Monera. (OR)
b) Differentiate Dicotyledons from Monocotyledons.

BIO - ZOOLOGY

SECTION - A

2 X 1 = 2

I Choose the correct answer.

1. A group of organism having similar traits of a rank is
a) species b) taxon c) genus d) family
2. Which of the following is not correctly paired?
a) Human - ureotelic
b) Birds - uricotelic
c) Lizards - uricotelic
d) Whale - ammonotelic

SECTION - B

2 X 2 = 4

II Answer any two questions.

3. Differentiate between probiotics and pathogenic bacteria.
4. What is trinomen classification.
5. What are flame cells?
6. List any 2 functions of air bladder in fishes.

SECTION - C

III Answer any two of the following.

2 X 3 = 6

7. What is cladogram? Draw a model cladogram.
8. What are the need for classifications.
9. Compare closed and opened circulatory system.
10. List three features that characterise bony fishes.

SECTION - D

IV Answer in detail.

1 X 5 = 5

11. a) Can we use recent molecular tools to identify and classify organisms.

(OR)

- b) Compare chordates and non - chordates.