

General Instructions:

1. This question paper consists of four parts A,B, C and D Part - D consists of two sections. Section -I and Section - II
2. All the parts are compulsory.
3. Draw diagrams wherever necessary. Unlabelled diagrams or illustrations do not attract any marks.

Part - A

Answer the following in one word or in one sentence each :

10x1=10

1. What is parthenocarpic fruit?
2. Define Staminode.
3. Earth worms are known as friends of farmer's. Why?
4. Name the power houses of the cell.
5. Define Osmosis.
6. What is Leg-haemoglobin?
7. Name the gaseous plant growth regulator.
8. What is plasticity?
9. Expand ECG.
10. Name the region of the vertebrate eye where the optic nerve passes out of the retina

Part - B

Answer any five of the following questions in 3-5 sentences each. Wherever applicable 5x2=10

11. Name the algal and fungal component of Lichens.
12. Mention four major groups of protozoans.
13. Write any two general characters of phylum ctenophora.
14. What are macronutrients? Mention any two of them.
15. Define
 - a) Ammonification
 - b) Hydroponics.
16. List any two physiological effects of Auxins.
17. Write the differences between Systole and Diastole
18. Name the Antigens and Antibodies present in A and B blood groups.

Part - C

Answer any Five of the following questions in 40 to 80 words each, wherever applicable.

5x3=15

19. List and explain any two Taxonomical aids.
20. Explain three types of Phyllotaxy
21. List any three types of chromosomes based on the position of the centromere.
22. Classify the plastids based on the type of pigments.

(P.T.O.)

23. Name any three significances of Mitosis.
24. Mention three steps in Urine formation.
25. Write a note on Actin.
26. Name three types of joints.

Part - D

Section - I

Answer any Four of the following questions in about 200 to 250 words each wherever applicable.
4x5=20

27. List any five general characteristics of Gymnosperms.
28. Write any four general characteristics of class Mammalia. Mention an oviparous Mammal.
29. a) List any two differences between spring wood and autumn wood. 2
b) Differentiate Heartwood from sapwood 3
30. Draw neat labeled diagram of a Animal cell.
31. Write the schematic representation of glycolysis.
32. List the hormones secreted by the following glands.
 1. Thyroid
 2. Adrenal
 3. Ovary
 4. Testis
 5. Pancreas.

Section - II

Answer any Three of the following questions in about 200 to 250 words wherever applicable.
3x5=15

33. a) Name three types of cell junction 3
b) Mention any two specialised connective tissues 2
34. Classify the enzymes based on the type of reaction they catalyse.
35. Describe pressure flow or mass flow Hypothesis.
36. Explain Z- scheme of light reaction.
37. Draw neat labeled diagram showing sagittal section of the Human brain.