



**JAIN COLLEGE**

463/465, 18th Main Road, SS Royal, 80 Feet Road, Rajarajeshwari Nagar,  
Bangalore - 560 098

**Date: JAN 2020**

**SUBJECT: BIOLOGY**

**I PUC  
MOCK EXAMINATION**

**Timings Allowed: 3Hrs 15mins**

**Total Marks: 70**

**INSTRUCTIONS:** a) All parts are compulsory, Answer all the questions.

b) Mention correct main and question numbers.

c) Draw diagrams wherever necessary. Unlabeled diagrams do not attract any marks

PART A

**I. Answer the following in one word or one sentence each**

**10X1=10**

1. Name the type of modification in Ginger.
2. During which stage does Crossing over take place?
3. Define Pistillode.
4. Name the Suicidal bags of the cell.
5. Define Plasmolysis.
6. Name the monomeric unit of DNA.
7. Name the polysaccharide form of exoskeleton in Arthropods.
8. Which blood group is called Universal recipient?
9. What are scleids?
10. What are coelomates?

PART B

**II. Answer any five of the following in about 3-5 sentences**

**5X2=10**

11. What are diploblastic animals? Give examples.
12. What are macro elements? Give two examples.
13. Mention the type of locomotory structures of the following animals:
  - a. Euglena
  - b. Hydra
14. What are Nephridia? Mention their types.
15. Mention any two groups of Protozoa with an example for each.
16. Draw a neat labeled diagram of Nucleus.
17. List the physiological effects of auxins.
18. Name the two components of Lichens.

PART C

**III. Answer any five of the following in about 8-10 sentences**

**5X3=15**

19. Classify plastids based on the types of pigments.
20. Draw a neat labeled diagram of phloem.
21. Mention the significance of mitosis.
22. Explain the following with an example for each:
  - a. parallel venation
  - b. Opposite and decussate phyllotaxy
  - c. Trimerous flower.
23. What is Fermentation? Mention the types.
24. Explain the digestion of Carbohydrates in the small intestine.

25. What are proteins? Mention the most abundant protein present in plants and animals.
26. Mention the phases of the Sigmoid Growth Curve.

PART D – SECTION I

**IV. Answer any four in about 150-200 words**

**4X5=20**

27. Give the general characteristic features of Gymnosperms.
28. Describe the mechanism of breathing.
29. Explain in detail the prophase I of Meiosis I.
30. Draw a neat labeled diagram of T.S of Dorsi-ventral Leaf.
31. Give any four characteristic features of Mammalia. Mention an oviparous mammal.
32. Illustrate the schematic representation of Z'scheme of Light reaction.

PART D – SECTION II

**V. Answer any three in about 150-200 words**

**3X5=15**

33. Draw a neat labeled diagram of Saggital section of Brain.
34. Describe pressure flow or mass flow hypothesis.
35. Give the schematic representation of glycolysis and explain.
36. Describe the structure of stomatal apparatus in Dicot plants.
37. Name any five hormones of Adrenal gland with one function each.

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