



JAIN COLLEGE

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

Date:

SUBJECT: BIOLOGY

**II PUC
Mock paper I**

Timings Allowed: 3 Hrs.

Total Marks: 70

GENERAL INSTRUCTIONS:

- **ALL PARTS ARE COMPULSORY.**
- **MENTION CORRECT MAIN AND QUESTION NUMBERS.**
- **DRAW DIAGRAMS WHEREVER NECESSARY. UNLABELLED DIAGRAMS DO NOT ATTRACT ANY MARKS.**

I. Answer the following;

10X1=10

1. Define Parthenogenesis?
2. Why is oxytocin necessary for parturition?
3. Name the fungus that produces cyclosporine A.
4. What are Eurythermal organisms?
5. How does fragmentation of large habitats due to human activities lead to population decline?
6. Name the disease diagnosed by widal test.
7. Mention the use of Statin.
8. What are soma clones?
9. What are plasmids?
10. Name the theory which attempts to explain the origin of universe.

Part-B

II. Answer the following

5X2=10

1. Distinguish between Benign tumour and Malignant tumour.
2. List any four hormones secreted by placenta.
3. Write two examples for loss of biodiversity due to alien species invasion.
4. Draw a neat labelled diagram of an antibody molecule.
5. What is Ex-Situ conservation? Mention two examples.
6. Write four symptoms of Down's syndrome.
7. What is inbreeding depression? How is it controlled?
8. The shape of RBC's of sickle cell anaemia patients change to elongated sickle like structures? Give reasons.

Part-C

III. Answer the following

5X3=15

1. Suggest any three assisted reproductive technology to overcome infertility and explain any one method.
2. Draw a neat diagram of typical biogas plant.

3. How pollination does is achieved in vallisneria and sea grasses?
4. What is heterothallic condition differentiate between staminate and pistillate flowers.
5. Name the six stages of human evolution in correct sequence.
6. With reference to ecological succession define the following.
 - i. Climax community.
 - ii. Sere(S)
 - iii. Pioneer Species
7. Name the pathogen, vector and symptoms of Malaria.

Part-D

IV. Answer any four of the following

4X5=20

1. Write the steps involved in multiple ovulation and Embryo transfer.
2. Explain the T.S. of young Anther with a neat labelled diagram.
3. With reference to flower colour in snapdragon. Explain incomplete dominance.
4. A) In which ways genetically modified plants are useful?
B) Add a note on BT cotton.
5. Describe Frederick Griffith's experiment to show transformation in bacteria.
6. a. Define the following terms.
 - i. Symbiotic Association.
 - ii. Brood Parasitism
 - iii. Mutualismb. Mention four basic processes that fluctuate the density of a population in a given habitat

V. Answer any three of the following

3X5=15

1. A. Give the diagrammatic representation of Miller's experiment.
B. Add a note on Miller's experimentation results.
2. What are the effects of Ozone depletion?
3. Describe the process of transplation of mRNA.
4. Explain the important steps involved in the process of decomposition.
5. Write a brief account of functioning of ElectroStatic Precipitatar with diagram.
