



SRI BHAGAWAN MAHAVEER JAIN COLLEGE

Vishweshwarapuram, Bangalore.

Mock Paper-2

Course: II PUC

Subject: Biology

Max. Marks: 70

Duration: 3hrs

General Instructions:-

1. Unlabeled diagrams do not attract any marks.
2. Extra questions should be answered separately.

PART-A

I. Answer the following questions:-

10x1=10

1. What is dormancy?
2. What is foetal ejection reflex?
3. Among vertebrates, which group of animals share highest number in the global biodiversity?
4. Who popularized the term biodiversity?
5. What is linkage?
6. Name the sequence of eukaryotic gene that are transcribed but not translated.
7. Define gene frequency.
8. Name the infectious stage of plasmodium.
9. Name the alkaloid present in tobacco.
10. Name the substance responsible for recurring chills and high fever in malaria.

PART-B

II. Answer (Any five) of the following questions:-

5x2=10

11. Mention any two techniques of molecular diagnosis.
12. Distinguish between G.P.P and N.P.P.
13. Distinguish between active immunity and passive immunity.
14. Find the difference between pisciculture and Aquaculture.
15. What is tissue culture? Write the applications (any two).
16. Write a note on biofertilizers.
17. What are cry proteins? Name an organism that produce it. How has man exploited this protein to his benefit?
18. What is Montreal protocol?

PART-C

III. Answer (Any five) of the following:-

5x3=15

19. What is resource partition? Describe with an example.
20. Describe ecological pyramids with diagrammatic representation.
21. Write the difference between homologous and Analogous organs with examples.
22. Define (a) point mutation and (b) Mutagenes with examples.
23. Differentiate between internal and external fertilization.
24. Define pollination write **any four** characteristics of insect pollinated flowers.
25. Name the microbes involved in the formation of (a) Statins (b) Roquefort cheese. (c) Streptokinase (d) ethanol.
26. What are carcinogens? Name the different types of carcinogens with example.

PART-D

(SECTION-I)

IV. Answer (any four) of the following:-

4x5=20

27. Explain the development of human embryo with diagrams.
28. How does pollination takes place in salvia. List any four adaptations required for such type of pollination.
29. (a) Explain the nucleosome model with a neat labeled diagram.
(b) Write any two salient features of genetic code.
30. Describe the experiment conducted by Griffith on mice.
31. Describe the process and products of decomposition.

(3+2)

32. Explain the following:-
(a) Green revolution (b) Somatic-hybridization. (c) Apiculture (d) White revolution.
(e) Micropropagation.

PART-D
(SECTION-II)

V. Answer (Any three) of the following:-

3x5=15

33. Describe the sewage treatment plant. Write a note on Ganga Action plan. **(4+1)**
34. (a) What is Animal husbandry?
(b) Write a note on Dairy farm management.
35. (a) Explain Insitu and exsitu conservation with suitable experiments. Add a note on sacred landscapes and sacred groove with examples.
(b) Expand IUCN.
36. Discuss the sequence of changes in a women's body upto parturition, after a women conceives under the influence of various hormones.
37. (a) List out **any four** harmful effects of air pollution on human health. **(2+3)**
(b) Write a note on electrostatic precipitator with a neat labeled diagram.
