



SRI BHAGAWAN MAHAVEER JAIN COLLEGE
Vishweshwarapuram, Bangalore 560004
Mock Examination Question Paper-2 (January 2019)

Course:	II PUC	Subject:	Biology
Max. Marks:	70	Duration:	3:15 hrs.

General Instructions:-

1. Draw Diagrams wherever necessary unlabeled diagrams do not attract any marks.
2. Extra questions should be answered as (E) quoted for the opted question.

PART-A

I. Answer the following questions:-

10 x 1 = 10

1. Define Co-dominance.
2. Ovulation takes place on the 14th day of menstrual cycle. Why?
3. Mention the technique used to separate DNA fragments in rDNA technology.
4. What is detritus?
5. What is SCP?
6. Why DNA replication is called semiconservative.
7. Define clones.
8. What is green house effect?
9. What is metastasis?
10. How do some species of insects and frogs avoid being detected easily by the predators?

PART-B

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

5 x 2 = 10

11. Define bio diversity. Write any two types of biodiversity.
12. Explain the two types of fertilization events in sexual reproduction of animals / mammals.
13. Differentiate between menstrual cycles and oestrus cycle.
14. Discuss the role of microbes as biocontrol agents with two examples.
15. t RNA is an adaptor molecule comment.
16. Name (any four) recent extinct organisms as per IUCN red list.
17. What is Green revolution? With any two examples mention the advantages of green revolution in our country.
18. Draw a neat labeled diagram of a typical agarose gel electrophoresis.

PART-C

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

5 x 3 = 15

19. Explain in brief separation and isolation of DNA fragments.
20. Explain role of microbes in Industrial products with (six) examples.
21. What is ecological succession? Distinguish primary succession from secondary succession.
22. State Hardy-weinberg's principle. Mention any two factors that effect Hardy-weinberg equilibrium.
23. a) What is endemism?
b) Mention 'The evil quartet' of biodiversity loss.
24. Write the functions of:-
(a) Endometrium (b) Acrosome (c) LH Surge.
25. List out any 6 features of human genome project.
26. a) Mention any 3 techniques used to detect cancer of internal organs.
b) What are retroviruses?

1 ½

1 ½

**PART-D
(SECTION-I)**

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

4 x 5 = 20

27. Name the pathogen which causes these diseases:-
(a) Common cold (b) Typhoid (c) Filariasis (d) Ringworm infection (e) Malaria.
28. Write a note on gaseous cycle.
29. Explain structure of megasporangium.
30. a) What are multiple alleles? Give an example.
b) List out any 3 symptoms of Klinefelter's syndrome.
31. Explain the main steps in breeding a new genetic variety of a crop.
32. With reference to flower colour in snapdragon, explain incomplete dominance.

2+3

**PART-D
(SECTION-II)**

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

3 x 5 =

- 15**
33. Explain Darwin's theory of Evolution.
34. (a) What are the effects of ozone depletion? (any three)
(b) What is TOMS?
(c) What is montreal protocol?
35. Give the diagrammatic representation of various events during a menstrual cycle.
36. Explain mutualism with four examples.
37. (a) What is biopiracy?
(b) How ADA deficiency is cured by gene therapy?

3+1+1

2+3
