



SRI BHAGAWAN MAHAVEER JAIN COLLEGE

Vishweshwarapuram, Bangalore.

Mock Question Paper 1 – January 2020

Course: II year PUC

Subject: Biology

Max. Marks: 70

Duration: 3.15hrs.

Instructions:-

- 1. Draw diagrams wherever required.**
- 2. Unlabeled diagrams do not carry marks.**

PART-A

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

10x1=10

1. Define Endemism.
2. Name the enzyme by which the HIV genome replicates in the host cell.
3. Expand PAR.
4. Name the plant from which cocaine is obtained.
5. Mention the significance of a selectable marker.
6. What is an allergy?
7. Why 'nucleopolyhedrovirus' genus of baculoviruses is used as biocontrol agents?
8. What is Lactational amenorrhea?
9. What is resource partitioning?
10. What is hidden hunger?

PART-B

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

5x2=10

11. Define:- (a) Embryogenesis (b) Syngamy.
12. What is amniocentesis?
13. What is an auto immune disease?
14. What is inbreeding depression?
15. What is mycorrhiza? Which genus member of fungi forms mycorrhiza.
16. Write any two major causes of species loss in geographical region.
17. Differentiate exon from intron.
18. Name the terminator codons?

PART-C

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

5x3=15

19. What are the essential requirements of genetic material?
20. Write a note on down's syndrome.
21. (a) What is ecological succession?
(b) Draw an ideal pyramid of energy and mention the units.
22. (a) What is tubectomy?
(b) What is vasectomy?
(c) Name a non-steroidal oral contraceptives for females.
23. Write any three advantages offered by the seed to angiosperms.
24. Mention three groups of carcinogens with one example each.
25. Mention the different steps of recombinant DNA technology.
26. Write a note on:-
(a) Parturition (b) Lactation
(c) Foetal ejection reflex.

PART-D

SECTION-I

IV. Answer the following:- (Any four)

4x5=20

27. (a) What are outbreeding devices?
(b) Describe the outbreeding devices in flowering plants.

(1+4)

28. Describe the Lac operon concepts in E Coli.
29. Mention the steps involved in DNA fingerprinting.
30. Name the microbes involved in these products.
(a) Roquefort cheese (b) Streptokinase
(c) Cyclosporin A (d) Statins.
(e) Bread
31. (a) Draw a neat labeled diagram of sectional view of seminiferous tubules.
(b) What is spermiogenesis? (3+2)
32. (a) Draw a neat labeled diagram of dicot embryo
(b) Differentiate between albuminous and non-albuminous seeds. (3+2)

SECTION-II

- V. Answer the following:- (Any three)** **3x5=15**
33. (a) State Gauss competitive exclusion principle
(b) Mutualism is a method of population interaction. Explain with examples.
34. Describe with a neat labeled diagram nucleosome model.
35. Explain the structure of antibody with neat labeled diagram.
36. Explains:-
(a) Algal bloom (b) Biomagnification
(c) Jhum cultivation (d) Chipko movement
(e) Ozone hole.
37. Diagrammatically explain the Hershey-chase experiment.
