Q. P. Code: 6BO4

BHARATA MATA COLLEGE, THRIKKAKARA

MODEL EXAMINATION FEBRUARY 2020 B.Sc BOTANY Semester VI BIOTECHNOLOGY & BIOINFORMATICS

TIME: 3 Hrs

Max. Marks: 60

Section A

Answer any ten(Each question carries 1 mark)

- 1. What callus?
- 2. Name two protein databases.
- 3. What is a bioreactor?
- 4. What are cosmids?
- 5. What isTi plasmid?
- 6. What are artificial seeds?
- 7. Expand DDBJ.
- 8. What is hardening.
- 9. What is pBR 322?
- 10. What is cell immobilization?
- 11. What are ligases?
- 12. Name a molecular visualization tool.

 $(10 \times 1 = 10)$

Section B Answer *any six* (Each question carries 5 marks)

- 13. Explain NCBI
- 14. Distinguish between redifferentiation and dedifferentiation.
- 15. Write a noteon RASMOL
- 16. Explain stages of micropropagation
- 17.Briefly explain invitro production of secondary metabolites
- 18. Give a brief account of restriction endonucleases.
- 19. Write the differences between blunt end cutting and staggered cutting.
- 20. What are the applications of protoplast culture
- 21. What is MS medium? How is it prepared?

 $(6 \times 5 = 30)$

Section C

Answer any two (Each question carries 10 marks)

- 22. Explain the components of a tissue culture medium.
- 23. Give an account of achievements of recombinant DNA technology.
- 24.Explain RASMOL.
- 25.Explain PCR and its applications.

 $(2 \times 10 = 20)$

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