B.Sc. DEGREE EXAMINATION,APRIL 2020
III Year VI Semester
Plant Biotechnology

Time : 3 Hours **Max.marks :75**

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

1. Callus
2. Sterilization
3. Fusogen
4. Cybrid
5. Colchicine
6. Embryo rescue
7. Biofuel
8. Biofertilizers
9. Plasmid
10. Vaccine
11. Totipotency
12. SCP

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

13. What are the scopes of Biotechnology.
14. How are synthetic seeds produced?
15. Briefly explain the culture of anther.
16. Mass cultivation of $Azospirillum$ - Explain.
17. Briefly explain the conversion of photosystems C3 to C4.
18. Define the culture medium. Write the composition of MS medium.
19. Briefly explain the fermentor design and operations.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Write an essay on the applications of plant tissue culture in agriculture and forestry.
21. Explain the protoplast isolation, purification and regeneration.
22. Describe the micropropagation of shoot culture and its advantages.
23. Discuss the industrial applications of fermentation technology.
24. Write about the genetic manipulation of eukaryotic cells.

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