Name...Reg. No...

BSc DEGREE END SEMESTER EXAMINATION MARCH 2017
SEMESTER – 6: BOTANY (CORE COURSE)
COURSE: U6CRBOT12 –: BIOTECHNOLOGY AND BIOINFORMATICS
(For Regular - 2014 Admission)

Time: Three Hours　　　　　　　　　　　　　　　　　　　　　Max. Marks: 60

PART A
Answer **all** questions. Each question carries 1 mark.

1. Define Totipotency.
2. What is Cybrid?
3. Name the method used for haploid production in plants.
4. What is Somatic Embryo?
5. Define PDB.
6. Name an enzyme used in PCR.
7. What is somaclonal variation?
8. What are edible vaccines?

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PART B
Answer **any six** questions. Each question carries 2 marks.

9. Name any two restriction endonucleases.
10. Explain re-differentiation?
11. What are ligases?
12. What are microprojectiles?
13. Define Golden rice.
14. What is Super bug?
15. What is genome?
16. What is the carbon source in MS medium?
17. Explain CADD.
18. What is SWISS PROT?

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PART C
Answer **any four** questions. Each question carries 4 marks.
19. Explain the major steps in Gene cloning.
20. Describe the working principle of laminar air flow and autoclave.
21. Comment on bioreactors and describe a typical bioreactor.
22. What are the advantages and disadvantages of micropropagation?
23. Explain the industrial applications of biotechnology.
24. Write a note on Murashige and Skoog medium.

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(PTO)

PART D
Answer **any two** questions. Each question carries 12 marks
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25. Explain DNA sequencing - Sanger's procedure.
OR
26. Explain Edman's degradation method for protein sequencing.

27. Write an essay vectors used in Biotechnology.
OR
28. Explain the applications of Biotechnology in Medicine and Agriculture.
(12 x 2 = 24)

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