

15P427

(Pages: 2)

Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, MARCH 2017

(CUCSS - PG)

(Botany)

CC15P BO4 E14 – GENETIC ENGINEERING

(2015 Admission)

Time: Three Hours

Maximum: 36 Weightage

I Answer all questions briefly :

1. What is meant by Biolistics?
2. Explain northwestern blotting.
3. What is a transgenic organism?
4. What is meant by nested PCR?
5. What is the use of viral promoter in a recombinant DNA?
6. What is meant by VNTR?
7. How are transgenics used in increasing the shelf life of plant produces?
8. What are nanoparticles?
9. What is a microsatellite?
10. What are split genes?
11. Explain chromosome jumping.
12. What are restriction endonucleases?
13. What is RAMPO?
14. What is Tm?

(14 x 1 = 14 weightage)

II Answer *any seven* questions each in not more than 100 words:

15. Explain the application of virus in gene therapy?
16. What is meant by DNA finger printing? Explain its significance.
17. What is PCR? Mention its different types.
18. How are GMOs used against environmental pollution?
19. Give an account on molecular markers.
20. Differentiate between northern and southern blotting
21. What is Electrophoresis? Explain any two types.
22. Mention the applications of gene cloning?
23. What are the properties of the Genetic code?
24. What is Golden rice? Mention its significance.

(7 x 2 = 14 weightage)

III Answer *any two* questions in **300** words:

25. What is DNA sequencing? Explain the different types of sequencing methods?
26. What are molecular markers? Mention different types and their significance?
27. What is gene therapy? How far is it applicable?
28. Discuss the various gene transfer methods followed in rDNA technology

(2 x 4 = 8 weightage)

Time: Three Hours

Maximum: 36 Weightage

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1. What is meant by Bioterror?
2. Explain northern blotting.
3. What is a transgenic organism?
4. What is meant by nested PCR?
5. What is the use of viral promoter in a recombinant DNA?
6. What is meant by VNTR?
7. How are transgenes used in increasing the shelf life of plant products?
8. What are nanoparticles?
9. What is a microsatellite?
10. What are split genes?
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