

C 41439

(Pages : 2)

Name.....

Reg. No.....

FOURTH SEMESTER. B.Sc. DEGREE EXAMINATION, MARCH 2013

(CCSS)

Microbiology—Core Course

MB 4 B 06—MICROBIAL GENETICS AND GENETIC ENGINEERING

Time : Three Hours

Maximum : 30 Weightage

Section I

Answer all questions.

1. Transforming principle as explained by Griffith was later identified as
2. Shine-Dalgaeno sequence is the one involved in
3. When the altered codon formed as result of mutation is a termination codon the mutation is called _____
4. PBR 322 vector has gene for resistance to
5. Part of DNA which is transferred from Ti-plasmid to host plant is called as _____
6. Ames test is used to study
7. An example for restriction-enzyme which produce sticky end is _____
8. In Western blotting, presence of specific protein can be detected by use of _____
9. When the F factor in F+ cells become integrated it is called as
10. Bacteria carrying prophage are called as
11. Taq DNA polymerase was originally isolated from
12. IPTG is used as an inducer of

(12 x $\frac{1}{4}$ = 3 weightage)

Section II

Answer all questions.

Answer each in one or two sentences.

13. Electroporation.
14. RT-PCR.
15. Bacterial conjugation.
16. RNA polymerase.
17. Genetic code.
18. PUC vector.
19. Okazaki fragment.

Turn over

- 20. Blue white screening.
- 21. Plasmid.

(9 x = 9 weightage)

Section III

Write any five of the following questions.

Write short notes on :

- 22. GM food.
- 23. Site directed mutagenesis.
- 24. Ligases.
- 25. Southern Blotting.
- 26. Expression vectors.
- 27. Induced mutation.
- 28. Generalised transduction.

5 x 2 = 10 weightage)

Section IV

Answer any two questions.

- 29. Explain methods for introducing foreign DNA into the cell.
- 30. Discuss DNA sequencing methods.
- 31. Describe terminator gene technology.

(2 x 4 = 8 weightage)