

C 63145

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Name.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2014

(CSS)

Microbiology

MB 2C 05—MICROBIAL GENETICS

(2010 Admissions)

Time : Three Hours

Maximum : 36 Weightage

Part A

*Answer **all** questions.*

Each question carries weightage of 1.

1. Operons.
2. Inversion mutation.
3. Mutagenesis by UV rays.
4. Auxotroph.
5. Sex pilus.
6. Prophage.
7. Reverse transcriptase.
8. Pulsed Field Gel Electrophoresis.
9. Polylinker.
10. Photoreactivation.
11. Specialized transduction.
12. Griffith's experiment.
13. Tandem repeats.
14. Repressor proteins.

(14 x 1 = 14 weightage)

Part B

*Answer any **seven** questions.*

Each question carries weightage of 2.

15. Mutagens.
16. Transduction.

Turn over

17. Construction of genetic map in bacteria.
18. Cloning.
19. Restriction endo nucleases.
20. Transposons.
21. DNA finger printing.
22. DNA repair mechanisms.
23. Genetic system in *Neurospora*.

(7 x 2 = 14 weightage)

Part C

*Answer any **two** questions.
Each question carries weightage of 4.*

24. Discuss the organization of prokaryotic genome.
25. Discuss the gene transfer mechanisms in prokaryotes.
26. Outline recombinant DNA technology.

(2 x 4 = 8 weightage)