C 28413

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JULY 2012

(CUCSS)

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. Nucleoid.
- 2. Deletion mutation.
- 3. Nitrosoguanidine.
- 4. Lethal mutation.
- 5. Hfr cells.
- 6. Lysogenic cycle.
- 7. Shotgun cloning.
- 8. R plasmid.
- 9. Replica plating.
- 10. Base excission repair.
- 11. Davis's U-tube experiment.
- 12. Generalized transduction.
- 13. Open Reading Frame.
- 14. Stop codon.

 $(14 \times 1 = 14 \text{ weightage})$

Part B

Answer any seven questions. Each question carries weightage of 2.

- 15. DNA repair mechanisms.
- 16. Physical mutagens.
- 17. Ames test.
- 18. Conjugation.
- 19. Cloning vectors.

Turn over

- 20. Plasmids.
- 21. Restriction enzymes.
- 22. Genetic system in yeast.
- 23. Phage induced mutation.

 $(7 \times 2 = 14 \text{ weightage})$

Part C

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

- 24. Describe DNA replication.
- 25. Discuss the mechanisms of transfer of genetic elements among bacteria.
- 26. Describe DNA Finger Printing.

 $(2 \times 4 = 8 \text{ weightage})$