

**C 17225**

**(Pages : 2)**

**Name.....**

**Reg. No.....**

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JULY 2011**

**(CSS)**

**MB 2C 05—MICROBIAL GENETICS**

**(2010 admissions)**

**Time : Three Hours**

**Maximum Weightage : 36**

**Part A**

*Answer **all** questions.*

*Each question carries **weightage** of 1.*

- |                         |                               |
|-------------------------|-------------------------------|
| 1. -Auxotrophs.         | 2. Transformation.            |
| 3. Bacteriophage.       | 4. Amber mutation.            |
| 5. Antisense DNA.       | 6. Competent cells.           |
| 7. cDNA.                | 8. Conjugation.               |
| 9. Directed mutation.   | 10. Homologous recombination. |
| 11. Conjugation.        | 12. Okazaki ragment.          |
| 13. Open reading frame. | 14. Plus strand.              |

**(14 x 1 = 14 Weightage)**

**Part B**

*Answer any **seven** questions.*

*Each question carries **weightage** of 2.*

15. Northern blot.
16. DNA repair mechanisms.
17. Lac Operon.
18. tRNA.
19. Methods of detection and isolation of mutants.
20. Repressor proteins.
21. Transposons.
22. Plasmids.
23. Transduction.

**(7 x 2 = 14 Weightage)**

**Turn over**

## Part C

*Answer any two questions.*

*Each question carries weightage of 4.*

24. Write notes on transcription factors.
25. DNA replication.
26. Horizontal gene transfer mechanisms.

(2 x 4 = 8 Weightage)