22580

Name: .....

# Reg. No. THIRD SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY, 2012 (General Biotechnology)

# GB3C1 – Genetic Engineering (2010 Admissions)

## **Time: Three hours**

Maximum: 36 weightage

## <u>SECTION</u> –<u>A</u>

#### (Answer all questions)

- 1. What is BAC?
- 2. Give the significance of GFP?
- 3. What do you mean by star value of restriction enzyme?
- 4. What is a marker gene?
- 5. Give the use of liposomes in genetic engineering.
- 6. What is a transgenic animal?
- 7. What do you mean by gene correction?
- 8. Comment on Type I restriction enzyme.
- 9. What is degenerate primer?
- 10. Write the advantage and disadvantage of using Taq polymerase.

(1x10=10 wieghtage)

# <u>SECTION – B</u>

### (Answer any seven)

- 11. What is phage display system?
- 12. Advantages of viral vectors.
- 13. How a cDNA library is constituted?
- 14. Describe the DNA micro array technology.
- 15. Comment on the concerns raised by GMO.
- 16. RFLP.
- 17. Types of gene therapy.
- 18. Patenting of life forms.
- 19. Colony hybridization.
- 20. Type II restriction enzymes.

(2x7=14 weightage)

## <u>SECTION</u> –<u>C</u> (Answer any TWO questions)

- 21. Write an essay on the biosafety regulations of rDNA technology.
- 22. What is PCR? Explain the types and applications of PCR.
- 23. Describe the DNA sequencing techniques.

(2x6=12 weigthage)

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