D 31370

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2012

(CUCSS)

General Biotechnology

GB 3C 1-GENETIC ENGINEERING

(2010 admissions)

Maximum : 36 Weightage

Section A

Answer **all** questions.

1. What is PAC ?

Time : Three Hours

- 2. What is the use of S_1 nuclease?
- 3. Write the significance of CaMv promoter.
- 4. What do you mean by palidromic sequence ?
- 5. What is plaque hybridisation?
- 6. What is a reporter gene?
- 7. What is gene augmentation ?
- 8. What is the significance of GFP?
- 9. What is refolding?
- 10. What is south-western blot?

Section B

Answer any **seven** questions.

- 11. Chromosome walking.
- 12. What is RNA interference ?
- 13. How recombinant proteins are processed?
- 14. Write the standard procedure for taking a patent.
- 15. What is colony hybridisation?
- 16. Automated DNA sequencing.
- 17. Microarray technology.
- 18. What is phage display system?
- 19. Gene therapy vectors.
- 20. Explain the applications of molecular mapping in disease diagnosis.

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

 $(10 \times 1 = 10 \text{ weightage})$

Turn over

Section C

Answer any two questions.

- 21. Explain the characterisation of recombinant proteins.
- 22. Explain the construction of a cDNA library. How it is different from a gene library ? Add a note on the applications of gene/cDNA libraries.
- 23. Describe the types and characters of restriction enzymes.

 $(2 \ge 6 = 12$ weightage)