

C 48625

(Pages : 2)

Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, SEPTEMBER 2008

General Biotechnology

GBT 215—GENETICS ENGINEERING

Time : Three Hours

Maximum :80 Marks

Section A

Answer any two questions.

1. Describe the importance of rDNA technology and introduction of genes in crops.
2. Discuss the different DNA sequencing techniques.
3. Write an account on DNA microarray technology, its applications and limitations.

(1 x 10 = 10 marks)

Section B

Answer any ten questions.

4. Give an account on FACS and chromosome microdissection.
5. Discuss the different classes of yeast transforming vectors.
6. Write a note on RNase protection Assay.
7. Write an account on gene knockout technology.
8. Explain agrobacterium mediated transformation.
9. Give the principle of yeast two hybrid system.
10. What are the strategies employed in developing herbicide-resistant plants ?
11. Discuss the positive and negative aspects of patenting genetically engineered multicellular organisms.
12. Write a note on gene therapy.
13. Describe the principle of Phage display of random peptides.
14. Write an account on site directed mutagenesis.
15. Explain the advances in protein engineering.

(10 x 5 = 50 marks)

Turn over

Section C

Answer **all** questions.

16. What is imprinting ?
17. EST.
18. RAPD.
19. Si mapping.
20. Ri Plasmid.

(5 x 4 = **20** marks)