

C 48196

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Name.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, AUGUST 2008

General Biotechnology

GBT 202—MOLECULAR BIOLOGY

Time : Three Hours

Maximum : 80 Marks

Section A

*Answer any **two** questions.*

1. Elaborate the process of protein translation in **Eukaryotes**.
2. Give a detailed account on different models of homologous recombination.
3. Explain gene regulation in prokaryotes with **suitable** examples.

(2 x 10 = 20 marks)

Section B

*Answer any **ten** questions.*

4. Describe the mechanism of replication fork formation.
5. Give an account on recombinant screening and selection.
6. Describe various nucleic acid hybridization techniques.
7. Give an account on DNA damage repair systems.
8. Describe the role of **ribozymes**.
9. Explain RNA editing.
10. Write a note on different gene cloning vectors.
11. Give the principle of DNA **Footprinting**.
12. Write a brief note on the steps involved in generating **cDNA** library.
13. Give an account on the various post-transcriptional modifications in **eukaryotes**.
14. Briefly describe the types of tumor viruses.
15. Describe the mechanism of receptor mediated **endocytosis**

(10 x 5 = 50 marks)

Turn over

Section C

Answer all questions.

n:

16. Splicesome.
17. Transposons.
18. Phagemids.
19. Holoenzyme.
20. Open-regarding frame.

(5 x 2 = 10 marks)