(DBOT 23)

M.Sc. (BOTANY) (Final) DEGREE EXAMINATION :: MAY 2006

Paper - VII : CELL BIOLOGY AND MOLECULAR BIOLOGY

Time: Three hours Maximum : 100 Marks

Answer any FIVE questions from Section A
Each question carries 8 marks
Also answer ALL the question from Section B
Each question carries 15 marks
SECTION A - (5 X 8 = 40 marks)

1. Red cell membrane structure
2. Liposomes and their applications.
3. Scanning electron microscopy
4. Role of second messenger in signal transduction
5. Details of Griffith's experiment
6. Lysogenic cycle
7. Watson and Crick DNA structure
8. Taylor's experiment

SECTION B - (4 X 15 = 60 marks)

9. (a) Write an account on structure and function of mitochondria.

Or

(b) Explain different models of plasma membrane? Which one is more realistic?

10. (a) Differentiate between Electron microscopy and Light microscopy.

Or

(b) What are oncogenes? How they induce uncontrolled cell division?

11. (a) Explain how phage work revealed find structure of gene.

Or

(b) Differentiate between conjugation and transduction.

12. (a) Explain general features of genetic code.

Or

(b) Explain the role of DNA polymerases in DNA replication and Mechanism of DNA replication.

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