

(DBOT 23)

M.Sc. DEGREE EXAMINATION, DECEMBER 2011.

Second Year

Botany

Paper VII — CELL BIOLOGY AND MOLECULAR
BIOLOGY

Time : Three hours

Maximum : 100 marks

SECTION A — (5 × 8 = 40 marks)

Answer any FIVE questions.

1. Endoplasmic reticulum.
2. Lysosomes.
3. SEM.
4. Cell signaling.
5. Transduction.
6. Gene concept.
7. DNA replication.
8. Transcription.

SECTION B — (4 × 15 = 60 marks)

Answer ALL questions.

9. (a) Discuss the ultra structure of plasma membrane.

Or

- (b) Describe the structure and functions of chloroplast.

10. (a) Give an account of genetics of cancer.

Or

- (b) Write an essay on transposable elements.

11. (a) Explain genetic recombination in phage.

Or

- (b) How do you justify DNA as genetic material?

12. (a) Write an essay on genetic code.

Or

- (b) Explain gene regulation in prokaryotes.
