

S.No. 160

12PBT03

(For the candidates admitted from 2012–2013 onwards)

M.Sc. DEGREE EXAMINATION, APRIL/MAY 2018.

First Semester

Biotechnology

MOLECULAR BIOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Comment on photo reactivation.

Or

(b) Write a short note on central dogma.

2. (a) Comment on RNA polymerase.

Or

(b) Explain about the post transcriptional process.

3. (a) Briefly explain the machineries involved in Translation.

Or

- (b) Explain about the post translational modifications of protein.

4. (a) Write short note on cellular oncogenes.

Or

- (b) Discuss about tumor suppressor genes.

5. (a) Comment on AFLP.

Or

- (b) Write short note on genetic counseling.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) Explain enzymes involved in replication.

Or

- (b) Explain about the DNA replication in Eukaryotes.

7. (a) Explain in detail about Regulatory Mechanism of transcription in prokaryotes.

Or

- (b) Explain the Regulatory elements involved in the post transcriptional process.

8. (a) Explain about the translation process involved eukaryotes.

Or

- (b) Explain about the sorting of protein in a cell.

9. (a) Explain in detail about the structure and the function of P^{RB} suppressor protein in tumor cell.

Or

- (b) Explain in detail about P⁵³.

10. (a) Explain about the molecular mapping of Genome.

Or

- (b) Explain in detail about RFLP and its application.