

No. of Printed Pages : 1

Sl. No.

21BOT3C10L

M.Sc. III Semester Degree Examination, April/May - 2023

BOTANY

Molecular Biology

Time : 3 Hours

Maximum Marks : 70

Note : Answer **any five** of the following questions with Question No. **1** is **compulsory**.

1. Describe the structure of DNA and RNA genetic material. **14**
2. Discuss the mechanism of transcription and translation in prokaryotes. **14**
3. Write on eukaryotic transposons. **14**
4. Explain genetic control of cell cycle. Add a note on antibody genes. **14**
5. Describe the causes and types of DNA damage and DNA repair. **14**
6. (a) Write on lactose metabolism and tryptophan synthesis in *E. coli*. **7**
(b) Applications of transposons. **7**
7. (a) Discuss the cell mediated immunity. **7**
(b) Chemical mutagens. **7**
8. (a) Write on DNA methylation **5**
(b) Oncogenes **5**
(c) Silent mutations **4**

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