

Roll No.

DD-465

M. Sc. (Second Semester) EXAMINATION, May-June, 2020

BOTANY

Paper Second

(Molecular Biology)

Time : Three Hours

Maximum Marks : 80

Note : Attempt all the *four* questions. *One* question from each Unit is compulsory. All questions carry equal marks.

Unit—I

1. Describe the DNA damage and repair system in cell.

Or

Write short notes on any *two* of the following :

- (i) Watson and Crick model of DNA
- (ii) RNA structure and its role in cell
- (iii) Semiconservative method of DNA replication

Unit—II

2. Write an essay on Translocation in Eukaryotes.

Or

Write short notes on any *two* of the following :

- (i) Transcription of DNA in Prokaryotes
- (ii) Nuclear DNA content
- (iii) Evolution of multigene families

B-11) P. T. O.

Unit—III

3. Describe the gene expression in Prokaryotes.

Or

Write short notes on any *two* of the following :

- (i) Protein targeting
- (ii) Intron and their significance
- (iii) Fine structure of gene

Unit—IV

4. Give an account of the different types of mutation.

Or

Write short notes on any *two* of the following :

- (i) Site directed mutagenesis
- (ii) Chemical mutagens
- (iii) Inherited human diseases