

Molecular Biology

Note : Answer **all** questions. All questions carry equal marks.

- (a) Leading and lagging strands
- (b) DNA polymerases
- (c) Topoisomerases

(2)

Unit-II

2. Describe DNA replication in Retro viruses.

OR

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

- (a) Types of DNA damages
- (b) Mismatch repair
- (c) Excision repair

Unit-III

3. Describe the types of RNA in detail.

OR

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

- (a) Attenuation
- (b) Initiation of transcription
- (c) RNA polymerases

Unit-IV

4. Describe Lac operon.

OR

(3)

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

- (a) Negative regulation
- (b) Positive regulation
- (c) t-RNA synthesis

Unit-V

5. Describe the formation of Initiation complex in translation.

OR

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

- (a) Signal hypothesis
 - (b) Rho-dependent termination
 - (c) In vitro transcription-translation system
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