

M.Sc. (Final)
Term End Examination, 2017-18

Group - C(II)

Paper - IV

Molecular Biology, Developmental
Biology and Bioinformatics

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

Unit-I

1. Describe the process of DNA replication in prokaryotes.

OR

(2)

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

- (a) Enzymes used in DNA replication
- (b) DNA finger printing
- (c) What is RFLP ?

Unit-II

2. Explain the process of translation in prokaryotes.

OR

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

- (a) DNA repair mechanism
- (b) Transportation in prokaryotes
- (c) DNA recombination

Unit-III

3. Define bioinformatics. How is it useful in DNA sequence analysis ?

OR

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

- (a) Methods of protein structure analysis
- (b) Cell diversification in early embryo
- (c) Role of genes in differentiation

(3)

Unit-IV

4. Describe the different steps involved in DNA technology.

OR

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

- (a) Genome analysis
 - (b) Role of gene in evolution
 - (c) What is Genetic engineering ?
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