

Roll No. ....

# DD-804

## M. Sc. (Fourth Semester) EXAMINATION, 2020

BIOTECHNOLOGY

Paper Fourth

**(Functional Genomics and Proteomics)**

*Time : Three Hours*

*Maximum Marks : 80*

**Note :** Attempt all the *five* questions. All questions carry equal marks.

1. Write notes on the following :
  - (a) Future of Genomics
  - (b) EST
  - (c) SDS-PAGE
  - (d) Protein databases

### Unit—I

2. Discuss structural organization of nuclear genome of eukaryotes.

*Or*

Write short notes on the following :

- (a) Chloroplast genome
- (b) Gene medicine

**Unit—II**

3. Discuss human genome project and its major outcomes.

*Or*

Write short notes on the following :

- (a) Comparative genomics in eukaryotes
- (b) SNPs

**Unit—III**

4. Describe practical applications of proteomics.

*Or*

Write short notes on the following :

- (a) Structural proteomics
- (b) Functional proteomics

**Unit—IV**

5. Write a technical note on future of proteomics.

*Or*

Discuss methods for expression analysis and characterization of proteins.