



Seat No. _____

HA-003-1134003

M. Sc. (Sem. IV) (CBCS) (W.E.F. 2016) Examination

April - 2023

Biotechnology : BT-420
(Pharmaceutical Biotechnology)
(Elective)

Faculty Code : 003

Subject Code : 1134003

Time : $2\frac{1}{2}$ Hours / Total Marks : 70

- 1** Answer the following (Any 7, Each of 02 marks) **14**
- (1) What are antimicrobial agents ?
 - (2) What is cDNA ?
 - (3) What is Cloning ?
 - (4) What is positional cloning ?
 - (5) How would you design a drug ?
 - (6) What is AIDS ?
 - (7) Who started the HGP ?
 - (8) What is the role of personalized medicine ?
 - (9) What is the molecular diagnosis ?
 - (10) Why Vaccine is called a Vaccine ?
- 2** Answer the following (Any Two, Each of 07 Marks) **14**
- (a) Describe the structural organization of the human genome.
 - (b) Write a note on MALDI - TOF and explain how it works.
 - (c) What is 2D gel electrophoresis. Give its applications.

3 Answer the following (a) & (b) Both are compulsory, **14**
Each of 07 marks)

(a) What are drug metabolizing enzymes ? Describe.

(b) Write a note on microarray ?

OR

3 Answer the following (a) & (b) Both are compulsory, **14**
Each of 07 marks)

(a) Write a note on individualized medicine.

(b) Write a note on disease-linked genes.

4 Answer the following (a) & (b) Both are compulsory, **14**
Each of 07 marks)

(a) Write a brief note on drug-metabolizing enzymes.

(b) Write a note on molecular diagnosis by biomolecular detection.

5 Answer the following (any Two, Each of 07 Marks) **14**

(a) Write a note on modern approaches in vaccination.

(b) What genome variations are found among the HIV strains ?

(c) How do antimicrobial agents work ? Give its various categories.

(d) Write a note on drug side effects.
