



DN-003-1134003

Seat No. _____

M. Sc. (Biotech) (Sem. IV) (CBCS) Examination

March - 2022

BT-420 : Pharmaceutical Biotechnology (2016)

Faculty Code : 003

Subject Code : 1134003

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- 1 Answer the following (Each of 02 marks) 14
- (1) Define : Bactericidal.
 - (2) Define : Vaccine.
 - (3) Enlist enzymes present in the HIV Virus.
 - (4) Define positional cloning.
 - (5) Enlist difference between HIV-I & HIV-II.
 - (6) Enlist types of drug metabolizing enzyme.
 - (7) Define linked gene.
 - (8) Enlist different class of antiretroviral medicine.
 - (9) Enlist the AIDS specific volunteer organization.
 - (10) What is an antimicrobial agent ?
- 2 Answer the following (Any two out of three, each of 07 marks) 14
- (a) Write a note on structural and functional organization of the human genome.
 - (b) What is Mass spectrometry ? Explain briefly on MALDI techniques.
 - (c) What is DNA microarray ?

- 3** Answer the following (Each of **07** marks) **14**
(a) Write a note on treatment of HIV infection.
(b) Explain the Life cycle of HIV infection in normal human host.

OR

- 3** Answer the following (Each of **07** marks) **14**
(a) Explain in detail : Structure of HIV.
(b) Diagnosis of HIV infection.

- 4** Answer the following (Each of **07** marks) **14**
(a) Write on genetic polymorphism in drug metabolism.
(b) Comment on interrelationship between genes, drugs and race.

- 5** Answer the following : **14**
(Any two out of four, each of **07** marks)
(a) Write a note on various antibacterial agents and mode of actions.
(b) Elaborate on the antibiotics affecting cell-wall synthesis.
(c) Write a detailed note on types of vaccines.
(d) Describe various classes of antibiotics with their mode of action.
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