



BBC-003-1134003

Seat No. _____

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

June / July - 2021

BT - 420 : Pharmaceutical Biotechnology (2016)

Faculty Code : 003

Subject Code : 1134003

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

[Total Marks : 70

Instruction : Attempt any five questions

- 1 Answer the following : (Each of 02 marks) 14
- (1) Enlist enzymes present in the HIV Virus.
 - (2) Define positional cloning.
 - (3) Enlist difference between HIV-I & HIV-II
 - (4) Define linked gene.
 - (5) Enlist the different Class of antiretroviral medicine
 - (6) Enlist the AIDS specific volunteer organization.
 - (7) Write on protein synthesis inhibitors drug.
- 2 Answer the following : (Each of 02 marks) 14
- (1) Write down mode of action of cell membrane inhibitors drug.
 - (2) Define : Bactericidal.
 - (3) Define : Bacteriosttic.
 - (4) Define : Vaccine.
 - (5) Enlist Morden approaches in vaccination.
 - (6) What is an antimicrobial agent?
 - (7) Enlist types of drug metabolizing enzyme.
- 3 Answer the following : (Each of 07 marks) 14
- (a) Elucidate on Human Genome project
 - (b) Write a note on structural and functional organization of the human genome.

- 4 Answer the following : (Each of 07 marks) 14
(a) What is DNA microarray?
(b) What is Mass spectrometry? Explain briefly on MALDI techniques
- 5 Answer the following : (Each of 07 marks) 14
(a) Explain in detail: Structure of HIV.
(b) Explain the Life cycle of HIV infection in normal human host.
- 6 Answer the following : (Each of 07 marks) 14
(a) Diagnosis of HIV infection
(b) Write a note on treatment of HIV infection.
- 7 Answer the following : (Each of 07 marks) 14
(a) Write on the phases of drug metabolism
(b) Comment on interrelationship between genes, drugs and race.
- 8 Answer the following : (Each of 07 marks) 14
(a) Write on genetic polymorphism in drug metabolism.
(b) Write a note on Drug toxicity
- 9 Answer the following : (Each of 07 marks) 14
(a) Write a note on various antibacterial agents and mode of actions.
(b) Describe various classes of antibiotics with their mode of action.
- 10 Answer the following : (Each of 07 marks) 14
(a) Write a detailed note on types of vaccines.
(b) Elaborate on the antibiotics affecting cell-wall synthesis? Explain any one of β -lactam Antibiotics with suitable example.