

2007 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

IV B.TECH I SEMESTER REGULAR EXAMINATIONS,
MOLECULAR PATHOGENESIS
(BIO-TECHNOLOGY)

NOVEMBER 2007

Time: 3 hours
Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) What is MHC / HLA, write in short about MHC / HLA subtypes, their structure and functions in immunity
- (b) Write in short about MHC / HLA and disease association and name few diseases with HLA association . [8+8]
2. What is a pathogen? Write in short different host defenses against pathogen . [16]
3. What is acquired / adaptive immunity? Write about the cells in the blood involved and their function in adaptive immunity. [16]
4. What are the mechanisms adopted by microbes / pathogens to evade the immune response? [16]
5. Write short notes on function and application of the following: [16]
- (a) Inbred mice
- (b) Immuno compromised animals
- (c) SCID mice
- (d) Knock out mice.
6. Write short notes on the following: [16]
- (a) Vaccines
- (b) Immunomodulators.
7. Define botulism. Write briefly about the pathogen, symptoms, pathogenesis and treatment. [16]
8. Write the similarities and differences between Lyme and Syphilis diseases.