

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. What is genetic diversity? Write the methods to detect genetic diversity in microbial pathogens? [16]
2. Write the defense mechanisms of the following: [16]
- (a) Mucosa
- (b) Respiratory tract
- (c) Skin.
3. What is systemic defense (SD)? Name the cells in the blood which contribute to SD and their function. [16]
4. What is colonization? Write in detail about the steps and mechanism involved in colonization. [16]
5. What factors should be taken care of in deciding an experimental animal model to study human diseases? [16]
6. Write short notes on the following: [4+4+4+4]
- (a) Routes of vaccination and its impact
- (b) Immunization
- (c) BCG vaccine
- (d) Effective vaccines.
7. Explain the mode of action of following antibiotics: [4+4+4+4]
- (a) Erythromycin
- (b) Penicillin
- (c) Rifampacin
- (d) Streptomycin.
8. Write short notes on [8+8]
- (a) Legionnaire's disease and
- (b) Glomerulo nephritis.