

**2016**

*Time : 2 hours*

*Full Marks : 40*

*The questions are of equal value.*

*Answer any **four** questions.*

**(MOLECULAR IMMUNOLOGY)**

1. What is Immunity ? Discuss the various features of innate and adaptive immunity.
2. Write short notes on the following :
  - (a) Lymphoid Organs
  - (b) NK cells
3. Give an account of the structure, distribution and processing of MHC molecules.
4. Write short notes on the following :
  - (a) T cells receptors
  - (b) Antigen-Antibody interactions

3. Write notes on the following :
  - (a) Effect of pH on enzyme activity
  - (b) Line weaver Burk plot
4. Describe how enzyme modification alters the catalytic efficiency. Giving suitable examples add a note on practical application of such technology.
5. Give an account of the mechanism of action of carboxypeptidase.
6. Write notes on the following :
  - (a) Serine protease
  - (b) Multienzyme complexes
7. Give an account of the commercial applications of enzymes in food industries.
8. Write short notes on the following :
  - (a) Effect of organic solvents on enzyme activity
  - (b) Enzymes in paper industry

