

M.Sc. Bioinformatics - 2nd Semester

(2721)

Paper: BI-526 Advanced Biochemistry and Immunology

Time Allowed: 2 hrs.

Max. Marks: 75

Note: There are EIGHT questions of equal marks. Candidates are required to attempt any FOUR questions.

SECTION-A

- I. Justify how citric acid cycle is the most important metabolic pathway for energy supply?
- II. Discuss the process of oxidative phosphorylation.

SECTION-B

- III. What is enzyme catalysis? Discuss the mechanism of enzyme catalysis.
- IV. Briefly discuss different types of enzyme inhibition.

SECTION-C

- V. Discuss the structure and functions of G-protein coupled receptors.
- VI. What is bacterial quorum sensing? Discuss its role in controlling the virulence of bacteria.

SECTION-D

- VII. Write a note on antigenic determinants? Discuss the properties of B-Cell epitopes.
- VIII. Discuss how endogenous and exogenous antigens are presented?

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