

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**MSc DEGREE EXAMINATION MAY 2019
(Third Semester)**

Branch - **BIOCHEMISTRY**

CORE ELECTIVE : I IMMUNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION -A 130 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 1 a What is meant by immunodeficient mouse strains? Explain with reference to Nudemice and knock out mice.
OR
b What is Leucocyte adhesion molecule? Explain the selection family.
- 2 a Write a detailed note on Hapten.
OR
b Discuss the Antigenic determinant with examples.
- 3 a Give the principle and applications of Immuno fluorescence.
OR
b Write briefly on Tumor Necrosis Factor.
- 4 a What are natural killer cell? Explain the toxicity mediated by natural killer cells.
OR
b What is immunization? Differentiate active and passive immunization.
- 5 a Outline the mechanism of graft - versus - host disease. How might this disease be over come?
OR
b Discuss the Auto immune diseases and the factors that influence the development of an auto immune disease.

SECTION -B (45 Marks)

Answer any **THREE** questions

ALL questions carry **EQUAL** Marks (3 x 15 = 45)

- 6 What is haematopoiesis? Describe the mechanism of haematopoiesis regulation.
- 7 Write elaborately the structure and organisation of MHC Class I and II molecule.
- 8 What are complement? Write the component of complement and describe steps involved in the alternative pathway of complement.
- 9 Describe elaborately the Antibody mediated cytotoxic hypersensitivity.
- 10 Write in detailed on structure, pathogenesis, diagnosis and treatment of HIV.