

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

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

Branch - **BIOTECHNOLOGY**

IMMUNOBIOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 Define immunity.
- 2 What are thymocytes?
- 3 Write a note on Fab fragment.
- 4 Define MHC.
- 5 Write a note on T_c cells.
- 6 What are cytokines?
- 7 Mention about histamine.
- 8 Write a note on hybridoma technology.
- 9 Define abzyme.
- 10 What is attenuated vaccine?

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a What is inflammation? Explain the steps involved in the process of inflammation.
OR
b Bring out the structure and functions of dendritic cells.
- 12 a What are the biological functions of immunoglobulin? Discuss.
OR
b Describe the alternative pathway of complement system.
- 13 a Give an account on the steps involved in activation of B-cells.
OR
b Describe the mechanism of immunological tolerance.
- 14 a Define autoimmunity. Mention any two organ specific auto immune diseases.
OR
b How does our immune system respond to tumour cells? Discuss.
- 15 a Describe the techniques involved in enzymoimmunoassay.
OR
b What is immunization? Discuss about active and passive immunization.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 What are secondary lymphoid organs? Discuss about its structure and function.
- 17 Discuss in detail the endogenous and exogenous pathway of antigen processing and presentation.
- 18 Briefly explain about humoral and cell mediated immune response.
- 19 What is hypersensitivity? Explain in detail about the mechanism of anaphylactic reaction.

70 Illustrate the principle and techniques involved in immunoblotting.