

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

**BSc DEGREE EXAMINATION DECEMBER 2019**  
(Fifth Semester)

Branch - **BIOCHEMISTRY**

**IMMUNOLOGY**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

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

- 1 Write any two major role of spleen.
- 2 What is Forssman antigen?
- 3 What are killer cells?
- 4 Mention the types of mast cells.
- 5 Define opsonisation.
- 6 What is urticaria?
- 7 What are interleukins? Mention their role.
- 8 Write any two applications of immuno electrophoresis.
- 9 What is xeno graft?
- 10 What is serum sickness?

**SECTION - B (25 Marks)**

Answer **ALL** Questions

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

- 11 a Describe the process of phagocytosis.  
OR  
b Explain the immunological functions of lymph node.
- 12 a Discuss the characteristics of B lymphocyte with surface markers.  
OR  
b Describe the structure and functions of neutrophils and monocytes.
- 13 a Explain the structure and properties of IgA.  
OR  
b Give a brief note on delayed hypersensitivity.
- 14 a Describe the steps involved in hybridoma technology and its applications.  
OR  
b Write about the technique and applications of RIA.
- 15 a Explain the mechanism of graft rejection.  
OR  
b Give a brief note on vaccines.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

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

- 16 Discuss in detail about the primary lymphoid organs.
- 17 Describe about cytokines and their mode of action.
- 18 Write about type I hypersensitivity reactions.
- 19 Give a detailed note on the techniques and applications of ELISA.
- 20 Explain the immunological abnormalities in AIDS.