

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)  
**BSc DEGREE EXAMINATION DECEMBER 2017**  
(Fifth Semester)

Branch - **MICROBIOLOGY**

**IMMUNOLOGY**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

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

**Write a note on the following :**

- 1 NK cells.
- 2 Thymus.
- 3 Adjuvants.
- 4 Ig A.
- 5 Attenuated Vaccine.
- 6 Interleukins.
- 7 RIA.
- 8 Complement.
- 9 Xenograft.
- 10 Allergens.

**SECTION - B (25 Marks)**

Answer **ALL** Questions

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

- 11 a Explain the structure and functions of bone marrow.  
OR  
b Write the difference between primary and secondary immune response.
- 12 a Write the structure and functions of IgG antibody.  
OR  
b Write short notes on alternative complement pathways.
- 13 a Write the differences between humoral and cell mediated immunity.  
OR  
b Write short notes on antigen presentation.
- 14 a Explain complement Fixation test.  
OR  
b Explain the principle of Immuno fluorescence.
- 15a Write short notes on tissue typing.  
OR  
b Explain Type II hypersensitivity reaction with example.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

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

- 16 What is meant by immunity. Write their types.
- 17 Explain the structure and functions of Ig M antibody.
- 18 Explain the techniques behind monoclonal antibody and its applications.
- 19 Explain the techniques behind ELISA and add a notes on its applications.
- 20 What is meant by hypersensitivity? Explain type I hypersensitivity reactions.