# **PSG COLLEGE OF ARTS & SCIENCE**

(AUTONOMOUS)

#### **BSc DEGREE EXAMINATION MAY 2017**

(Fifth Semester)

### **Branch-BIOCHEMISTRY**

# **IMMUNOLOGY**

Time: Three Hours

Maximum:'75 Marks

### **SECTION-A (20 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks  $(10 \times 2 = 20)$ 

- 1 What is thymus?
- Write about the haptens.
- What is interferon? Give example.
- 4 Define apoptosis.
- 5 Write about the immunogen.
- 6 What are interleukins?
- 7 Write about memory cells.
- 8 Write about the principle of electrophoresis.
- 9 Define xenograft. Give example.
- Write about attenuation.

# **SECTION - B (25 Marks)**

Answer ALL Questions

**ALL** Questions Carry **EQUAL** Marks  $(5 \times 5 = 25)$ 

11 a Explain about the types of immunity.

OR

b Give a brief account on cells involved in immune system.

12 a Explain in detail about phagocytosis.

OR

- b Explain about the cytokines and their mode of action.
- 13 a Write an account on the properties of antibodies.

OR

- b Describe about cytotoxic T cells.
- 14 a Write a short note on hybridoma technology.

OR

- b Discuss about the principle and application of RIA.
- 15 a Write about the HLA typing and its significance.

\* OR

b Explain in detail about vaccines.

#### **SECTION - C (30 Marks!**

Answer any THREE Questions

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

- . 16 Explain in detail about primary lymphoid organs.
  - Give a brief account on structure and function of granulocytes.
  - Write about the antigen antibody invivo.
  - 19 Give an account on complement components and their role.
- 20 Explain in detail about the types of immunization.

**END**