

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(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 HSC.
- 2 MALT.
- 3 Hinge region.
- 4 γ_2 microglobulin.
- 5 TCR.
- 6 Perforin.
- 7 Attenuated vaccine.
- 8 Abzyme.
- 9 Coombs test.
- 10 Precipitin.

SECTION - B (25 Marks!)

Answer ALL Questions

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

- 11 a What is haematopoiesis? Outline the process of haematopoiesis.
OR
b Discuss about innate immune system and its function.
- 12 a With neat sketches explain the basic structure of immunoglobulin.
OR
b Describe the role of Class I and Class II MHC molecule in immune response.
- 13 a What happens when the antigen interact with B-cells? Discuss.
OR
b What are Cytokines? Discuss about the properties of cytokines.
- 14 a What are vaccines? Discuss about active and passive immunization.
OR
b What are monoclonal antibodies? How are they produced? Discuss.
- 15 a Describe the techniques involved in single and double immunodiffusion.
OR
b Explain the principle and applications of radioimmunoassay.

SECTION - C (30 Marks!)

Answer any **THREE** Questions

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

- 16 Give a detailed account on structure and function of secondary lymphoid organs.
- 17 Briefly explain about the classic and alternative pathway of complement.
- 18 Discuss in detail about the humoral and cell mediated immune response.
- 19 What is hypersensitivity? Explain in detail about the types of hypersensitivity reaction.
- 20 Give an elaborate note on the principle and techniques involved in