## M.Sc. DEGREE EXAMINATION, MARCH/APRIL 2020.

## FOURTH SEMESTER

## Zoology

## Paper IV — IMMUNOLOGY

Time : Three hours

Innate Immunity

Haptens

Phagocytosis

Interferons

Hypersensitivity

Agglutination

Anemia

1.

2.

3,

4.

5.

6.

7.

8.

Maximum: 75 marks

(No additional sheet will be supplied)

PART A —  $(5 \times 3 = 15 \text{ marks})$ 

Answer any FIVE questions. Each question carries 3 marks. Each answer should not exceed 1 page. Digeorge's syndrome. PART B - (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

Write an essay on lymphoid system and the importance of lymphoid system on immunity.

- Explain the acquired immunity in human beings and its role against diseases. 10.
- Describe the classical and alternate pathways against inflammation. 11.

Or

Write an essay on cell mediated immunity.

13. Describe antigen and antibody interactions during pathogenesis.

Or

- 14. What is hypersensitivity? Write different types in hypersensitivity with detailed classification.
- 15. What is autoimmune disorder? Describe single organ autoimmune diseases.

 $\mathbf{Or}$ 

16. What is immuno deficiency disease? Write mechanism of immunosuppression by taking HIV as an example.

