(For the candidates admitted from 2012-2013 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Fourth Semester

Microbiology

IMMUNOLOGY

Time: Three hours Maximum: 75 marks

SECTION A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

- 1. Father of Immunology.
- 2. Interferons.
- 3. Giant cells.
- 4. Differentiate primary and secondary lymphoid organs.
- 5. Hetrophile antigen.
- 6. Opsonization.
- 7. Complement fixation.

- 8. ELISA.
- 9. Immunohaematology.
- 10. Isoimmune reaction.

SECTION B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions.

11. (a) List out the biochemical factors of innate immunity.

Or

- (b) Give an account of artificial passive immunity.
- 12. (a) What are B cells? Explain them with their types.

Or

- (b) Describe the structure of Thymus.
- 13. (a) Describe the structure of I_gM.

Or

- (b) Explain the attractive pathway of complement system.
- 14. (a) Add a note Agglutination.

Or

(b) Give a brief account of RIA.

15. (a) Write the mechanism of Type I hypersensitivity.

Or

(b) Summarise the points in Type IV cell mediated immunity.

SECTION C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

- 16. Write the history of Immunology.
- 17. Differentiate T cells from B cells.
- 18. Elucidate the structure and properties of immunoglobulins.
- 19. Write an essay on Antigen-Antibody reactions.
- 20. Give an account of blood group systems and their application in medical field.