D 50685	(Pages: 2)	Name
		Reg. No

FIFTH SEMESTER (CBCSS-UG) DEGREE EXAMINATION **NOVEMBER 2023**

Microbiology

MBG 5B 08—IMMUNOLOGY

(2019 Admission onwards)

Time: Two Hours and a Half

Maximum: 80 Marks

Wherever needed answers must be supported by structural illustrations and diagrams.

Section A (Short Answer Type Questions)

Answer all questions. Each question carries 2 marks.

Write briefly on:-

- 1. Karl Landsteiner.
- 2. Hematopoiesis.
- 3. IgA.
- 4. Idiotype.
- 5. Ouchterlony immunodiffusion.
- 6. Tumor antigens.
- 7. GVH.
- 8. Horror autotoxicus.
- 9. Humoral immunity
- 10. HGPRT.
- 11. RIA.
- 12. NK cells.
- 13. Opsonization.

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- 14. Complement system.
- 15. Adjuvants.

(Maximum: 25 marks)

Section B (Paragraph Type Questions)

Answer all questions.

Each question carries 5 marks.

Write notes on :-

- 1. Complement pathways.
- 2. Cytokines and types
- 3. Immune complex disease.
- 4. Macrophage and its function.
- 5. MHC molecules.
- 6. Predisposing factors of antigenicity.
- 7. MALT.
- 8. Types of ELISA.

(Maximum: 35 marks)

Section C (Essay Type Questions)

Answer any **two** questions. Each question carries 10 marks.

Write essay on :-

- 1. Describe different mechanism of hypersensitivity reactions.
- 2. Define Immunity. Explain the different types of Immunity.
- 3. Explain different types of Antigen-Antibody reactions? Write briefly on precipitation reactions and its clinical applications.
- 4. Discuss the structure and functions of IgG with the help of a labelled diagram.

 $(Maximum : 2 \times 10 = 20 \text{ marks})$