F-0670



M.Sc. DEGREE EXAMINATION, NOVEMBER 2023

Second Semester

Biochemistry

MICROBIOLOGY AND IMMUNOLOGY

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** the questions.

- 1. Define pili.
- 2. Give example for selective media.
- 3. Write the economic importance of fungi.
- 4. Define amoeboid movement.
- 5. Define antigenicity.
- 6. What are haptens?
- 7. Write about T-Cell receptor complexes
- 8. Define cytokines with example.
- 9. What is isograft?
- 10. Define autoimmune diseases.

Part B $(5 \times 5 = 25)$

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain shortly about characteristics of Archaebacteria.

Or

- (b) Give a brief note on maintenance of pure culture.
- 12. (a) Write briefly about morphology of moulds.

 \mathbf{Or}

- (b) Briefly explain about structure of bacteriophages.
- 13. (a) Write brief note on functions of bone marrow.

Or

- (b) Add short note on structure and function of IgA.
- 14. (a) Differentiate innate and acquired immunity.

Or

- (b) Give short note on immunosuppression.
- 15. (a) Write a brief note on the role of MHC molecule in the immune system.

 \mathbf{Or}

(b) Write brief note on the immune responses to tumor.

 $\mathbf{2}$

Part C $(3 \times 10 = 30)$

Answer any **three** questions.

- 16. Illustrate the internal and external structure of bacteria
- 17. Explain in detail about lysogenic life cycle of bacteriophages
- 18. Discuss the activation of complement protein.
- 19. Write elaborately about humoral immunity.
- 20. Give a detailed account on hypersensitivity reactions.

3

F-0672

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023

Third Semester

Biochemistry

MEDICAL BIOCHEMISTRY

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** the questions.

- 1. What does it imply when the levels of ALP and ACP are high in the serum?
- 2. What is SI unit?
- 3. What is Fanconi syndrome?
- 4. What is tyrosinemia?
- 5. What is a plaque?
- 6. What is pentosuria?
- 7. What is steatohepatitis?
- 8. What is creatinine clearance test?
- 9. What is sickle cell anaemia?
- 10. What is cirrhosis?

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write a note on liver marker enzymes used for disease diagnosis.

Or

- (b) Discuss on the clinical importance of functional and non-functional plasma enzymes.
- 12. (a) Elaborate on the symptoms and diagnosis of multiple myeloma.

Or

- (b) Explain the methods for managing proteinuria.
- 13. (a) Explain the causes and treatment for hypercholesterolemia.

Or

- (b) Write a note on the procedure of glucose tolerance test.
- 14. (a) Discuss on the clinical tests done for kidney stone analysis.

Or

- (b) Explain the mechanism by which Diabetes insipidus affects infants.
- 15. (a) Write a note on the diagnostic test for Crigler-Najjar syndrome.

Or

(b) What are the different types of jaundice? Explain

 $\mathbf{2}$

Part C (3 × 10 = 30)

Answer any **three** questions.

- 16. What is the importance of isoenzymes in disease diagnosis?
- 17. Differentiate primary and secondary gout.
- 18. Elaborate on the different types of glycogen storage diseases.
- 19. Explain the clinical significance of Indirect or Unconjugated Bilirubin.
- 20. Give a detailed note on the reasons for performing amniocentesis.

3