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M.Sc. DEGREE EXAMINATION, APRIL 2024.

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. Give two examples for non-Functional enzymes.
- 2. Define 'Mole'.
- 3. Differentiate between gout and pseudogout.
- 4. Why is Cystinosis called as lysosomal storage disease?
- 5. What are the effects of galactosemia?
- 6. What is Diabetic coma?
- 7. What are ketone bodies?
- 8. What is Haemodialysis?
- 9. What is HbA1c? Mention the normal and abnormal levels of A1c.
- 10. Write a note on screening for sickle cell anaemia.

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

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

11. (a) Which enzyme is used for diagnosis of pancreatitis? Explain.

Or

- (b) Explain the factors that affect Quality control in clinical biochemistry.
- 12. (a) Write in detail on the pathophysiology of Fanconi syndrome.

 \mathbf{Or}

- (b) What is gamma Globulinemia? Write down the causes and symptoms.
- 13. (a) Discuss on the types of Glycogen storage disease.

 \mathbf{Or}

- (b) What are the causes of Nephritic syndrome? Write about the treatment of the disease.
- 14. (a) Write about the diagnostic importance of bile salt and uric acid in treating renal abnormalities.

Or

- (b) Write a note on the qualitative analysis of urine and urinary sediments.
- 15. (a) Write a note on the diagnostic tests performed in CSF.

Or

(b) Describe in detail about the types of jaundice.

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

Answer any **three** questions.

- 16. What are the benefits of automation in clinical laboratory?
- 17. What are the causes for Kwashiorkor and Marasmus? How can it be treated?
- 18. Explain the mechanism that contribute to the development of Fatty liver.
- 19. Write a note on the diagnostic importance of the constituents present in urine.
- 20. Mention the composition of amniotic fluid, its origin and the analysis done with the fluid.

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