QP Code: UV25DR010

Reg. No : ....

Name : ....

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20

I SEMESTER (FYVP) DEGREE REGULAR EXAMINATIONS, NOVEMBER 2025

B. Voc. Applied Biotechnology

ABT1CJ103 : Clinical Biochemistry and Diagnostics Applications

2025 Admission Onwards

(Credits: 4)

Time: 2 Hours **Maximum Marks: 60**

Section A

*Answer **all** questions. Each carries **2** Marks.* ***(Ceiling 20)***

1. Name the cellular components of blood.
2. Comment on the toxic metabolite produced during protein metabolism.
3. Explain essential fatty acids with examples.
4. Explain the scope of Medical Biochemistry.
5. Describe the normal range of total cholesterol in blood.
6. Identify the amino acids containing sulphur.
7. Illustrate aerobic respiration and anaerobic respiration.
8. A patient has high AST levels. What does it indicate?
9. Inspect induced fit hypothesis of enzymes.
10. How will you correlate the test results of thyroid with clinical symptoms?
11. Illustrate on high fasting blood glucose and HbA1c in a patient.
12. All enzymes are proteins. But all proteins are not enzymes. Validate.

Section B

*Answer **all** questions. Each question carries **6** Marks.* ***(Ceiling 30)***

13. Outline β-oxidation of fatty acids.
14. How blood glucose is regulated in the body.
15. Why GFR and creatinine clearance are important in kidney function assessment.
16. Determine the role of insulin in regulating the glucose level of a person.

Turn Over

17. Outline the structure of an aldose sugar and a ketose sugar and comment on their properties.
18. Elevated tumor marker levels always indicate malignancy.Evaluate.

Section C

Answer ***any One***. ***(1X10=10 Marks)***

19. Discuss in detail about the metabolic disorder gout.
20. Compare and analyze the electrolyte disturbances in diarrhoea Vs vomiting.

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