

**Third Year B.Sc MLT Degree Supplementary Examinations October 2023  
Biochemistry – III**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw Diagrams wherever necessary.*

**Essay**

**(2x10=20)**

1. Discuss the various factors affecting the enzyme activity
2. Classify jaundice. What are the causes of different types of jaundice. Discuss the biochemical alterations seen in blood and urine in different types of jaundice. (1+4+5)

**Short notes**

**(10x5=50)**

3. Draw and discuss normal and abnormal pattern of hemoglobin electrophoresis
4. Describe principle and applications of Radioimmunoassay
5. Congenital Erythropoietic porphyria
6. Thin layer chromatography
7. Enzyme profile in acute pancreatitis
8. Biliary calculi
9. Oxygen dissociation curve of hemoglobin
10. Sickle cell anemia
11. Principle and method of estimation of Aspartate aminotransferase
12. Allosteric inhibition

**Answer briefly**

**(10x3=30)**

13. Michaelis -Menten theory
14. Ligases
15. Creatinine clearance test
16. Ehrlich's test
17. Competitive inhibition of enzyme
18. Myoglobin
19. Chloride shift
20. Isoelectric focusing
21. Immobilisation of enzymes
22. Creatine Kinase