

**Third Year B.Sc MLT Degree Examinations, November 2013**

**BIOCHEMISTRY-III**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw Diagrams wherever necessary.

**Essay**

**(2x10=20)**

1. Describe the principle, procedure, indications and interpretations of serum electrophoresis  
( 1+5+2+2=10)
2. Discuss the principle and methods for the estimation of direct and total bilirubin. Explain briefly on urobilinogen and urobilin  
( 2+ 6+1+1=10)

**Short notes**

**(10x5=50)**

3. Isoenzymes
4. End point assay and kinetic assay
5. Principles and methods for estimation of creatine phosphokinase
6. Porphyria
7. High performance liquid chromatography
8. Radio immunoassay
9. Plasma enzyme pattern in myocardial infarction
10. Aminoacidurias
11. Urinary calculi analysis
12. Receptor assays

**Answer briefly**

**(10x3=30)**

13. Transaminases
14. Ceruloplasmin
15. Isohydric transport of carbon dioxide
16. Hemolytic jaundice
17. Isoelectric focusing
18. Immunodiffusion
19. Creatinine clearance
20. Thin layer chromatography
21. Non competitive inhibition
22. Hemoglobin variants