

**First Year B.Sc MLT Degree Supplementary Examinations  
February 2019**

**Biochemistry**

**(2016 Scheme)**

**Time: 3 Hours****Total Marks: 100**

- Answer all questions.
- Draw diagrams wherever necessary.

**Essay****(2x10=20)**

1. Discuss the basic steps for drawing a blood specimen. Mention the precautions to prevent hemolysis of blood and the tests affected by hemolysis and add a note on preparation of serum from the blood (4+3+3)
2. Define and classify carbohydrates with a note on its functions. Discuss the various types of isomerism with reference to glucose. (3+3+4)

**Short notes****(10x5=50)**

3. Polyolefins.
4. Turbidimetry.
5. Buffer solutions.
6. Fluid mosaic model.
7. Functions of nucleotides.
8. Watson & Crick model of DNA.
9. Waste management in laboratory.
10. Medico legal problems in the laboratory.
11. Applications and hazards of radioactive isotopes.
12. Mention the procedure for preparation of 500 ml of 1 M NaOH.

**Answer briefly****(10x3=30)**

13. Iodine number.
14. Anticoagulants
15. Cold centrifuge.
16. De- ionised water.
17. General glass wares.
18. Secondary standards.
19. Osazone formation in sugars.
20. Minimize infections in laboratory workers.
21. Standardization of a 10 ml volumetric pipette.
22. Define normality. Mention the procedure for preparation of 500 ml. of 3N HCl.