QP CODE: 103012 Reg No:.....

First Year B.Sc MLT Degree Examinations, September 2015

BIOCHEMISTRY

Time: 3 Hours Total Marks: 100

Answer all Questions.

Draw Diagrams wherever necessary.

Essay (2x10=20)

1. Classify amino acids based on nutritional importance and metabolic fate. Discuss about denaturation of proteins. (3+3+4=10)

2. Mention the difference between eukaryotic and prokaryotic cells. Discuss the structure and functions of mitochondria. (6+4=10)

Short notes (10x5=50)

- 3. Preparation of exactly 0.1 N Hydrochloric acid solution
- 4. Calibration of pipettes.
- 5. Principles of colorimeter.
- 6. Primary structure of proteins.
- 7. Donnan's membrane equilibrium.
- 8. Stereo isomerism in mono saccharides.
- 9. Techniques of using vacuum desiccators.
- 10. Working principle of magnetic stirrer and its use.
- 11. Structure of adenine and guanine and mark the various atoms.
- 12. Mention any five mucopolysaccharides and any one function of each.

Answer briefly (10x3=30)

- 13.PUFA.
- 14. Lecithin.
- 15. Peroxisomes.
- 16. Nucleosomes.
- 17. Collagen helix
- 18. Deionized water.
- 19. Gamma radiation.
- 20. Facilitated diffusion.
- 21. Anticoagulants used in clinical lab.
- 22. lodine number and its significance.
