

QP CODE: 113012

Reg. No:

First Year B.Sc MLT Degree Supplementary Examinations July 2023
Biochemistry
(2016 Scheme)

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 table/diagrams/flow charts wherever necessary*

Essay

(2x10=20)

1. Define absorbance and transmittance. Draw and enumerate the parts of a colorimeter. What is the principle of colorimetry. (2+4+4)
2. Enumerate the different types of DNA and describe their characteristics. (3+7)

Short notes

(10x5=50)

3. Glycoproteins.
4. Draw the structure of tRNA and indicate the functions of the various arms.
5. Name three reducing disaccharides and describe a method to differentiate them.
6. Fluid mosaic model of bio membranes.
7. Mitochondria.
8. Define radioactivity. Discuss the methods to measure radioactivity.
9. Chylomicrons.
10. Digestion of carbohydrates.
11. Sphingolipids.
12. A solution of H_2SO_4 with a molal concentration of 8.01M has a density 1.35gm/ml. Calculate the molar concentration of the solution.

Answer briefly

(10x3=30)

13. Define buffers. Name two plasma buffers and their biochemical role.
14. Preparation of potassium dichromate solution for cleaning of glasswares.
15. Iodine number and its significance.
16. Peptide bond.
17. Principle of flame photometry.
18. Essential fatty acids.
19. Barfoed test.
20. Applications of radioisotopes.
21. Histones.
22. Anomerism.
