

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[AHS 0321]

**MARCH 2021**

**Sub. Code: 2913**

**(AUGUST 2020 EXAM SESSION)**

**B.Sc. MICROBIOLOGY**

**SECOND YEAR (Regulation 2018-2019)**

**PAPER III – BIOCHEMISTRY**

***Q.P. Code : 802913***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. What is Glucose Tolerance Test? What are the indications for Glucose Tolerance Test? Explain in detail how to prepare and perform Glucose Tolerance Test.
2. Define solution. Write in detail the types of solution. How will you prepare 1N solution?
3. Explain in detail the principle and types of Electrophoresis. Add a note on Clinical applications of Electrophoresis.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Anticoagulants used for blood collection.
2. Dietary sources and functions of Vitamin D.
3. Structure and function of ribosomal RNA.
4. Entner – Doudoroff pathway and its importance.
5. Colorimeter.
6. Functions of calcium.
7. Importance of Albumin Globulin ratio.
8. Method for estimation of urea.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Examples of homopolysaccharide.
2. Define Complex lipids with an example.
3. What are structural proteins?
4. Normal reference range for  
a) Serum Total Bilirubin                      b) Serum Uric acid                      c) Serum Calcium
5. Name the parameters included in renal function test.
6. Functions of endoplasmic reticulum.
7. Diffusion.
8. Phototrophs.
9. Define anabolism with an example.
10. Importance of laboratory safety.

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