

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

**[BDS 0323]**

**MARCH 2023**

**Sub. Code: 4202**

**(SEPTEMBER 2022 EXAM SESSION)**

**FIRST YEAR B.D.S. DEGREE EXAMINATION**

**New Modified Revised Regulation (August 2016 Examination Session onwards)**

**[Common to Modified Regulation III {Candidates admitted from 2003-2004 to 2007-2008}  
and New Modified Regulation {Candidates admitted from 2008 – 2009 onwards}]**

**PAPER II – GENERAL HUMAN PHYSIOLOGY AND BIOCHEMISTRY**

***Q.P. Code: 544202***

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Draw Suitable diagrams wherever necessary**

**Answer section A and B in Separate Answer Books**

**SECTION – A**

**(GENERAL HUMAN PHYSIOLOGY)**

**I. Elaborate on:**

**(1 x 10 = 10)**

1. Define Cardiac output. Describe the factors regulating it. Add a note on measurement of Cardiac output.

**II. Write Notes on:**

**(3 x 5 = 15)**

1. Transport of Carbon dioxide.
2. Explain about Cystometrogram.
3. Functions of Glucocorticoids.

**III. Short answers:**

**(5 x 2 = 10)**

1. Examples for Positive feedback mechanism.
2. What are the types of muscle contraction?
3. Mention any four functions of liver.
4. Referred pain.
5. What is anaemia? What are the types?

**SECTION – B**

**(BIOCHEMISTRY)**

**I. Elaborate on:**

**(1 x 10 = 10)**

1. Write in detail the sources, daily requirement, functions and deficiency manifestations of Vitamin C.

**II. Write Notes on:**

**(3 x 5 = 15)**

1. Define Glycolysis. Enumerate how Glucose is completely oxidized.
2. Functions and daily requirement of Calcium.
3. Explain the Urea Cycle and its associated disorder.

**III. Short answers:**

**(5 x 2 = 10)**

1. Name any four Prostaglandins and its clinical significance.
2. Name two inhibitors of oxidative phosphorylation.
3. Brief the features of Genetic Code.
4. What is prehepatic jaundice? Give an example.
5. What is the normal serum level of Cholesterol? Name two biologically important compounds derived from cholesterol.

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