

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

[BDS 1023]

**OCTOBER 2023
(AUGUST 2023 EXAM SESSION)**

Sub. Code: 4202

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. What is Erythropoiesis? Describe the stages in the development of RBC. Mention the factors for regulating Erythropoiesis.
- II. Write Notes on:** **(3 x 5 = 15)**
1. Peculiarities of renal circulation.
 2. Explain the features of hypovolemic shock.
 3. Describe Spermatogenesis.
- III. Short answers:** **(5 x 2 = 10)**
1. Define Action Potential.
 2. List the Non respiratory functions of lung.
 3. Draw a labelled diagram of neuron.
 4. What is Cretinism?
 5. Mention the stages of Deglutition.

**SECTION – B
(BIOCHEMISTRY)**

- I. Elaborate on:** **(1 x 10 = 10)**
1. Write in detail the sources, daily requirement, functions and deficiency manifestations of Vitamin B 12.
- II. Write Notes on:** **(3 x 5 = 15)**
1. a) Brief the significance of HMP stunt.
b) Fluorosis.
 2. Tabulate the disorders of Urea Cycle with affected enzyme.
 3. Define-Nutrition and explain the different types of Mutation.
- III. Short answers:** **(5 x 2 = 10)**
1. What are Eicosanoids? Give an example.
 2. Explain suicide inhibition of Enzyme with an example.
 3. Name two enzymes that are elevated in Myocardial infarction.
 4. What is post Hepatic jaundice? Give an example.
 5. How is Tyrosine produced in the body? Name two biologically important compounds derived from Tyrosine.
