

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

[BDS 1223]

DECEMBER 2023

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. Explain the mechanism of secretion of HCL and briefly write about its regulation.

II. Write Notes on: **(3 x 5 = 15)**

1. List the actions of Thyroxine.

2. Define Hypoxia. Discuss the features of different types of Hypoxia.

3. What is Referred pain? What are the theories of Referred pain?

III. Short answers: **(5 x 2 = 10)**

1. What is Diffusion? What are the two types of diffusion?

2. What are plasma proteins? Mention its function.

3. Name two Anti-coagulant.

4. Mention two uses of Electrocardiogram.

5. Mention the components of Juxta glomerular apparatus.

SECTION – B

(BIOCHEMISTRY)

I. Elaborate on: **(1 x 10 = 10)**

1. Explain the steps of DNA Replication in Prokaryotes.

II. Write Notes on: **(3 x 5 = 15)**

1. Glutathione.

2. Isoenzymes.

3. Brief about a) Refsum's disease b) Galactosemia.

III. Short answers: **(5 x 2 = 10)**

1. Which organ produces Urea and what is the normal Blood urea level.

2. Write four investigations done in Diabetes mellitus.

3. What is the normal Blood pH and one cause for metabolic alkalosis.

4. Write the Inhibitors of Electron transport chain.

5. Name the different Lipoproteins.
