

BACHELOR OF DENTAL SURGERY (2008 COURSE)
FIRST - B.D.S. : WINTER :- 2021
SUBJECT: GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY

Day : Wednesday
Date 16-Mar-2022

W-3790-2021

Time : 09:00 AM-12:00 PM
Max. Marks: 70

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat labelled diagram **WHEREVER** necessary.
- 4) Both the sections should be written in **SEPARATE** answer books.

SECTION-I

Q.1 Describe ABO and Rh blood group system. Add a note on erythroblastosis foetalis. (7+3) **(10)**

OR

Define cardiac output. What is its normal value? Describe various factors determining cardiac output. (2+1+7) **(10)**

Q.2 Write notes on **ANY THREE** of the following: **(15)**

- a) Physiological actions of growth hormone
- b) Transmission of impulse across neuro-muscular junction
- c) Properties of reflex action
- d) Volumes and capacities of lungs

Q.3 Answer **ANY FIVE** of the following: **(10)**

- a) Functions of Juxta-Glomerular Apparatus
- b) Uses of electrocardiogram
- c) Mechanisms of homeostasis
- d) Functions of gastric juice
- e) Functions of pyramidal tracts
- f) Actions of testosterone

SECTION-II

Q.4 Define enzymes. Describe in detail factors affecting enzyme activity with suitable graphs. **(10)**
(1+9)

OR

Describe sources, biochemical functions and deficiency manifestations of vitamin C. **(10)**
(1+4+5)

Q.5 Write notes on **ANY THREE** of the following: **(15)**

- a) Plasma proteins
- b) Functions of phospholipids
- c) GTT
- d) Chemistry, sources and functions of Vitamin A

Q.6 Answer **ANY FIVE** of the following: **(10)**

- a) Name any four heteropolysaccharide
- b) Define ketosis. Name the ketone bodies
- c) Enumerate blood buffers
- d) Name important compounds synthesized from tyrosine
- e) Enumerate abnormal hemoglobins
- f) Write names and functions of polyunsaturated fatty acids

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