

BACHELOR OF DENTAL SURGERY (2008 COURSE)
FIRST - B.D.S. : SUMMER -2022
SUBJECT : GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY

Day : Wednesday

Date : 11/1/2023

S-3790-2022

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 Define blood pressure. Enlist various regulatory mechanisms of blood pressure. Describe baroreceptor mechanism in detail.(2+3+5) **(10)**

OR

Describe composition, functions and regulation of salivary juice.(2+3+5) **(10)**

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

- a) Functions of cerebellum
- b) Structure of sarcomere
- c) Various types of white blood cells and their functions
- d) Transport of oxygen from lungs to tissues

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

- a) Define homeostasis
- b) Enlist hormones of posterior pituitary gland
- c) State uterine changes during menstrual cycle
- d) State any two properties of synapse
- e) Enlist steps of urine formation
- f) State actions of insulin

SECTION-II

Q.4 Discuss the sources, RDA, Biochemical functions of calcium and phosphorus. Add a note on regulation of serum calcium level. **(10)**
(1+1+3+5)

OR

What is normal blood pH? Write the role of blood buffers and kidney in maintenance of acid base balance? **(10)**
(1+3+6)

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

- a) Urea cycle and its significance.
- b) Jaundice
- c) Amphibole role of TCA cycle
- d) Biologically important peptides

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

- a) Enumerate hormones responsible for hyperglycemia
- b) Functions of serum iron
- c) Features of Genetic code
- d) Functions of phospholipids
- e) Define ketosis and name ketone bodies
- f) Enumerate four B complex vitamins with their active forms

* * * * *