

**SUPPLEMENTARY
DOCTOR OF PHARMACY
First Year Pharm. D. :SUMMER- 2022
SUBJECT : HUMAN ANATOMY & PHYSIOLOGY**

Day : Monday

Time : 10:00 AM-01:00 PM

Date : 12/9/2022

S-5724-2022

Max. Marks : 70

N.B.:

- 1) **Q.No.1** and **Q.No.5** are **COMPULSORY**. Out of the remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

- Q.1** a) Answer **ANY FOUR** of the following: **[08]**
- i) Explain the structure and functions of RBC.
 - ii) Explain with the help of figure and example of a positive feedback loop.
 - iii) Define following terms: **a) Arteriosclerosis** **b) Hypoxia.**
 - iv) Write compositions of cytosol.
 - v) Explain the structure of spleen.
 - vi) Draw neat labeled diagram of epithelial tissue.
- b) Classify joints in detail. **[03]**
- Q.2** Draw a neat labeled diagram of respiratory system. Explain mechanism of breathing and exchange of gases at lung and tissue level. **[12]**
- Q.3** a) Explain structure and functions of Muscular tissues. **[07]**
b) Explain homeostasis. **[05]**
- Q.4** Write notes on **ANY THREE** of the following: **[12]**
- a) Hemostasis
 - b) ECG
 - c) Sodium Potassium ATPase pump
 - d) Cardiac cycle and heart sounds
 - e) Anatomy and functions of stomach

SECTION – II

- Q.5** a) Answer **ANY FOUR** of the following: **[08]**
- i) Write negative control of hormones of anterior pituitary gland.
 - ii) Spermatogenesis.
 - iii) Drugs and Athletics in brief.
 - iv) Functions of thyroid hormone.
 - v) Various types of contraceptive devices.
 - vi) Define renal clearance and kidney stones.
- b) Explain in brief micturition. **[03]**
- Q.6** Draw and explain structure of Ear and add brief note on physiology of hearing. **[12]**
- Q.7** a) Draw structure of Eye ball with detailed functions of every organ. **[07]**
b) Explain in detail physiology of vision. **[05]**
- Q.8** Write notes on **ANY THREE** of the following: **[12]**
- a) Explain in detail Male Reproductive System
 - b) Structure of Kidney and note on Active Reabsorption of salts
 - c) Explain in detail structure of skin
 - d) Limbic system
 - e) Structure and functions of spinal cord