

**NKT/KS/17/6542**

**B.Pharm. Semester—I (C.B.S.) Examination
HUMAN ANATOMY AND PHYSIOLOGY—I**

Paper—3

Time : Three Hours]

[Maximum Marks : 80

N.B. :— (1) Question No. 1 is compulsory.(2) Solve any **FOUR** questions from the remaining.

(3) Draw neat labelled diagram wherever necessary.

1. Solve any **five** of the following :

(a) Explain different levels of structural organization of human body.

(b) Explain structure and functions of mitochondria.

(c) Write in brief about various types of anaemia.

(d) Explain action potential in contractile fibres of heart.

(e) Write functions of erythrocytes.

(f) Draw well labelled diagram showing organs of respiratory system.

(g) How blood flows through heart ? Explain.

20

2. (a) Explain phases of somatic cell division.

10

(b) Write functional significance of lipids and proteins on cell membrane.

5

3. Describe subtypes, distribution and characteristics of epithelial tissues.

15

4. (a) Explain in detail mechanism of blood coagulation

10

(b) Write significance of Rh type of blood groups.

5

5. Describe in detail regulation and maintenance of blood pressure.

15

6. (a) How O₂ and CO₂ are transported in blood ? Explain.

10

(b) Define various respiratory volumes and vital capacity.

5

7. Write short notes on any **two** :

(a) Cardiac cycle

(b) Nervous regulation of respiration

(c) Spleen.

15

NXO—12530

