

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