

SEI Sem III (Biomed) Choice Based  
Paper / Subject Code: 50502 / Basics of Human Physiology

[Time: 3 Hours]

[Marks: 80]

N.B:

- Please check whether you have got the right question paper.  
1. Question no. 1 is compulsory.  
2. Answer any 3 out of remaining 5 questions.  
3. Figures on the right indicate full marks.  
4. Draw appropriate diagrams wherever necessary.

Q.1 Attempt any Four

- a) How is blood grouping done? Give the table of Compatibility. 05  
b) Sketch the graph of Lung Volume Capacities and explain the terminologies. 05  
c) What do you mean by Endocrine system? List various Endocrine glands and their secretions. 05  
d) Differentiate between sympathetic and Parasympathetic Nervous System 05

Q.2

- a) Describe Polarization and Depolarization of Cell. 10  
b) In detail explain composition of Blood 10

Q.3

- a) Sketch the microscopic structure of Nephron and mention its working. 10  
b) Describe the process of Micturition 05  
c) What are the functions of Bile in digestive system? 05

Q.4

- a) With a neat labelled diagram of a typical Human Cell, describe functioning of major cell Organelles. 10  
b) Describe the process of Exchange of gases in Alveoli 10

Q.5

- a) Describe the Conduction system of Heart. Define Cardiac Output and Stroke Volume 10  
b) Explain the reflex action and Reflex Arc 10

Q.6

Write short notes on (Any 4)

- a) Heart Valves 05  
b) Structure of Middle Ear 05  
c) Formation of Image on Retina 05  
d) Homeostasis 05  
e) Blood Pressure 05

