

Exam Code: 509701

Paper Code: 1196

Programme: Bachelor of Science (Medical Laboratory Technology)

Semester- I

Course Title: Basics of Human Physiology-I

Course code: BMLL-1483

Time Allowed: 3 Hours

Max marks: 70

Note: Attempt five questions, selecting one question from each section. The fifth question may be attempted from any section. All questions carry 14 marks. Draw neat and well labelled diagrams wherever required.

Section A

1. Explain in detail principal parts of brain and its functions.
2. a) What is brain stem. State its functions.
b) Differentiate action potential from resting membrane potential.

Section B

3. Explain in detail sympathetic nervous system and its functions.
4. Discuss divisions of autonomic nervous system in detail.

Section C

5. Discuss in detail electrical and biochemical events in muscle contraction.
6. a) Explain role of biomolecules in muscle contraction.
b) Discuss Cori's cycle in detail.

Section D

7. a) Describe role of hemoglobin in regulation of respiration.
b) Discuss in detail blood clotting and bleeding time.
8. Discuss in detail pulmonary and systemic circulation. Give functions of blood.

Exam Code: 509701

Paper Code: 1197

Programme: Bachelor of Science (Medical Laboratory Technology)

Semester- I

Course Title: Basics of Human Anatomy-I

Course code: BMLL-1484

Time Allowed: 3 Hours

Max marks: 70

Note: Attempt five questions, selecting atleast one question from each section. The fifth question may be attempted from any section. All questions carry 14 marks. Draw diagrams wherever necessary.

Section-A

1. Describe in detail the histology of bone tissue. 14
2. a) What is joint? Explain various types of joints along with diagrams. 10
- b) Explain the process of fracture repair. 4

Section-B

3. Explain in detail the microscopic anatomy of skeletal muscle fibers. 14
4. a) What is neuromuscular junction? 7
- b) Describe the anatomy of cardiac muscles using well labelled diagram. 7

Section-C

5. Explain human arterial system. 14
6. Describe the internal structure of heart with the help of diagram. 14

Section-D

7. Explain the anatomy of Human respiratory System. 14
8. a) Discuss the structural components of Alveolus. 7
- b) What are olfactory receptors? Explain in detail. 7

Exam Code: 509701

Paper Code: 1198

Programme: Bachelor of Science (Medical Laboratory Technology)

Semester: I

Course Title: Principles of Biochemistry

Course Code: BMLL-1485

Time Allowed: 3 Hours

Max Marks: 70

Note: Attempt five questions in all, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries 14 marks. Draw diagrams wherever necessary.

Section: A

1. A. Draw the structures of Glucose, Galactose and Sucrose. (7)
B. What are Disaccharides? Explain briefly. (7)
2. Write a detailed note on polysaccharides with examples and their functions. (14)

Section B

3. A. Describe the Watson and Crick model of DNA. (10)
B. Differentiate between Purine and pyrimidine. (4)
4. A. Write a note on phospholipids. (7)
B. What are fats? Explain how they are formed? (7)

Section C

5. What are amino acids? Classify them. (14)
6. Give a detailed note on protein structure at various levels. (14)

Section D

7. Write a detailed note on vitamins, its types and functions. (14)
8. What is enzyme inhibition? Discuss its various types. (14)