June-2023

### BLDE (DEEMED TO BE UNIVERSITY) BACHELOR OF PHYSIOTHERAPY

[Time: 3 Hours]

[Max. Marks: 80]

#### **I SEMESTER**

#### PAPER - I (Anatomy - I)

**QP CODE: 8120** 

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

#### **Long Questions**

10X1 = 10 Marks

- 1. Describe Brachial Plexus under following headings
  - a. Formation b) Parts c) Branches & d) Applied anatomy

#### Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Explain shoulder joint
- 3. Write short note on Bronchopulmonary segment
- 4. Explain parts of developing long bone and its blood supply
- 5. Write a brief note on connective tissue
- 6. Explain Radio ulnar joint
- 7. Biceps Brachii
- 8. Cubital fossa
- 9. Sternoclavicular Joint
- 10. Articulating surfaces of TM joint

#### Short Answers: (Any - 10)

- 11. Cardiac Muscle
- 12. Typical Thoracic Vertebrae
- 13. Radial grove
- 14. Openings of diaphragm
- 15. Arch of Aorta
- 16. Types of Muscle
- 17. Synovial joint
- 18. Meiosis
- 19. Atypical 1st Rib relations
- 20. Carpal bones
- 21. Intercostal Muscles

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[Time: 3 Hours]

[Max. Marks: 80]

# I SEMESTER PAPER - II (Physiology - I) QP CODE: 8121

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

#### **Long Questions**

10X1 = 10 Marks

1. Define coagulation of blood. Explain mechanism of coagulation.

Short Essays: (Any – 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Explain chloride shift
- 3. Types of WBCs and explain structure and functions of each WBC.
- 4. Explain Isotonic and isometric contraction of muscle
- 5. Explain conducting system of heart with neat labelled diagram
- 6. Composition and function of saliva
- 7. Explain types of active transport mechanism in detail.
- 8. Explain Simple muscle twitch in muscle fiber with neat labelled diagram
- 9. Define hemostasis. Explain Stages of hemostasis
- 10. Explain different phases, composition and function of Gastric juice secretion.

#### Short Answers: (Any - 10)

- 11. Define erythropoiesis. Give normal values of RBCs in male and female
- 12. Define and give normal value: Tidal Volume, Residual Volume, FEV1
- 13. Movements of small intestine
- 14. Define muscle tone. What is hypertonia and hypotonia?
- 15. Difference between ICF and ECF
- 16. Define Cardiac output. Give its normal value.
- 17. All or none law
- 18. Draw neat labelled diagram of cell membranc
- 19. Name muscles of respiration
- 20. Enlist types of fats.
- 21. Draw a neat labelled diagram of action potential in nerve fiber

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[Time: 3 Hours]

[Max. Marks: 80]

# I SEMESTER PAPER - III (Biochemistry - I) OP CODE: 8122

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

#### **Long Questions**

10X1 = 10 Marks

1. Describe the classification and biomedical importance of carbohydrates.

Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. What are lipoproteins/ name them with their normal ranges.
- 3. Describe the factors affecting the enzyme catalyzed reactions
- 4. What are vitamins? Write a note on their classification
- 5. What is glycogen? State biomedical importance of it?
- 6. What are essential amino acids? Name them.
- 7. Describe the clinical utility of serum enzyme measurements with suitable examples
- 8. Mention the dietary sources and daily requirements of Vitamin E
- 9. Functions of cholesterol.
- 10. Describe the causes and features of Vitamin D deficiency.

#### Short Answers: (Any – 10)

- 11. What are essential fatty acids/? Name them with their importance.
- 12. What is beri beri? What are its features?
- 13. Write normal ranges for 1. CK-MB. 2. AST. 3. ALT
- 14. Denaturation of proteins.
- 15. Important functions of albumin.
- 16. What are purines and pyrimidines?
- 17. State causes for Hypoproteinemia?
- 18. Which sugars are present in nucleic acids?
- 19. What is active site and what is enzyme inhibition?
- 20. Define electrophoresis? Mention about its applications?
- 21. Name the disaccharide which is non-reducing sugar and why it so?

## BLDE (DEEMED TO BE UNIVERSITY) BACHELOR OF PHYSIOTHERAPY

Jane-2023

[Time: 3 Hours]

[Max. Marks: 80]

## I SEMESTER PAPER - IV (Kinesiotherapy) OP CODE: 8123

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

#### **Long Questions**

10X1 = 10 Marks

1. Write in detail about shoulder joint biomechanics

Short Essays: (Any - 8)

5 X 8 = 40 Marks

- 2. What is mechanical advantage? Explain mechanical advantage in relation to pulleys
- 3. Define Centre of gravity, base of support and line of gravity
- 4. Biomechanics of cervical spine
- 5. Enumerate various grips of hand in detail
- 6. Explain the biomechanics of temporomandibular joint
- 7. Supination twist
- 8. Write a note on closed and open kinematics
- 9. Define Joint? Classify with examples & add a note on features of the synovial joints
- 10. Describe the structure of elbow joint and explain the factors affecting the stability of the elbow joint.

#### Short Answers: (Any – 10)

- 11. Tipping of scapula
- 12. Lateral prehension
- 13. Define angle of pull
- 14. Define power and work
- 15. Carrying angle
- 16. Define axis and planes
- 17. What are the muscles of expiration
- 18. What is concentric and eccentric contraction?
- 19. What are different types of goniometer
- 20. Define torque and name the anatomical pulleys in human body
- 21. Young's modulus