

[Time: 3 Hours]

[Max. Marks: 80]

I SEMESTER

PAPER - I (Anatomy - I)

OP 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 Shoulder joint under following headings
 - a) Type b) Articular surface c) Ligaments d) movements and muscles responsible for movements
 - e) Applied aspects

Short Essays: (Any – 8)

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

- 2. Lateral wall of nose
- 3. Mediastinum
- 4. Left coronary artery
- 5. Histology of Spleen
- 6. Right lung
- 7. Describe structure of neuron
- 8. Describe deltoid muscle
- 9. Tongue
- 10. Temporómandibular joint

Short Answers: (Any – 10)

- 11. Name the branches of Brachial artery
- 12. Transitional epithelium
- 13. Name muscles of Larynx
- 14. Name the openings of diaphragm with structures passing through them
- 15. Histology of Cardiac muscle
- 16. Name the parts of long bone
- 17. Sesamoid bones
- 18. Boundaries of Posterior triangle
- 19. Name the muscles of arm
- 20. Supination of hand
- 21. Histology of Elastic cartilage

[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 erythropoiesis? With the help of neat & labeled diagrams, discuss various stages of erythropoiesis. Add a note on factors influencing it

Short Essays: (Any - 8)

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

- 2. Discuss the intrinsic mechanism of coagulation
- 3. Neuromuscular junction: Diagram & Description of events associated with transmission of impulse across it
- 4. Short term regulation of blood pressure
- 5. Cardiac output: Definition, Normal value & factors influencing it
- 6. Conducting system of heart
- 7. Discuss the mechanism of secretion of hydrochloric acid in the stomach
- 8. Hemoglobin-Oxygen dissociation curve
- 9. Neural regulation of respiration
- 10. Lung surfactant-origin, composition and functions.

Short Answers: (Any – 10)

- 11. List the mismatched blood transfusion reaction
- 12. List the functions of the following a)Endoplasmic reticulum b) Lysosome c) Golgi apparatus
- 13. Define & give examples for the following a)Diffusion b) Osmosis
- 14. Draw a neat & labeled diagram of sarcomere
- 15. Draw a neat & labeled diagram to depict a neuron
- 16. List the differences between 1st &2nd Heart Sounds
- 17. Draw a neat &labeled diagram of ECG
- 18. List the functions of saliva
- 19. List the properties of cardiac muscle
- 20. Draw a neat & labeled diagram to depict various lung volumes & capacities
- 21. Define & classify hypoxia with suitable examples

[Time: 3 Hours]

[Max. Marks: 80]

I SEMESTER

PAPER - III (Biochemistry - I)

QP 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 chemistry, sources, RDA, biochemical functions and deficiency manifestations of Vitamin A.

Short Essays: (Any – 8)

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

- 2. Describe briefly factors affecting the rate of enzyme catalyzed reaction.
- 3. Explain Fluid mosaic model of cell membrane.
- 4. Discuss the classification and functions of monosaccharides with examples.
- 5. Describe the , classification and functions of lipids.
- **6.** Write sources, RDA and functions of any 2 water soluble vitamins.
- 7. Write about mechanism of enzyme action.
- 8. Classify amino acids based on structure, nutritional requirement and metabolic fate.
- 9. Explain Structural organization of proteins.
- 10. Structure and function of mitochondria.

Short Answers: (Any - 10)

- 111. Essential Fatty acids
- 12. Reducing and non-reducing sugars
- 13. Functions of vitamin K
- 14. Zwitter ion and Isoelectric pH
- 15. Active site of enzyme
- 16. Active transport
- 17. Mention the vitamins deficiency in beri-beri and Pellagra
- 18. Rickets
- 19. Polysaccharides.
- 20. Biologically active peptides
- 21. Coenzyme and cofactors

[Time: 3 Hours]

[Max. Marks: 80]

I SEMESTER

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

hould be specific to the question

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

Long Questions

10X1 = 10 Marks

1. Define lever & discuss in detail classes of levers with suitable examples in human body.

Short Essays: (Any - 8)

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

- 2. Add a note on length tension relationship & its importance in muscle function.
- 3. Discuss kinematics of supination & pronation.
- A. Discuss shoulder joint kinematics.
- 5. Add a note on kinetics of Temporo-mandibular joint.
- 6. Add a note on cervical spine kinetics.
- 7. Classify muscles & mention functions of muscles.
- 8. Discuss elbow joint kinematics.
- 9. Add a note on hand functions.
- 10. Mention all & explain anyone palmar grips.

Short Answers: (Any - 10)

- 11. Open and closed kinematic chain movements.
- 12. Define Elasticity.
- 13. Equilibrium & its types.
- 14. Define Force & mention it's types.
- 15. Scapulohumeral Rhythm
- 16. Angle of pull of muscles.
- 17. Define Stress & strain.
- 18. Young's modulus
- 19. Hook's law.
- 20. Anatomical pulleys with examples.
- 21. Pump handle movement.