

[KZ 0811]

AUGUST 2011

Sub. Code: 1001

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 801001

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Draw a neat diagram of a cell, name its parts and mention its functions.
2. Humerus with diagrams.
3. Classify proteins and briefly explain its biological functions.

II. Write notes on:

(8 x 5 = 40)

1. Write the normal values of RBC, WBC and platelets.
2. Anemia.
3. Write a note on components of blood.
4. Clavicle.
5. List out water soluble vitamins and write a note on any two of them.
6. Explain the factors involving in the enzyme activity.
7. Blood groups.
8. ESR – Erythrocytes Sedimentation Rate.

III. Short Answers on:

(10 x 3 = 30)

1. Landstainer's law.
2. Write a note on haemoglobin.
3. Functions of ribosomes.
4. Neutrophils.
5. Golgi Apparatus.
6. Name the bones of upper limbs.
7. Hip joint.
8. Types of lipoproteins.
9. What is suicide inhibition of an enzyme?
10. Night blindness.

[LB 0212]

AUGUST 2012

Sub. Code: 1001

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I - ANATOMY, PHYSIOLOGY, BIOCHEMISTRY

Q.P. Code : 801001

Time : Three hours

Maximum : 100 marks

(180 Mins) Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.)(Max.)(Max.)**

- | | | | |
|---|---|----|----|
| 1. Name the various organs of respiratory system and discuss about trachea in detail. | 7 | 20 | 10 |
| 2. Explain in detail about origin, course and termination of corticospinal tract. | 7 | 20 | 10 |
| 3. Define carbohydrates. Classify carbohydrates with suitable examples. | 7 | 20 | 10 |

II. Write notes on:

- | | | | |
|----------------------------------|---|----|---|
| 1. Tongue. | 4 | 10 | 5 |
| 2. Uterus. | 4 | 10 | 5 |
| 3. Deltoid. | 4 | 10 | 5 |
| 4. Enumerate the cranial nerves. | 4 | 10 | 5 |
| 5. Micturition reflex. | 4 | 10 | 5 |
| 6. Grave's disease. | 4 | 10 | 5 |
| 7. Functions of Kidney. | 4 | 10 | 5 |
| 8. Jaundice. | 4 | 10 | 5 |

III. Short Answers on:

- | | | | |
|----------------------------|---|---|---|
| 1. Thoracic duct. | 2 | 4 | 3 |
| 2. Sesamoid bones. | 2 | 4 | 3 |
| 3. Aorta. | 2 | 4 | 3 |
| 4. Landsteiner's Law. | 2 | 4 | 3 |
| 5. Iron deficiency anemia. | 2 | 4 | 3 |
| 6. Menstrual cycle. | 2 | 4 | 3 |
| 7. Endocytosis. | 2 | 4 | 3 |
| 8. Functions of ribosome. | 2 | 4 | 3 |
| 9. GTT. | 2 | 4 | 3 |
| 10. Structure of tRNA. | 2 | 4 | 3 |

[LC 0212]

FEBRUARY 2013

Sub. Code: 1001

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I - ANATOMY, PHYSIOLOGY, BIOCHEMISTRY

Q.P. Code : 801001

Time : Three hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on :

(3 x 10 = 30)

1. Define JOINTS. Classify the Joints with Examples.
2. Define BLOOD PRESSURE and explain various factor and mechanism regulating it. Add a note on blood pressure measurement.
3. Describe the Chemistry, Sources, Daily requirement, Biochemical Functions and deficiency Manifestations of Vitamin – A.

II. Write notes on:

(8 x 5 = 40)

1. Classification of Skeletal Muscle
2. Difference Between Small and Large Intestine
3. Circulation of CSF
4. Functions of Liver
5. Artificial Respiration
6. Micturition
7. Enzymes in Myocardial infarction
8. Basal Metabolic Rate (BMR)

III. Short Answers on:

(10 x 3 = 30)

1. Enumerate the Layers of Skin
2. Muscles of Mastication
3. Adenohypophysis
4. Name all the cranial nerves in order
5. Trachea
6. Anticoagulants
7. Phases of Menstrual Cycle
8. Functions of Middle ear
9. Mitochondria
10. Epimers

[LD 0212]

August 2013

Sub.code: 1001

**B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
FIRST YEAR
PAPER I - ANATOMY, PHYSIOLOGY, BIOCHEMISTRY**

Q.P. Code : 801001

Time : Three hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on: (3X10=30)

1. Define Ventilation. Explain the various lung volumes with a spirometry graph.
2. Structure of Nephron with detailed description of physiology of urine production .
3. Properties of Enzymes . write a short note on kreb's cycle

II. Write short notes on: (8X5=40)

1. Uterus
2. Blood groups
3. Adrenal gland.
4. Functions of Proteins
5. Glycolysis
6. Cranial nerves
7. Peritoneum
8. Thiamine.

III. Short answers on : (10X3=30)

1. Catabolism
2. Pleura and its applied anatomy
3. Thymus
4. Agranulocytes
5. Erythropoiesis
6. Ribosomes
7. Alkaptonuria
8. Riboflavin
9. Renal function test.
10. Layers of a blood vessel wall

[LE 0212]

FEBRUARY 2014

Sub.code: 1001

**B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
FIRST YEAR
PAPER I - ANATOMY, PHYSIOLOGY, BIOCHEMISTRY**

Q.P. Code : 801001

Time : Three hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on: **(3 x 10 = 30)**

1. Describe the Anatomical Terms and Planes in detail.
2. Define BLOOD PRESSURE and explain various factor and mechanism regulating it. Add a note on blood pressure measurement
3. Describe the Chemistry , Sources , Daily requirement, Biochemical Functions and deficiency Manifestations of Vitamin – D.

II. Write Notes on : **(8 x 5 = 40)**

1. Classification of glands
2. Clavicle
3. Coronary artery
4. Cerebro spinal fluid
5. Cardiac output
6. Calcitonin
7. Co-enzyme
8. Classification of proteins

III. Short Answers on : **(10 x 3 = 30)**

1. Mitochondria
2. Pleural recess
3. Deltoid
4. Anticoagulants
5. Erythrocyte Sedimentation Rate
6. Vital Capacity
7. Spermatogenesis
8. Marasmus
9. Metabolic Acidosis
10. Essential Fatty acids

[LF 0212]

AUGUST 2014

Sub. Code: 1001

**B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
FIRST YEAR
PAPER I - ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

Q.P. Code : 801001

Time : Three hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3X10=30)

1. What are the different components of Blood. Write in detail about the Functions of blood.
2. Describe in detail about the structure of Heart with a neatly labeled diagram. Add a note on the major blood vessels of heart.
3. Glycolysis.

II. Write short notes on:

(8X5=40)

1. Renal function test
2. Spermatogenesis.
3. Urinary bladder.
4. Explain the role of bile in digestion.
5. Mitochondria.
6. Synovial joint.
7. Calcium.
8. Coenzymes.

III. Short answers on:

(10X3=30)

1. Define micturition.
2. Name the hormones secreted by pancreas.
3. Name the different auscultation areas.
4. Define hypertension.
5. Intercostal space.
6. Protein energy malnutrition.
7. Define PH.
8. What is BMR?
9. Classify lipids.
10. Draw and label the structure of a nephron.

[LG 0215]

FEBRUARY 2015

Sub. Code: 1001

**B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
FIRST YEAR
PAPER I - ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

Q.P. Code : 801001

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Define Cardiac cycle. Write in detail about the events taking place during Cardiac cycle. Add a note on Electrocardiogram.
2. Write in detail about the situation, shape, size and structure of Kidney.
3. What are fat soluble Vitamins. Write in detail about the source, daily allowance, functions and deficiency manifestations of vitamin A.

II. Write notes on:

(8 x 5 = 40)

1. Endocytosis and Exocytosis.
2. Draw and label the parts of GIT.
3. Functions of Hemoglobin.
4. Thoracic cage.
5. Classify Glands.
6. Valves of Heart.
7. Enzyme Inhibition.
8. Balanced diet.

III. Short answers on:

(10 x 3 = 30)

1. Define blood pressure.
2. Draw and label the parts of Neuron.
3. Define micturition.
4. What are the hormones secreted from Anterior pituitary.
5. Name the lobes of brain.
6. Biceps Brachii.
7. Bones forming Lower limb.
8. Hyperlipidemia.
9. Write any two functions of sodium
10. Gluconeogenesis.
