[LB 0212] **AUGUST 2012** **Sub. Code: 1001**

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841001

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions in the same order

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max)**
1. Describe the structure and function of vertebral column.	7	20 min.	10
2. Discuss in detail about the cell structure and organelles?	7	20 min.	10
3. Discuss in detail about the protein classification based on function?	7	20 min.	10
II. Write notes on:			
1. What are the different body cavities and add a note on cranial cavity?	4	9 min.	5
2. Describe the anatomical location and coverings of the heart and label its chambers.	4	9 min.	5
3. Write short notes on ball and socket joint with an example?	4	9 min.	5
4. Draw a diagram of transverse section of the kidney; explain the anatomical position related organs?	4	9 min.	5
5. Describe the structure, characteristics and general function of granulocytes?	4	9 min.	5
6. Give an account on blood clotting mechanism.	4	9 min.	5
7. Different types of anemia and add a note on iron deficiency anemia?	4	9 min.	5
8. Explain the structure of mitochondria with diagram and its importance?	4	9 min.	5
9. Discuss about Polysaccharides.	4	9 min.	5
10. Mention about the glucose and its disorders?	4	9 min.	5
III. Short Answers on			
1. Draw the structure of Nephron and label its parts?	1	3 min.	2
2. Blood typing.	1	3 min.	2
3. Types of Fibrous joints.	1	3 min.	2
4. Define diffusion and its types.	1	3 min.	2
5. What is Table sugar?	1	3 min.	2
6. Basal Metabolic Rate.	1	3 min.	2
7. Calorific value of food.	1	3 min.	2
8. Normal value of Haemoglobin in Male and Female.	1	3 min.	2
9. Normal Blood Platelet count.	1	3 min.	2
10. Kwashiorkor.	1	3 min.	2

****

[LC 0212] **FEBRUARY 2013** **Sub. Code: 1001**

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841001

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

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

1. State the principal bones of axial skeleton and appendicular skeleton?
2. Describe the structure, function, formation of red blood cells with ABO system?
3. Write a detailed note on proteins and its functions?

II. Write notes on: **(10 x 5 = 50)**

1. Structure, characteristics and general function of WBCs.
2. Plasma Proteins.
3. Erythrocyte Sedimentation Rate.
4. Types of Anemia.
5. Clotting Mechanism.
6. Power house of Cell.
7. Fat soluble vitamins.
8. Trace Elements.
9. Contents of Abdominal Cavity.
10. Bones of Lower limb

III. Short Answers on: **(10 x 2 = 20)**

1. Fossa and fovea.
2. Kwashiorkar.
3. Respiratory Quotient.
4. Rh Factor.
5. Contents of Nucleus.
6. Draw the diagram of Nephron and label its parts.
7. Give three examples for cells of connective tissue.
8. What is Table sugar?
9. Name any two pituitary hormones?
10. Blood typing.

****

[LD 0212] **AUGUST 2013** **Sub. Code: 1001**

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841001

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

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

1. Describe the stomach under following headings:
   boarders, surface, parts, valves & blood supply.
2. Classify WBC. Explain about the different types of WBC with a neat diagram.
3. Define glycolysis. Explain the steps involved in glycolysis.

II. Write notes on: **(10 x 5 = 50)**

1. Deltoid muscle.
2. Draw and label the different parts of kidney.
3. Functions of cerebro spinal fluid.
4. Functions of phosphorus.
5. Marasmus.
6. Phospholipids.
7. Type of joint.
8. Types of blood group and its importance.
9. Write the functions of RBC.
10. Write the names of muscles of thigh.

III. Short Answers on: **(10 x 2 = 20)**

1. Define Anaemia.
2. Define glucogenolysis.
3. Define thrombocytosis.
4. Endoplasmic reticulum.
5. Lipoproteins.
6. Mitochondria.
7. Name 2 plasma protiens.
8. Name 4 cranial nerves.
9. Vit D deficiency.
10. Write the functions of platelets.

****

[LE 0212] **FEBRUARY 2014** **Sub. Code: 1001**

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841001

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

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

1. State the boundaries of four body cavities with its contents
2. Write a detailed a note on classification of lipids?
3. Describe the structure, characteristics and general function of WBCs

II. Write notes on: **(10 x 5 = 50)**

1. Thoracic Cage
2. Appendicular Skeleton
3. ABO system
4. Normal values of Erythrocytes
5. Clotting cascade
6. Discuss about polysaccharides
7. Describe basal metabolic rate and Respiratory quotient?
8. Formation and Normal level of Platelets
9. Water soluble vitamins
10. Lipoproteins

III. Short Answers on: **(10 x 2 = 20)**

1. What is the name of macrophages in brain, liver and kidney?
2. Kwashiorkor.
3. Write a short note on HDL and LDL.
4. Draw and label the features of humerus?
5. Basal Metabolic Rate.
6. Marasmus.
7. Essential Fatty acids.
8. Reducing Sugars.
9. Essential Amino acids.
10. Disorders of Glucose.

****

[LF 0212] **AUGUST 2014** **Sub. Code: 1001**

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841001

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

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

1. Describe the cerebrum under the following headings?
   a) Lobes and fissures b) Functions c) Blood Supply d) Clinical Anatomy
2. Define blood volume? Explain how it is regulated? Explain the methods to measure it?
3. Describe the chemistry, biochemical functions, Daily requirement, sources and deficiency manifestations of Vit. A?

II. Write notes on: **(10 x 5 = 50)**

1. Ventricles of Brain
2. Median Cubital Vein
3. Great saphenous vein
4. Packed cell volume
5. Cytoplasm
6. Functions of plasma protein
7. Anemia and its type
8. Scurvy
9. Mucopolysaccharide
10. Kwashiorkor

III. Short Answers on: **(10 x 2 = 20)**

1. Carpal Bones
2. Name the Branches of Femoral artery
3. Inter costal muscles
4. Name the Extraoccular muscles
5. Mitosis
6. Cytoskeleton
7. Marasmus
8. Essential amino acids
9. Anomer
10. Mutarotation

****

[LG 0215] **FEBRUARY 2015** **Sub. Code: 1001**

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841001

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

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

1. Draw the diagram of kidney and label it. Discuss under following headings: boarders, surface, poles. Add a note on its blood supply.
2. Define joint, types of joint with examples. Add a not on ball and socket joint.
3. Discuss lipid under following headings: definition, classification with examples and functions.

II. Write notes on: **(10 x 5 = 50)**

1. Types and function of Plasma Proteins.
2. Composition and functions of blood.
3. Polysaccharide with examples.
4. Amino acids.
5. Vitamins.
6. Formation of glycogen.
7. Parts of Cerebellum.
8. Deltoid muscle.
9. Difference between skeletal muscle and cardiac muscle.
10. Structure and functions of skin.

III. Short Answers on: **(10 x 2 = 20)**

1. Name 4 muscles of thorax.
2. Define coagulation.
3. Marasmus.
4. Define glycolysis.
5. Name thyroid hormones.
6. Universal donor.
7. Vitamin A.
8. Coverings of brain.
9. Name the 4 chambers of heart.
10. Write the normal range of

    a) RBC b) WBC

****

[LH 0815] **AUGUST 2015** **Sub. Code: 1001**

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841001

Time : Three Hours **Maximum : 100 marks**

Answer ALL questions

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

1. What is Erythropoiesis? Write in detail the Formation of RBCs and morphological Variations in Physiological and Pathological Conditions.
2. Classify Skeletal System. List out the Axial and Appendicular Bones and describe Anatomical features of any One Bone.
3. Classify and describe the functions of Lipids.

II. Write notes on: **(10 x 5 = 50)**

1. Intercostal Space.
2. Spermatogenesis.
3. Functions of CSF.
4. Functions of Thyroid Hormones.
5. Auscultatory areas in Chest.
6. Acid Base Balance and Disturbances.
7. Synovial Joint.
8. Rh Incompatibility.
9. Components of Blood.
10. Cardiac cycle.

III. Short Answers on: **(10 x 2 = 20)**

1. Side Determination of Clavicle.
2. Origin, Insertion and Actions of Gastrocnemius Muscle.
3. List of Cranial Nerves.
4. What is Cartilage? Give examples.
5. Define Acidosis.
6. What is Cardio pulmonary Resuscitation?
7. Benedict’s Test.
8. Respiratory Quotient.
9. Branches of Arch of Aorta.
10. What is Surfactant?

****