

[LJ 0816]

AUGUST 2016

Sub. Code: 1051

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY**  
(New Syllabus 2015-2016)

**FIRST YEAR**

**PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

*Q.P. Code: 841051*

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer All questions.**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. What is leucopoiesis? Describe the stages of leucopoiesis and its regulation with salient features.
2. Draw a neat labelled diagram of respiratory system. Write in detail about lungs
3. Classify proteins. Write in detail about the functions of proteins. Add a note on protein deficiency.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Stomach.
2. Cerebellum.
3. Femur.
4. Left ventricle of heart.
5. Basal Metabolic Rate.
6. Calcium.
7. Fat soluble vitamins.
8. Simple lipids.
9. Functions of Red Blood Cells.
10. ABO Blood grouping.

**III. Short answers on:**

**(10 x 2 = 20)**

1. What are the major forms of plasma proteins?
2. Enumerate the chambers in heart.
3. Name any two cranial nerves.
4. Enumerate the lobes in right lung.
5. Define anatomical position.
6. Name any two bones present in head and neck.
7. Name any two enzymes involved in glycolysis.
8. Give two examples of phospholipids.
9. Name any two diseases related to the deficiency of water soluble vitamins.
10. Name any two hazards of mismatched blood transfusion.

\*\*\*\*\*

[LK 0217]

FEBRUARY 2017

Sub. Code: 1051

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY**  
(New Syllabus 2015-2016)

**FIRST YEAR**

**PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

*Q.P. Code: 841051*

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer All questions.**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Enumerate the blood groups. Write in detail about the ABO blood group. What are the uses of blood grouping?
2. Draw a neat labelled diagram of excretory system. Write in detail about kidney.
3. Classify carbohydrates. Write in detail about glycolysis pathway.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Left lung.
2. Blood supply of heart.
3. Liver.
4. Respiratory muscles.
5. Water soluble vitamins.
6. Functions of lipids.
7. Erythrocyte Sedimentation Rate.
8. Functions of platelets.
9. Marasmus.
10. Composition of blood.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Enumerate the major organs present in the thoracic cavity.
2. Name any two nerves of upper limb.
3. Enumerate the fissures in right lung.
4. Enumerate the types of bones.
5. Give two examples of monosaccharides.
6. Give two examples for derived lipids.
7. Name any two causes for leucocytosis.
8. Enumerate fat soluble vitamins.
9. Name any two differences between plasma and serum.
10. Name any two muscles of lower limb.

\*\*\*\*\*

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY**

(New Syllabus 2015-2016)

**FIRST YEAR****PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY***Q.P. Code: 841051***Time : Three Hours****Maximum : 100 Marks****Answer All questions.****I. Elaborate on:****(3 x 10 = 30)**

1. Draw a neat labelled diagram of heart. Write in detail about the chambers of heart.
2. What is Erythropoiesis? Describe the stages of Erythropoiesis. Add a note on erythropoietin.
3. Classify lipids. Write in detail about the functions of lipids. Add a note on diseases related to its deficiency.

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

1. Functions of cerebrum.
2. Trachea.
3. Humerus.
4. Broncho pulmonary segments of lung.
5. Plasma proteins.
6. Various types of leucocytes and their functions.
7. Structure and functions of cell organelles.
8. Phosphorus.
9. Fat soluble vitamins.
10. Monosaccharides.

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

1. Enumerate the major blood groups.
2. Give the normal values of haemoglobin in adult and new born.
3. Define haemostasis.
4. Name any two bones of lower limb.
5. Name any two organs related to digestive system.
6. Enumerate the muscles present in the intercostal space.
7. Write a short note on ESR
8. Name any two functions of proteins.
9. Enumerate fat soluble vitamins.
10. Name any two diseases caused by deficiency of proteins.

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY**  
(New Syllabus 2015-2016)

**FIRST YEAR**

**PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

*Q.P. Code: 841051*

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer All questions.**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Classify Vitamins, Write in detail about vitamin C – functions dietary sources and deficiencies.
2. Draw a neat diagram of digestive system, write in detail about stomach and its functions.
3. Name the respiratory muscles, explain about mechanism of respiration.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Composition of blood.
2. Classification of carbohydrates.
3. Draw and label a neat diagram of respiratory system.
4. Protein energy malnutrition.
5. Chambers of the heart.
6. Functions of lipids.
7. Blood groupings.
8. Kidney.
9. Functions of skin.
10. Clavicle.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Functions of Hemoglobin.
2. Erythrocyte sedimentation rate.
3. Write three calcium rich foods.
4. Functions of bone.
5. Pleura.
6. Meninges.
7. Draw a diagram of Nephron.
8. Difference between artery and vein.
9. Iron deficiency Anemia.
10. Fracture.

\*\*\*\*\*

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY**  
(New Syllabus 2015-2016)

**FIRST YEAR**

**PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

*Q.P. Code: 841051*

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer All questions.**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Write in detail about the functions of kidney and formation of urine.
2. Name the cranial nerves. Write in detail about the human brain.
3. Explain in detail about carbohydrate and its classification.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Bronchial tree.
2. Difference between male and female pelvis.
3. Hormones secreted by pituitary gland and their functions.
4. Conducting system of the heart.
5. Salivary gland.
6. Types of joint.
7. Define cell and explain any three organelles.
8. Renal function test.
9. Anatomical planes of abdomen.
10. Spermatogenesis.

**III. Short answers on:**

**(10 x 2 = 20)**

1. What are immunoglobulins? Give two examples.
2. Femur.
3. Tidal volume.
4. Biceps.
5. Functions of melanocytes.
6. Lacrimal gland.
7. Types of Neuron.
8. Gluconeogenesis.
9. Endocrine secretion of pancreas.
10. Amino acids.

\*\*\*\*\*

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY**  
(New Syllabus 2015-2016 / 2018-2019)

**FIRST YEAR**

**PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

*Q.P. Code: 841051*

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer All questions.**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Write about classification of lipids and functions.
2. Platelets – formation, normal levels and functions.
3. Structure of a cell and functions of various organelles.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Balanced diet.
2. Erythrocyte sedimentation rate (ESR).
3. Trace elements.
4. Glucose metabolism.
5. Functions of Hemoglobin.
6. Types of anemia.
7. Role of sodium in our body.
8. Types of leucocytes and its functions.
9. Classify proteins.
10. Composition of blood.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Name the water soluble vitamins.
2. Structures present in the abdomen.
3. Exocytosis.
4. Normal level of erythrocytes (RBC).
5. Basal metabolic rate.
6. Marasmus.
7. Kwashiorkor.
8. Respiratory quotient.
9. Parts of brain.
10. Caloric value of foods.

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[AHS 0321]

**MARCH 2021**

**Sub. Code: 1051**

**(AUGUST 2020 EXAM SESSION)**

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY**

**FIRST YEAR (Regulations 2015-2016 & 2018-2019)**

**PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

***Q.P. Code : 841051***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Write in detail about composition of blood and its functions.
2. Write in detail about all the fat soluble Vitamins.
3. Heart – borders, chambers, valves, blood supply and applied anatomy.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Intercostal space.
2. Functions of cerebrospinal fluid.
3. Role of bile in digestion.
4. Type of muscle.
5. Hormones secreted by the adrenal gland and their functions.
6. Vertebral column.
7. Functions of (a) Cell Membrane (b) Golgi apparatus (c) Mitochondria
8. Cranial Nerves.
9. Draw a structure of eye.
10. Menstruation.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Basal metabolic rate.
2. Define pH.
3. Define tachycardia and bradycardia.
4. Bleeding time and clotting time.
5. Sesamoid bone.
6. List any two functions of cerebrum.
7. Vocal cord.
8. Functions of tongue.
9. Name any three female reproductive organs.
10. Blood pressure.

\*\*\*\*\*