FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841051

Time: Three Hours Maximum: 100 Marks

Answer All questions.

I. Elaborate on: $(3 \times 10 = 30)$

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: $(10 \times 5 = 50)$

- 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:

 $(10 \times 2 = 20)$

- 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.

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841051

Time: Three Hours Maximum: 100 Marks

Answer All questions.

I. Elaborate on: $(3 \times 10 = 30)$

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: $(10 \times 5 = 50)$

- 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:

 $(10 \times 2 = 20)$

Sub. Code: 1051

- 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.

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841051

Time: Three Hours Maximum: 100 Marks

Answer All questions.

I. Elaborate on: $(3 \times 10 = 30)$

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: $(10 \times 5 = 50)$

- 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: $(10 \times 2 = 20)$

- 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.

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: $(3 \times 10 = 30)$

- 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: $(10 \times 5 = 50)$

- 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:

 $(10 \times 2 = 20)$

- 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.

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841051

Time: Three Hours Maximum: 100 Marks

Answer All questions.

I. Elaborate on: $(3 \times 10 = 30)$

- 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: $(10 \times 5 = 50)$

- 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:

 $(10 \times 2 = 20)$

- 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.

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841051

Time: Three Hours Maximum: 100 Marks

Answer All questions.

I. Elaborate on: $(3 \times 10 = 30)$

- 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: $(10 \times 5 = 50)$

- 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: $(10 \times 2 = 20)$

- 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. Kwasoirkar.
- 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

O.P. Code: 841051

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(3 \times 10 = 30)$

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: $(10 \times 5 = 50)$

- 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:

 $(10 \times 2 = 20)$

- 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.

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

[AHS 0122] JANUARY 2022 Sub. Code: 1051 (FEBRUARY 2021 & AUGUST 2021 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: $(3 \times 10 = 30)$

- 1. Write in detail about the Fat Soluble Vitamins.
- 2. Classify bones. Write in detail about upper limb bones.
- 3. Explain the composition of blood. Add a note on blood group and coagulation of blood.

II. Write notes on: $(10 \times 5 = 50)$

- 1. Classifications of Carbohydrate.
- 2. Diaphragm.
- 3. Functions of Red Blood Cells.
- 4. Marasmus.
- 5. Broncho pulmonary segments of lung.
- 6. Chambers of the heart.
- 7. Anemia.
- 8. Cerebellum.
- 9. Blood supply of heart.
- 10. Role of sodium in our body.

III. Short answers on: $(10 \times 2 = 20)$

- 1. Name any two cranial nerves.
- 2. Draw a diagram of Nephron
- 3. Erythrocyte sedimentation rate.
- 4. Diabetes mellitus.
- 5. Meninges.
- 6. Define Blood pressure.
- 7. Difference between artery and vein.
- 8. Name the salivary glands.
- 9. Hypertension.
- 10. Name any two Flat bones.
