[LB 0212] **AUGUST 2012** **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY,

DIPLOMA IN CRITICAL CARE TECHNOLOGY &

DIPLOMA IN SCOPE SUPPORT TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841101

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

Answer ALL questions in the same order

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. List out all the Cranial nerves. Write a detailed note on Human Brain.	7	20 min.	10
2. Describe in detail about the Electrical activity of the Heart. Add a note on Electrocardiogram.	7	20 min.	10
3. Write in detail about all the fat soluble Vitamins.	7	20 min.	10
II. Write notes on:			
1. Cerebrospinal fluid.	4	9 min.	5
2. Nephron.	4	9 min.	5
3. Scalp.	4	9 min.	5
4. Tongue.	4	9 min.	5
5. Parathyroid gland.	4	9 min.	5
6. Lead.	4	9 min.	5
7. Breast.	4	9 min.	5
8. Gastronemius muscle.	4	9 min.	5
9. Oxytocin.	4	9 min.	5
10. Mediastinum.	4	9 min.	5
III. Short Answers on			
1. Name two cranial nerves supplying the eye.	1	3 min.	2
2. Name the disorders due to Niacin deficiency.	1	3 min.	2
3. Mention any two contents of femoral canal.	1	3 min.	2
4. Name the membranes covering the Heart.	1	3 min.	2
5. Define Hypermetropia.	1	3 min.	2
6. What is surfactant?	1	3 min.	2
7. What is Cartilage?	1	3 min.	2
8. Name any two sources of Vitamin C.	1	3 min.	2
9. Mention any two functions of cerebellum.	1	3 min.	2
10. What is the function of Rods in the eye?	1	3 min.	2

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[LC 0212] **FEBRUARY 2013** **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY,

DIPLOMA IN CRITICAL CARE TECHNOLOGY &

DIPLOMA IN SCOPE SUPPORT TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841101

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

Answer ALL questions

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

1. Heart – surfaces , borders , chambers , valves and applied anatomy.
2. Spermatogenesis.
3. Enzymes – definition , nomenclature and classification.

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

1. Intercostal space.
2. Right kidney.
3. Scapula.
4. Triceps muscle.
5. Formation of platelets and normal level.
6. Role of bile in digestion.
7. Functions of cerebrospinal fluid.
8. Calcium metabolism.
9. Bicarbonate buffer system.
10. Glycogen storage diseases.

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

1. Divisions of pleura.
2. Name the branches of aorta.
3. Name the flexors of fore arm.
4. Parts of typical rib.
5. Erythrocyte Sedimentation Rate.
6. Acidosis.
7. Functions of pancreatic hormones.
8. Structure of cholesterol.
9. Benedict’s test.
10. Fat soluble vitamins.

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[LD 0212] **AUGUST 2013** **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY,

DIPLOMA IN CRITICAL CARE TECHNOLOGY &

DIPLOMA IN SCOPE SUPPORT TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841101

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

Answer ALL questions

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

1. Draw the structure of cell and label it. Explain in detail about various cell organelles.
2. Classify proteins. Add a note on structure of protein.
3. Draw and label the different parts of brain. Explain the different coverings and space of brain.

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

1. Types and functions of plasma protein.
2. Types and functions of WBC.
3. Rh incompatibility.
4. Difference between kwashiorkor and marasmus.
5. Vitamin D.
6. Functions of Vitamin K.
7. Cerebro - spinal fluid.
8. Functions of synovial fluid.
9. Lipoprotien.
10. Type of muscle.

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

1. Name 2 example of ball & socket joints.
2. Hemoglobin.
3. Types of RNA.
4. Phagocytosis.
5. Packed cell volume (PCV).
6. Name3 amino acids.
7. Write the name of different lobe of right lung.
8. Define granulocytosis.
9. Beriberi.
10. Steatorrhoea.

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[LE 0212] **FEBRUARY 2014** **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY,

DIPLOMA IN CRITICAL CARE TECHNOLOGY &

DIPLOMA IN SCOPE SUPPORT TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841101

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

Answer ALL questions

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

1. Name the parts of respiratory system? Explain the mechanism of gas exchange in the lungs?
2. What are the parts of brain? Describe the formation & function of cerebrospinal fluid?
3. Classify lipids. Describe their functions. Add a note on fat soluble Vitamins.

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

1. Liver.
2. Composition and functions of blood.
3. Digestion of food in the stomach.
4. Blood supply to the heart.
5. Platelets.
6. Electrocardiogram.
7. Hormones secreted by the adrenal glad and their functions.
8. Hip bone.
9. Myocardium.
10. Nephron.

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

1. Endocytosis.
2. Respiratory quotient.
3. Name four causes of anemia.
4. Biceps muscle.
5. Urinary bladder.
6. Define blood pressure.
7. Name the bones forming the knee joint.
8. What is cardiopulmonary resuscitation (CPR).
9. Morality.
10. Mitochondria.

****

[LF 0212] **AUGUST 2014** **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY,

DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841101

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

Answer ALL questions

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

1. Explain Femur under following headings:
   a) Side Determination. b) Presenting Parts. c) Muscle Attached to it.
2. Describe the process of Erythropoiesis and the factors affecting it.
3. Explain the synthesis of Glycogen Metabolism in detail. Add a note on its Metabolic Defects.

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

1. Bronchus.
2. Pleural Recesses.
3. Deltoid.
4. Golgi Complex.
5. Renal Function test.
6. Arterial Pulse.
7. HDL.
8. Circulation of CSF.
9. Insulin and its function.
10. Define Rh factor.

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

1. Neuroglia.
2. Muscles acting on Wrist Joint.
3. Mention the Coverings of Kidney.
4. Tetany.
5. Albumin.
6. Alkalosis.
7. Essential Amino Acid.
8. Beri-beri.
9. Essential Aminoacids.
10. Transverse sinus.

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[LG 0215] **FEBRUARY 2015** **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY,

DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841101

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

Answer ALL questions

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

1. Explain Blood supply of heart in detail.
2. Enumerate the Phases of Menstrual Cycle and Explain Uterine Changes taking place on it.
3. Describe Citric Acid Cycle in Detail. Add a note on its Energetics.

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

1. Supinator.
2. Ureter.
3. Anaemia.
4. Hypertension.
5. Immunoglobulins.
6. Wald's Visual Cycle.
7. Classification of Proteins.
8. Bronchopulmonary segment of Right Lung.
9. Essential fatty acid.
10. Renal function test.

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

1. Patella.
2. Relations of Bladder in Male.
3. Name the Muscles take origin from medial epicondyle of Humerus.
4. Anatomical Planes.
5. Clotting time.
6. Classification of Nervous System.
7. Clearance Test.
8. Mucopolysaccharides.
9. Protein Energy Malnutrition.
10. Name the Factors Affecting Enzyme Activity.

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[LH 0815] **AUGUST 2015** **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE AND ANAESTHESIA TECHNOLOGY / DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841101

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

Answer ALL questions

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

1. List out the Muscles of the Thorax. Give details of Accessory Muscles of Respiration.
2. List out the Important Endocrine Glands of the Body.
   Write in detail the Hormones of Adrenal Gland.
3. Write in detail about the Fat Soluble Vitamins.

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

1. Anatomical description of Sacrum.
2. Vertebral Column.
3. Endocytosis and Exocytosis.
4. Functions of Hemoglobin.
5. Origin and Conduction of Electrical Impulses of the Heart.
6. Micturition.
7. Anatomical Planes of the Abdomen.
8. Role of Oxytocin.
9. Types of muscle Tissue.
10. Lung Volume and capacities.

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

1. What is LDL and HDL?
2. Essential Amino acids.
3. What is Alkalosis?
4. What is a Sesamoid Bone? Give examples.
5. Bleeding Time and Clotting Time.
6. Protein Energy Malnutrition.
7. Cranial Nerves supplying the Eyes.
8. What is a Balanced Diet?
9. Define Normality, Molarity and molality.
10. ESR.

****

[LI 0216] **FEBRUARY 2016** **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE AND ANAESTHESIA TECHNOLOGY / DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841101

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

Answer ALL questions

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

1. Describe the Surface Markings and Internal Anatomical structures of the Heart.
2. Write in detail the functions of the Kidney and formation of Urine.
3. Classify and describe the structure of Protein.

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

1. Side determination of Scapula.
2. Bronchial Tree.
3. Normal findings in Chest X ray PA view.
4. Composition of Blood.
5. Calcium Metabolism.
6. Stages of Menstrual Cycle.
7. Cardiac Cycle.
8. Factors affecting Enzyme activity.
9. Synovial joint.
10. Carbohydrate Metabolism.

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

1. Define Basal Metabolic Rate.
2. What are Immunoglobulins?
3. Difference between Marasmus and kwashiorkor.
4. Respiratory Quotient.
5. Anatomical features of Femur.
6. Water soluble Vitamins.
7. Contents of Mediastinum.
8. Vital Capacity.
9. Parts of a Nephron.
10. What is Surfactant?

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[LJ 0816] **AUGUST 2016** **Sub. Code : 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY / DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841101

Time : Three hours **Maximum: 100 Marks**

Answer **ALL** questions.

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

1. Describe the structure of Nephron? Explain Renal function tests.
2. Elaborate on classification of enzymes and factors affecting enzyme activity.
3. Write in detail about Composition and Functions of Blood.

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

1. Urinary bladder.
2. Clavicle.
3. Intercostal Space.
4. Hypertension.
5. Functions of CSF.
6. Mechanism of Respiration.
7. Endocytosis and Exocytosis.
8. Heart sounds.
9. Write briefly about (a) Sodium and (b) Calcium.
10. Functions of Protein.

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

1. Partial pressure of oxygen.
2. Bleeding time and clotting time.
3. Repolarisation of Nerves.
4. Stroke volume.
5. Alkalosis.
6. Albumin.
7. Third thoracic vertebra (T3).
8. Functions of Cell membrane.
9. Classify nervous system.
10. Define: (a) Normality (b) pH.

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[LK 0217] FEBRUARY 2017 **Sub.Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/ DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 841101

Time : Three Hours **Maximum : 100 Marks**

Answer ALL questions

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

1. Explain Humerus with a) Presenting parts b) Muscle attachment c) Side determination d) Applied anatomy and e) Blood supply
2. Write in detail about Cardiac Output and Factors influencing it.
3. Classify Proteins and write its functions in detail.

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

1. Thoracic vertebrae.
2. Micturition.
3. Muscles of Thorax.
4. Functions of a) Cell membrane b) Mitochondria c) Golgi apparatus
5. Enzyme inhibition.
6. Functions of Blood.
7. Lung Volumes and Muscles of Inspiration.
8. Write briefly about a) Calcium b) Vitamin B12.
9. Hypertension.
10. Functions of Insulin and Glucagon and their disorders.

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

1. Define Tachycardia and Bradycardia.
2. Anatomical planes.
3. ESR.
4. Respiratory quotient.
5. Depolarisation of Nerves.
6. Alkalosis.
7. Classify Nervous system.
8. Bleeding time and Clotting time.
9. Partial pressure of Carbon dioxide.
10. Define a) pH b) Buffers.

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[LL 0817] AUGUST 2017 **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/ DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841101

Time : Three Hours **Maximum : 100 Marks**

Answer All questions.

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

1. Name the parts of respiratory system? Explain the mechanism of gas exchange in the lungs.
2. Classify lipids. Describe their functions. Add a note on fat soluble vitamins.
3. Enumerate the phases of menstrual cycle and explain uterine changes taking place during it.

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

1. Nephron.
2. Composition and functions of blood.
3. Classification of proteins.
4. Cerebro spinal fluid.
5. Role of bile in digestion.
6. Types and functions of White blood cells.
7. Rhesus incompatibility.
8. Gall bladder.
9. Carbohydrate metabolism.
10. Protein energy malnutrition.

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

1. Surfactant.
2. Water soluble vitamins.
3. Beri Beri.
4. Name the branches of aortic arch.
5. Deoxyribonucleic acid.
6. Define PH.
7. Benedicts test.
8. Name the carpal bones.
9. Acidosis.
10. Erythrocyte sedimentation rate.

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[LM 0218] FEBRUARY 2018 **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/ DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841101

Time : Three Hours **Maximum : 100 Marks**

Answer All questions.

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

1. Draw the structure of a cell and label it. Explain in detail about various cell organelles.
2. Describe in detail about the electrical activity of the heart. Add a note on Electrocardiogram.
3. Enzymes-definition, nomenclature and classification.

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

1. Functions of vitamin K.
2. Describe about menstrual cycle.
3. Hormones secreted by adrenal gland and their function.
4. Draw and explain the structure of femur.
5. Protein metabolism.
6. Physiology of respiration.
7. Difference between Kwashiorkor and Marasmus.
8. Draw the diagram of the nephron and marks the parts.
9. Functions of CSF.
10. Essential fatty acid.

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

1. List down the steps of digestion process.
2. Stroke volume.
3. Define basal metabolic rate.
4. Protein energy malnutrition.
5. Define pH.
6. Anatomical planes.
7. Draw the structure of ear.
8. Any three functions of haemoglobin.
9. Write the meaning of endocytosis and exocytosis.
10. Vital capacity.

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[LN 0818] AUGUST 2018 **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/ DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841101

Time : Three Hours **Maximum : 100 Marks**

Answer All questions.

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

1. Discuss in detail about the coverings and external features of Heart. Add a note on its blood supply.
2. Define Blood pressure. Discuss in detail about the factors controlling blood pressure and regulation of arterial blood pressure.
3. What is normal fasting and postprandial blood glucose level? Discuss in detail about the Glycolytic pathway.

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

1. Typical rib.
2. Spermatogenesis.
3. Isoenzymes.
4. Functions of White Blood Corpuscles.
5. Cross section of Kidney – Features with labeled diagram.
6. Vitamin K.
7. Intercostal nerve.
8. Renal function tests.
9. Molarity and Molality.
10. External features of Right Lung.

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

1. Enumerate the three basic types of Cartilage.
2. What is Endocytosis?
3. Enumerate the bones that form the Elbow joint.
4. What is Respiratory Acidosis?
5. Name any two muscles attached to Scapula.
6. Enumerate the sources of Vitamin A.
7. Name any two factors affecting Vital Capacity.
8. Name any two functions of Lipids.
9. What are the parts of Hip bone?
10. How are Proteins classified?

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[LO 0219] FEBRUARY 2019 **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/ DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841101

Time : Three Hours **Maximum : 100 Marks**

Answer All questions.

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

1. Discuss in detail about the Urinary system with a neat labelled diagram.
2. Classify Vitamins. Discuss in detail about the sources, dietary requirements, biochemical role and deficiency manifestation of Vitamin A.
3. Discuss in detail about the events in Cardiac cycle with appropriate diagrams. Add a note on the Auscultatory areas.

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

1. Features of Urinary bladder with diagram.
2. Glycogen metabolism.
3. Digestion and absorption of fats.
4. Features of Thoracic vertebrae.
5. Phases of Menstrual cycle.
6. Factors affecting Enzyme activity.
7. Features of Left Lung.
8. Buffers in acids and bases.
9. Actions of Insulin.
10. Features of Trachea.

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

1. Enumerate the three layers of Blood vessel.
2. Name any two enzymes taking part in Glycolytic pathway.
3. What are Lysosomes? Give its function.
4. Enumerate the bones that form the thoracic cage.
5. Name any two functions of Proteins.
6. What is Tidal Volume? Give its normal value.
7. How Enzymes are classified?
8. Name the bones that form the Shoulder joint.
9. Enumerate the hormones secreted by anterior Pituitary gland.
10. Name any two muscles of the front of forearm.

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[LP 0819] AUGUST 2019 **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/ DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841101

Time : Three Hours **Maximum : 100 Marks**

Answer All questions.

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

1. Classifications of Vitamin, explain about fat soluble.
2. Explain in detail about Structure of the Heart.
3. Name the parts of the Respiratory system. Explain about Lungs in detail.

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

1. Menstrual Cycle.
2. Mechanism of Respiration.
3. Functions of Skin.
4. Functions of Proteins.
5. Hypertension.
6. Classifications of Carbohydrate.
7. Intercostal space.
8. Secretions of Pancreas.
9. Classifications of Muscles.
10. Food digestion in Stomach.

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

1. Draw the diagram of Mitochondria.
2. Functions of Tongue.
3. Endocytosis.
4. Functions of dietary fibre.
5. Draw the diagram of Neuron.
6. Lobes of the Liver.
7. Difference between right and left lung.
8. Beri-Beri.
9. Sesamoid bone.
10. Classifications of Nervous system

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[LQ 0220] FEBRUARY 2020 **Sub. Code: 1101**

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/ DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841101

Time : Three Hours **Maximum : 100 Marks**

Answer All questions.

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

1. Write the parts of the brain, its structures and functions with suitable diagram.
2. Classifications of Carbohydrates with example.
3. Write the Composition and Functions of blood.

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

1. Write the parts of Female reproductive system with example.
2. Micturition.
3. Lung Volumes.
4. Diaphragm.
5. Essential Amino acid.
6. Draw the diagram of humerus.
7. Enzymes.
8. Blood supply of the Heart.
9. Cranial nerves.
10. Diabetes Mellitus.

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

1. Pneumatic bone.
2. Define Blood Pressure.
3. Define Balanced diet.
4. Normal value of Urea.
5. Night Blindness.
6. Functions of Ribosomes.
7. Clavicle.
8. Normal Pulse rate.
9. Name the Fat soluble Vitamins.
10. Define Basal Metabolic Rate.

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

[AHS 0321] MARCH 2021 Sub. Code: 1101

(AUGUST 2020 EXAM SESSION)

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/ DIPLOMA IN CRITICAL CARE TECHNOLOGY

FIRST YEAR (Regulation 2010-2011)

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code : 841101

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

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

1. Draw the diagram of Kidney, explain about Urine formation.
2. Write the source, functions, deficiency of Iron.
3. Explain about the Mechanism of Respiration.

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

1. Vertebral column.
2. Secretion of Pituitary gland.
3. Functions of bone.
4. Urinary bladder.
5. Role of bile in digestion
6. Draw the structure of the Heart.
7. Differences between small intestine and large intestine.
8. Draw the diagram of Nephron.
9. High density lipoprotein.
10. Blood grouping.

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

1. Clotting time.
2. Kwashiorkor.
3. Classify nervous system.
4. Sagittal plane.
5. Types of Neuron.
6. Name the bones present in the ear.
7. Name the Water soluble vitamins.
8. Biceps Brachii.
9. Functions of Mitochondria.
10. Name any three essential amino acid.

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

[AHS 0122] JANUARY 2022 Sub. Code: 1101
(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/
DIPLOMA IN CRITICAL CARE TECHNOLOGY
FIRST YEAR (Regulation 2010-2011)
PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY
Q.P. Code : 841101

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

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

1. Describe in detail about the external features of Heart.
2. Describe the transport of Oxygen in the body. Add a note on Oxyhaemoglobin Dissociation Curve.
3. Classify Proteins and mention 5 functions of Proteins.

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

1. Blood supply of Brain
2. Animal Cell
3. Anatomy of Lungs
4. Uterus
5. Sodium Potassium Pump
6. Coronary Circulation
7. Bohr's Effect
8. Briefly discuss about Glycogenolysis
9. Functions of Lipids
10. Classify Enzymes with examples.

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

1. Define Anatomical position and Abduction.
2. Name the layers of Blood Vessels.
3. Mention the parts and length of Trachea.
4. Appendix.
5. Alveolar-Ventilation Ratio (AV Ratio).
6. Functions of Plasma Proteins.
7. Functions of Juxtaglomerular Apparatus.
8. Mention two functions of Calcium.
9. Mention the normal levels of Fasting and Postprandial blood glucose levels.
10. Define BMR.

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