

[LG 0815]

AUGUST 2015

Sub. Code: 1106

**B.Sc. OPERATION THEATRE AND ANAESTHESIA TECHNOLOGY
(New Syllabus 2014-2015)**

FIRST YEAR

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 801106

Time : Three Hours

Maximum : 100 Marks

Answer All Questions.

I. Elaborate on:

(3 x 10 = 30)

1. Classify Carbohydrates. Explain Glucose metabolism.
2. List out the glands of Endocrine system. Explain in detail the functions of Thyroid Hormone.
3. Explain the events of Cardiac cycle.

II. Write notes on:

(8 x 5 = 40)

1. Neuromuscular Junction.
2. Muscles of Respiration.
3. Functions of Protein.
4. Pericardium.
5. Hypersensitivity reactions- type I and type IV.
6. Functions of Blood.
7. Broncho pulmonary segments.
8. Hepatitis B virus (HBV).

III. Short Answers on:

(10 x 3 = 30)

1. Functions of Calcium.
2. Functions of Mitochondria and Golgi Apparatus.
3. Classification of Enzymes.
4. Cell death.
5. Normal values of Lung volumes.
6. Auscultatory areas.
7. Hyperkalemia.
8. Functions of CSF.
9. Buffers.
10. Define
 - a) Blood pressure
 - b) Systolic Blood Pressure
 - c) Diastolic Blood Pressure

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Time : Three Hours

Maximum : 100 Marks

Answer All Questions.

I. Elaborate on:

(3 x 10 = 30)

1. Classify Muscles. Explain in detail about Deltoid Muscle.
2. Explain the events of Cardiac cycle.
3. Write in detail about the causes and mechanism of Cell injury. Add a note on Irreversible cell Injury.

II. Write notes on:

(8 x 5 = 40)

1. Explain features of Clavicle with diagram.
2. Micturition.
3. Chronic Inflammation.
4. Neuromuscular Junction.
5. Muscles of Respiration.
6. Functions of Protein.
7. Pericardium.
8. Hypersensitivity reactions- type I and type IV.

III. Short Answers on:

(10 x 3 = 30)

1. Define a) Blood pressure b) Systolic Blood Pressure
 c) Diastolic Blood Pressure
2. Functions of CSF.
3. Origin, Insertion and Blood supply of Deltoid Muscle.
4. Auscultatory areas.
5. Functions of Calcium.
6. Buffers.
7. Hyperkalemia.
8. Situation, Blood Supply and Nerve supply of Heart.
9. Classification of Enzymes.
10. Define Neoplasia. Mention any four Carcinogenic Agents.

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FIRST YEAR

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Q.P. Code: 801106

Time : Three Hours

Maximum : 100 Marks

Answer All Questions.

I. Elaborate on:

(3 x 10 = 30)

1. Describe the arch of aorta under the following headings: Extent, Relations, Branches and microscopic anatomy.
2. What are Blood groups? Discuss their importance.
3. Describe in detail the mechanism of regulation of blood pH.

II. Write notes on:

(8 x 5 = 40)

1. Erythroblastosis fetalis.
2. Gastric Emptying.
3. Explain the functions of plasma proteins.
4. Origin, course and Branches of Right coronary artery.
5. Functions of Posterior Pituitary hormones.
6. Role of Bile in digestion.
7. Formation of superior venacava.
8. Functions of Sodium and add a note on renin-angiotensin-aldosterone system.

III. Short Answers on:

(10 x 3 = 30)

1. Action of Parathormone on Bone.
2. Functions of Vitamin-K.
3. Classify leucocytes and write its normal percentage.
4. Define Neuromuscular Junction.
5. Tributaries of coronary sinus.
6. Nerve supply of larynx.
7. Valves of the heart.
8. Applied aspects of Pleura.
9. Causes of Metabolic acidosis.
10. Define (a) Normality (b) Molarity (c) Molality