

[LJ 0816]

AUGUST 2016

Sub.Code :1231

B.Sc. CRITICAL CARE TECHNOLOGY
(New Syllabus 2015-2016)
FIRST YEAR
Paper I – ANATOMY AND BIOCHEMISTRY

Q.P Code : 801231

Time : Three Hours

Maximum : 100 Marks

Answer All Questions

I. Elaborate on:

(3 x 10 = 30)

1. Explain blood supply of brain in detail with suitable diagrams. Add a note on Circle of Willis.
2. Write in detail about the measurements, structure, relations and applied anatomy of Trachea.
3. Enumerate the energetics and regulation of Glycolysis.

II. Write Notes on:

(8 x 5 = 40)

1. Ligaments of Liver.
2. Common Carotid Artery.
3. Citric Acid Cycle.
4. Adrenal Gland.
5. Basal Metabolic Rate.
6. Electrophoresis.
7. Bronchopulmonary segments of lung.
8. Features and types of Synovial joint.

III. Short Answers on:

(10 x 3 = 30)

1. What is winging of scapula?
2. Give the functional classification of proteins.
3. What is chromatolysis?
4. Name the structures forming Waldeyer's ring.
5. What are surfactants? Give its functions.
6. Write the functions of Bile.
7. Name the coverings of Kidney.
8. What is the role of cerebrospinal fluid?
9. Name the arteries supplying thyroid gland.
10. What is Pellagra?

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Answer All Questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe Kidney under the following headings.
a) Location b) Coverings c) Relations d) Blood supply.
2. Enumerate the gross anatomy of Thyroid Gland in detail.
3. Explain the factors regulating acid base balance.

II. Write Notes on:

(8 x 5 = 40)

1. Islets of Langerhans.
2. Deltoid muscle.
3. Unsaturated fatty acids.
4. Great saphenous vein.
5. Glycolysis.
6. Enumerate the differences between Kwashiorkor and Marasmus.
7. Muscles of Pharynx.
8. B - Complex vitamins.

III. Short Answers on:

(10 x 3 = 30)

1. How many carpal bones are present? Name them.
2. What is Hilton's Law?
3. Name the functions of Anti-diuretic hormone.
4. What is Erb's point?
5. What are the causes of Vitamin A deficiency?
6. Name the tributaries of superior vena cava.
7. What is Benedict's test?
8. Name the endocrine glands.
9. Mention the factors affecting Basal Metabolic Rate.
10. What are Buffers?

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Time : Three Hours

Maximum : 100 Marks

Answer All Questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe the heart under the following headings: (a) Borders and surfaces
(b) External features (c) Chambers (d) Valves and nerve supply.
2. Write about the spinal cord under the following headings:
(a) Extent (b) External features (c) Cross section and (d) Blood supply.
3. Describe the mechanisms involved in the regulation of blood pH.

II. Write Notes on:

(8 x 5 = 40)

1. Contents of the intercostal space.
2. Lobes of the brain.
3. Secretions of the pancreatic gland.
4. Anatomical planes.
5. Plasma proteins and their functions.
6. Sympathetic nervous system.
7. Blood supply and nerve supply of diaphragm.
8. Bronchopulmonary segments.

III. Short Answers on:

(10 x 3 = 30)

1. List three neuroglial cells and their functions.
2. Name three muscles of the arm and their functions.
3. List the parts of the sternum.
4. Name the enzymes that are used to diagnose liver diseases.
5. What are the tests done to diagnose diabetes mellitus?
6. Biochemical basis and clinical features of kwashiorkor.
7. What is hypokalemia?
8. Deficiency of thiamine.
9. Types of tissues.
10. List three muscles of lower limb and their functions.

[LM 0218]

FEBRUARY 2018

Sub. Code: 1231

B.Sc. CRITICAL CARE TECHNOLOGY
(New Syllabus 2015-2016)

FIRST YEAR

Paper I – ANATOMY AND BIOCHEMISTRY

Q.P Code : 801231

Time : Three Hours

Maximum : 100 Marks

Answer All Questions

I. Elaborate on:

(3 x 10 = 30)

1. With the help of a need labeled diagram, write about the animal cell.
2. Describe kidney under the following headings:
(a) Location (b) Coverings (c) External structure
d) Internal features and (e) Blood supply.
3. Describe the catabolism of glucose for the production of energy.

II. Write Notes on:

(8 x 5 = 40)

1. Bronchopulmonary segments.
2. Conducting system of the heart.
3. Circle of Willis.
4. Sympathetic nervous system.
5. Adrenal cortex.
6. Explain the parts of a long bone.
7. Aorta and its branches.
8. Synthesis and functions of vitamin D.

III. Short Answers on:

(10 x 3 = 30)

1. Functions of sodium.
2. What is a balanced diet?
3. What are isoenzymes? Give an example.
4. What are the functions of albumin?
5. Functions of cholesterol.
6. Function of mitochondria.
7. Define metaphysis.
8. Anatomical position.
9. Parts of the pharynx.
10. Functions of sympathetic nervous system.

[LN 0818]

AUGUST 2018

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Q.P Code : 801231

Time : Three Hours

Maximum : 100 Marks

Answer All Questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe the origin, insertion, action, nerve supply and clinical importance of thoracic diaphragm.
2. Classify joints. Write in detail about the types of synovial joints with examples.
3. Explain the factors affecting enzyme activity.

II. Write Notes on:

(8 x 5 = 40)

1. Describe the different types of muscle fibres.
2. Cell organelles.
3. Cross section of the spinal cord.
4. Gross anatomy of thyroid gland.
5. Coronary circulation.
6. Blood supply of kidneys.
7. Parts of cerebellum.
8. Regulation of calcium homeostasis.

III. Short Answers on:

(10 x 3 = 30)

1. Physiological buffers present in our body.
2. How are fatty acids classified? Give examples.
3. Describe the function of vitamin K in our body.
4. Factors affecting basal metabolic rate.
5. Anion gap and its importance.
6. List three secretions of the islets of pancreas.
7. Define coronal plane.
8. Define a tissue. List two tissue types.
9. List the coverings of the lung.
10. List the layers of the heart wall.

[LO 0219]

FEBRUARY 2019

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B.Sc. CRITICAL CARE TECHNOLOGY
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FIRST YEAR
PAPER I – ANATOMY & BIOCHEMISTRY

Q.P. Code: 801231

Time: Three Hours

Maximum: 100 Marks

Answer all questions

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

1. Explain in detail about the spinal cord
2. Explain tissues with its definition, types, classifications, functions and formation.
3. Write in detail about Vitamin A.

II. Write notes on: **(8 x 5 = 40)**

1. Circle of willis.
2. Blood supply of kidney.
3. What is sternum?
4. Parts of cerebellum.
5. Functions of pharynx.
6. Ligaments of liver.
7. Glucose tolerance test.
8. Functions of plasma proteins.

III. Short answers on: **(10 x 3 = 30)**

1. Functions of mitochondria.
2. Functions of bile.
3. What is larynx?
4. Coverings of lungs.
5. What is Aorta?
6. What is Ulna?
7. What is coronal plane?
8. Define Active site.
9. Basal metabolic rate.
10. What are Isomers?

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PAPER I – ANATOMY & BIOCHEMISTRY

Q.P. Code: 801231

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. With a neat labelled diagram explain about animal cell.
2. Describe the heart under the following headings:-
 - a) Border & surface
 - b) External features
 - c) Chambers
 - d) Valves and nerve supply
3. Write the classification of enzyme and factors affecting enzyme activity.

II. Write notes on:

(8 x 5 = 40)

1. Parasympathetic nervous system.
2. Bronchial circulation.
3. Features and types of synovial joints.
4. Muscles of pharynx.
5. Functions of lipoproteins.
6. Functions of Vitamin - D.
7. Thyroid gland.
8. Explain the parts of long bone.

III. Short answers on:

(10 x 3 = 30)

1. List out pituitary hormones.
2. Name the coverage of kidney.
3. What is femur?
4. Role of cerebrospinal fluid.
5. Name the carpal bones.
6. Benedict's test.
7. Basal metabolic rate.
8. What are buffers?
9. Essential amino acids.
10. Name the endocrine glands.
