

[LB 0212]

AUGUST 2012
B.Sc. OPTOMETRY
FIRST YEAR

Sub. Code: 6003

PAPER II – GENERAL ANATOMY AND GENERAL PHYSIOLOGY

Q.P. Code : 806003

Time : Three hours

Maximum : 100 marks

(180 Mins) Answer ALL questions in the same order.

I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

- | | | | |
|--|---|----|----|
| 1. What is blood coagulation? Enumerate the factors involved in coagulation of blood. Describe the intrinsic mechanism of coagulation. Add a note on anticoagulants. | 7 | 20 | 10 |
| 2. Name the structures included in upper and lower respiratory tract. Describe the position, general features, lobes and fissures of lung. Add a note on its blood supply. | 7 | 20 | 10 |
| 3. What is the normal blood calcium level in the human body? Explain the regulation of blood calcium level. Add a note on tetany. | 7 | 20 | 10 |

II. Write Notes on:

- | | | | |
|----------------------------------|---|----|---|
| 1. Conducting system of heart. | 4 | 10 | 5 |
| 2. Anatomy of long bone. | 4 | 10 | 5 |
| 3. Functions of liver. | 4 | 10 | 5 |
| 4. Structure of skeletal muscle. | 4 | 10 | 5 |
| 5. Juxtaglomerular apparatus. | 4 | 10 | 5 |
| 6. Pleura. | 4 | 10 | 5 |
| 7. Neuromuscular junction. | 4 | 10 | 5 |
| 8. Histology of retina. | 4 | 10 | 5 |

III. Short Answers on:

- | | | | |
|--|---|---|---|
| 1. What is lactation? | 2 | 4 | 3 |
| 2. Name the bones of the axial skeleton. | 2 | 4 | 3 |
| 3. What is vital capacity? | 2 | 4 | 3 |
| 4. What is an epithelium? | 2 | 4 | 3 |
| 5. What is micturition? | 2 | 4 | 3 |
| 6. What is organ of Corti? | 2 | 4 | 3 |
| 7. What is saltatory conduction? | 2 | 4 | 3 |
| 8. Name the parts of small intestine. | 2 | 4 | 3 |
| 9. Define arterial blood pressure. | 2 | 4 | 3 |
| 10. Name the hormones of thyroid gland. What is cretinism? | 2 | 4 | 3 |

[LC 0212]

FEBRUARY 2013
B.Sc. OPTOMETRY
FIRST YEAR

Sub. Code: 6003

PAPER II – GENERAL ANATOMY AND GENERAL PHYSIOLOGY

Q.P. Code : 806003

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

I. Elaborate on :

(3×10=30)

1. Describe the position, surfaces, lobes and functions of liver. Add a note on jaundice.
2. Define and classify joints. Write in detail about synovial Joints.
3. Define blood pressure. What is its normal value. Explain the long term regulation of blood pressure.

II. Write Notes on:

(8×5=40)

- 1.Hypoxia.
2. Heart sounds.
- 3.Functions of Skin.
4. Thyroid gland.
- 5.Structure of nephron.
- 6.Neuromuscular junction.
7. Active transport.
- 8.Pain pathway.

III. Short Answers on:

(10×3=30)

1. What is epithelium?
2. What is an action potential?
3. What is normal haemoglobin level in female?
4. Name thesegments of eyeball.
5. What is stroke?
- 6.What is Diabetes insipidus?
- 7.What is peristalsis?
- 8.What is a capillary?
- 9.What is leukemia?
10. Name the digestive juices.

[LD 0212]

AUGUST 2013

Sub.Code :6003

**B.SC. OPTOMETRY
FIRST YEAR
PAPER III – GENERAL ANATOMY AND GENERAL PHYSIOLOGY**

Q.P. Code: 806003

Time: Three hours

Maximum : 100 Marks

Answer All questions

I Elaborate on: (3x10 =30)

1. Give an account of Anatomy of Pancreas. Add a note on its functions
2. What is cardiac cycle and its importance?
3. Write about menstrual cycle

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

1. Hemoglobin
2. Anemia and its classification
3. Vitamin C
4. Types and classification of joints
5. Functions of skin
6. Histology of liver
7. Renin angiotensin system
8. Types of cartilage

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

1. What is diabetes mellitus?
2. What is exophthalmos?
3. Classify WBC's and give two functions
4. What are the symptoms of Vitamin D deficiency?
5. Name the hormones produced by anterior pituitary
6. What is Myxoedema?
7. Name the layers of blood vessels
8. Name the organs of excretory system
9. Types of taste buds
10. Composition of Blood

[LE 0212]

FEBRUARY 2014

Sub. Code :6003

**B.SC. OPTOMETRY
FIRST YEAR
PAPER II – GENERAL ANATOMY AND GENERAL PHYSIOLOGY**

Q.P. Code: 806003

Time: Three hours

Maximum : 100 Marks

Answer all questions

I Elaborate on:

(3 x 10 =30)

1. What is blood coagulation? Enumerate the factors involved in coagulation of blood. Describe the intrinsic mechanism of coagulation. Add a note on anticoagulants.
2. Define Joints. Write in detail about synovial Joints with examples.
3. Draw and label the parts of Digestive system.

II. Short notes on:

(8 x 5 = 40)

1. Functions of White Blood cells.
2. Classifications of bone.
3. Structure of Skeletal muscle.
4. Draw the diagram of bronchopulmonary segments.
5. Define hypoxia.
6. What are Immunoglobulins?
7. Function of Vitamin C.
8. Structure of Skin.

III. Short answers on:

(10 x 3 = 30)

1. What is Scurvy?
2. Coverings of testis.
3. Types of epiphysis.
4. Sesamoid bone with its example.
5. Parts of neurons.
6. Define Cardiac cycle.
7. Define oedema.
8. What is a Synapse?
9. Lobes of lungs.
10. Erythrocyte Sedimentation Rate.

[LF 0212]

AUGUST 2014

Sub.Code :6003

**B.SC. OPTOMETRY
FIRST YEAR
PAPER II – GENERAL ANATOMY AND GENERAL PHYSIOLOGY**

Q.P. Code: 806003

Time: Three hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3x10 =30)

1. Joints - definition and classification of different types with examples.
2. Liver-its position, relations, lobes, surfaces, borders and functions.
3. Composition and functions of blood; add a note on erythropoiesis.

II. Short notes on:

(8 x 5 = 40)

1. Tongue.
2. Cartilage.
3. Muscles of respiration.
4. Thyroid gland.
5. Eye ball.
6. Erythrocyte Sedimentation Rate.
7. Visual pathway.
8. Structure and function of skin.

III. Short answers on:

(10 x 3 = 30)

1. Urothelium.
2. Thymus.
3. Appendix.
4. Testis.
5. Difference between large intestine and small intestine.
6. Electrocardiogram.
7. Hypoxia.
8. Reflex arc.
9. Normal and abnormal constituents of urine.
10. Contraceptive methods.

[LG 0215]

FEBRUARY 2015

Sub.Code :6003

B.Sc. OPTOMETRY

FIRST YEAR

PAPER II – GENERAL ANATOMY AND GENERAL PHYSIOLOGY

Q.P. Code: 806003

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Lacrimal apparatus.
2. Small intestine—structure, secretions and functions.
3. Heart—position, relations, chambers, flow of blood through heart and coronary circulation.

II. Short notes on:

(8 x 5 = 40)

1. Para nasal air sinuses.
2. Mammary gland.
3. Broncho pulmonary segments.
4. Duodenum.
5. Functions of skin.
6. Menstrual cycle.
7. Visual pathway.
8. Action potential.

III. Short answers on:

(10 x 3 = 30)

1. Hyaline cartilage.
2. Cornea.
3. Branches from arch of aorta.
4. Formation of thoracic duct.
5. Supra renal glands.
6. Juxta glomerular apparatus.
7. Glaucoma.
8. Phagocytosis.
9. Haemostasis.
10. Sleep.

[LH 0815]

AUGUST 2015

Sub. Code: 6003

B.Sc. OPTOMETRY

FIRST YEAR

PAPER II – GENERAL ANATOMY AND GENERAL PHYSIOLOGY

Q.P. Code: 806003

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe the heart – position, coverings, relations and chambers.
Add a note on the coronary circulation.
2. Describe the pancreas : position, parts and relations.
3. Discuss the mechanism of carbon di oxide and oxygen transport in the blood.

II. Write notes on:

(8 x 5 = 40)

1. Describe the anatomy of the spleen.
2. Describe the structure of a neuron.
3. Describe the types and classification of bone.
4. Describe the structure of skin.
5. List the hormones involved in pregnancy and lactation and state their functions.
6. List the different white blood cells along with their functions.
7. Describe the physiology of hearing.
8. List the enzymes required for carbohydrate digestion, their source and their actions.

III. Short Answers on:

(10 x 3 = 30)

1. Draw a diagram of the brainstem and label its parts.
2. Anatomy of the ureter.
3. Structure of stratified Squamous epithelium.
4. Define the term reflex. What are the components of the reflex arc?
5. List the female contraceptive methods.
6. What is anemia? List two causes of anemia.
7. What is a diuretic? Give one example.
8. List the functions of the mitochondria, lysosome and endoplasmic reticulum.
9. What is meant by myopia and hypermetropia? How are they corrected?
10. Describe the micturition reflex.

[LI 0216]

FEBRUARY 2016

Sub.Code :6003

B.Sc. OPTOMETRY

FIRST YEAR

PAPER II – GENERAL ANATOMY AND GENERAL PHYSIOLOGY

Q.P. Code: 806003

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. List the various constituents of blood. What are the functions of blood?
2. Describe the various refractive errors of the eye and describe their correction.
3. Describe the lungs in detail – position, coverings, lobes, fissures and blood supply.

II. Write notes on:

(8 x 5 = 40)

1. Describe the structure of a nephron.
2. Describe the anatomy of the cerebral hemispheres.
3. Describe the anatomy of the thyroid gland.
4. Describe the anatomy of the liver.
5. Describe the types of muscle.
6. What is the normal adult blood pressure? What are the factors that affect blood pressure? What does the term 'hypertension' mean?
7. List the important sensory and motor tracts of the spinal cord.
8. List the hormones produced by the pituitary gland. Mention one function of each hormone.

III. Short answers on:

(10 x 3 = 30)

1. Anatomy of the gall bladder.
2. Anatomy of the uterus.
3. Name the branches of the arch of the aorta.
4. Structure of hyaline cartilage.
5. Anatomy of the prostate gland.
6. List three functions of the kidney.
7. What is meant by the term homeostasis?
8. Discuss permanent contraceptive methods.
9. Describe the composition and function of gastric juice.
10. List any three organelles present in a cell and describe their functions.
