

DIPLOMA IN OPHTHALMIC NURSING ASSISTANT
FIRST YEAR
PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841601

Time : Three Hours

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

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

- | | | | |
|---|---|---------|----|
| 1. Anatomy of Retina. | 7 | 20 min. | 10 |
| 2. Lacrimal apparatus. | 7 | 20 min. | 10 |
| 3. Physiology of binocular single vision. | 7 | 20 min. | 10 |

II. Write notes on:

- | | | | |
|---------------------------------|---|--------|---|
| 1. Production of Aqueous humor. | 4 | 9 min. | 5 |
| 2. Lens metabolism. | 4 | 9 min. | 5 |
| 3. Conjunctiva. | 4 | 9 min. | 5 |
| 4. Spaces of orbit. | 4 | 9 min. | 5 |
| 5. Anatomy of cornea. | 4 | 9 min. | 5 |
| 6. Wald's visual cycle. | 4 | 9 min. | 5 |
| 7. Pupillary reflex. | 4 | 9 min. | 5 |
| 8. Physiology of vision. | 4 | 9 min. | 5 |
| 9. Superior orbital fissure. | 4 | 9 min. | 5 |
| 10. Tests for color vision. | 4 | 9 min. | 5 |

III. Short Answers on:

- | | | | |
|--|---|--------|---|
| 1. What are the layers of eyeball? | 1 | 3 min. | 2 |
| 2. What are the layers of tear film? | 1 | 3 min. | 2 |
| 3. Name the bones of orbit. | 1 | 3 min. | 2 |
| 4. What are layers of sclera? | 1 | 3 min. | 2 |
| 5. What are the parts of ciliary body? | 1 | 3 min. | 2 |
| 6. Mention the boundaries of posterior chamber of eyeball. | 1 | 3 min. | 2 |
| 7. What are parts of lens? | 1 | 3 min. | 2 |
| 8. What are the parts of optic nerve? | 1 | 3 min. | 2 |
| 9. Tests for lacrimal secretion. | 1 | 3 min. | 2 |
| 10. Classify lipids. | 1 | 3 min. | 2 |

[LD 0212]

AUGUST 2013

Sub. Code: 1601

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FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841601

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe in detail about the development of eye.
2. Describe the structure and functions of retina.
3. Classify carbohydrates. Describe the Krebs's cycle in detail.

II. Write notes on:

(10 x 5 = 50)

1. Anatomy of cornea.
2. Ciliary body.
3. Structure of lens.
4. Pupillary reflex.
5. Presbyopia.
6. Vitamin E.
7. Ketogenesis.
8. Binocular Vision.
9. Transamination.
10. Eyelids.

III. Short Answers on:

(10 x 2 = 20)

1. What is Schlemm's canal?
2. Name the muscles of iris.
3. What is optic chiasma?
4. Name the fat soluble vitamins.
5. What is electroretinogram?
6. What is scotopic vision?
7. What are polysaccharides? Give examples.
8. What is acuity of vision?
9. What are lipoproteins?
10. What is Diabetes mellitus?

[LE 0212]

FEBRUARY 2014

Sub. Code: 1601

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FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841601

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe the structure and functions of lens. Add a note on accommodation.
2. Describe the theories of colour vision in detail. Add a note on colour blindness.
3. Describe the urea cycle. What is the normal blood urea level?
Name two conditions in which blood urea level increases.

II. Write notes on:

(10 x 5 = 50)

1. Choroid.
2. Lacrimal apparatus.
3. Retinal pigment epithelium.
4. Aqueous humour.
5. Wald's visual cycle.
6. Glycogenolysis in liver.
7. Photochemistry of retina.
8. Refractive errors of eye.
9. Actions of extra ocular muscles.
10. Functions of tear film.

III. Short Answers on:

(10 x 2 = 20)

1. What are rods and cones?
2. Name the cranial nerve supplying the eyeball.
3. What is electro oculogram?
4. What is hemianopia?
5. What is the difference between DNA and RNA?
6. What is stereopsis?
7. Name the sulphur containing amino acids.
8. Name the folate antagonists.
9. What are phospholipids?
10. What is metabolic acidosis?

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Q.P. Code: 841601

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Layers of Eye ball.
2. Intra ocular pressure and maintenance of Intra ocular pressure.
3. Vitamins – Classification and functions.

II. Write notes on:

(10 x 5 = 50)

1. Ciliary Ganglion.
2. Uveal Tract.
3. Tenon's capsule.
4. Lateral Geniculate body.
5. Functions of Cornea.
6. Accommodation.
7. Refractive errors.
8. Biochemistry of visual proteins.
9. Classification of proteins.
10. Phospholipids.

III. Short Answers on:

(10 x 2 = 20)

1. Conjunctiva.
2. Naso lacrimal duct.
3. Aqueous humour.
4. Hyaloid canal.
5. Colour blindness.
6. Muscles of Iris.
7. Visual acuity.
8. Structure of Sucrose.
9. Hormones.
10. Biochemical composition of lens.

[LG 0215]

FEBRUARY 2015

Sub. Code: 1601

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Q.P. Code: 841601

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Lacrimal Apparatus.
2. Extra ocular muscles and extra ocular movements.
3. Urea cycle.

II. Write notes on:

(10 x 5 = 50)

1. Layers of Retina.
2. Irido corneal angle.
3. Orbicularis oculi.
4. Structure of lens.
5. Functions of the tear film.
6. Intra ocular pressure.
7. Functions of Vitreous.
8. Classification of Carbohydrates.
9. Glycolysis.
10. Basal metabolic rate.

III. Short Answers on:

(10 x 2 = 20)

1. Amacrine cells.
2. Limbus.
3. Canal of Schlenmn.
4. Central artery of the retina.
5. Light reflex.
6. Myopia.
7. Binocular vision.
8. Structure of Cholesterol.
9. Trace elements.
10. Antioxidants.
