

First Year B. Sc Optometry Degree Supplementary Examinations May 2022
Paper II – Physiology
(2016 Scheme)

Time: 3 hrs

Max marks: 80

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers • Draw table/diagrams/flow charts wherever necessary
- Write section A and section B in separate answer books. Do not mix up questions from section A and section B.

Q P Code: 123013

Section A – General Physiology

Marks: 40

Essay:

(10)

1. What are the different stages in erythropoiesis. How is erythropoiesis regulated.

Short notes:

(3x5=15)

2. Mechanism of gastric hydrochloric acid secretion.
3. Conducting system of the heart.
4. Functions of cerebellum.

Answer briefly:

(5x2=10)

5. Parkinsonism.
6. Steps in formation of urine.
7. Functions of Plasma proteins
8. Taste buds.
9. Dwarfism.

One-word answer:

(5x1=5)

10. Alveoli are prevented from collapsing, during expiration by a substance produced from alveolar epithelial cells called.....
11. Primary sensory cortex is located in which lobe of cerebral hemisphere.....
12. Normal RBC count in Males is
13. Which are known as Counter current multipliers
14. In pre synaptic nerve endings, neurotransmitters are stored within membrane bound structures called

Q P Code: 124013

Section B – Ocular Physiology

Marks: 40

Essay:

(10)

1. Trace the visual pathway as light enters eye. Describe the sequence of changes occurring till image formation and its perception.

Short notes:

(3x5=15)

2. Photoreceptors and ionic basis of photoreceptor potential.
3. Actions of extra ocular muscles with a mention of their innervation.
4. Theories of colour vision.

Answer briefly:

(5x2=10)

5. Glaucoma.
6. Ocular dominance.
7. Amblyopia.
8. Presbyopia.
9. Pupillary diameter

One-word answer:

(5x1=5)

10. Refractive error where eyeball is short and light rays focus behind retina is
11. Condition resulting from deficiency of Vitamin A is
12. Power of biconvex lens of human eye is
13. As gaze shifts from one object to another, sudden jerky movements of eyeball are called.....
14. Normal IOP is
