

First Year B.Sc Optometry Degree Supplementary Examinations April 2025
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. Classify leukocytes. Describe their functions

Short notes:

(3x5=15)

2. Composition and functions of pancreatic juice
3. Actions of insulin
4. Short term regulation of blood pressure

Answer briefly:

(5x2=10)

5. Glucose reabsorption from renal tubules
6. Parkinsonism
7. Conducting system of heart
8. Functions of plasma proteins
9. Name the sensations carried by dorsal column tract

One-word answer:

(5x1=5)

10. Name the cells secreting pulmonary surfactant
11. Normal cardiac output is
12. Renin is secreted from cells of kidney
13. Sense organ for hearing is
14. P wave in electrocardiogram(ECG) is due to

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Section B – Ocular Physiology

Marks: 40

Essay:

(10)

1. What is Aqueous humor. Describe the composition, formation, circulation and its functions. Add a note of its role in maintenance of intraocular tension.

Short notes:

(3x5=15)

2. Accommodation reflex
3. Dark adaptation
4. Visual cycle

Answer briefly:

(5x2=10)

5. Electroretinogram
6. Cataract
7. Macular sparing
8. Saccades
9. Visual acuity

One-word answer:

(5x1=5)

10. Part of retina where the photoreceptors are absent is
11. Normal refractive power of human eye is
12. Hypermetropia is corrected by
13. Muscles that help in the convergence of eyeball
14. The photoreceptors concerned with photopic vision are
