

Reg. No.: .....

**First Year B.Sc Optometry Degree Regular/Supplementary Examinations**

**October 2019**

**Paper II – Physiology  
(2016 Scheme)**

**Time: 3 hrs**

**Max marks: 80**

- Answer all questions
- Draw diagrams 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. Define arterial blood pressure giving normal values. Explain the mechanisms that regulate blood pressure.

**Short notes:**

**(3x5=15)**

2. Rh incompatibility.
3. Functions and formation of lymph.
4. Hormones regulating blood calcium.

**Answer briefly:**

**(5x2=10)**

5. List the different types of hypoxia.
6. Movements of small intestine.
7. Two differences between upper motor neuron and lower motor neuron lesion.
8. Innervation of urinary bladder.
9. List any four primary taste sensations.

**One-word answer:**

**(5x1=5)**

10. Blood cell mediating humoral immunity is.....
11. ECG wave representing depolarisation of atria is.....
12. Normal cardiac output per minute is..... (specify unit)
13. Most important inspiratory muscle is.....
14. Structural and functional unit of kidney is.....

**Q P Code: 124013**

**Section B – Ocular Physiology**

**Marks: 40**

**Essay:**

**(10)**

1. Describe the photochemistry of vision. Add a note on colour blindness.

**(6+4)**

**Short notes:**

**(3x5=15)**

2. Factors affecting corneal transparency.
3. Types of pupillary reflexes.
4. Intraocular muscles.

**Answer briefly:**

**(5x2=10)**

5. Bitemporal hemianopia.
6. Define visual acuity.
7. Light adaptation.
8. Two advantages of binocular vision.
9. Rhodopsin.

**One-word answer:**

**(5x1=5)**

10. Refractive index of lens is.....
11. Vision in bright light is called.....
12. Minimum amount of light that can produce sensation of light is called.....
13. Rise in intraocular pressure leads to.....
14. The colour of eye is due to colour of.....

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