

**First Year B.Sc Optometry Degree Supplementary Examinations  
December 2017  
General Physiology & Ocular Physiology  
(2014 Scheme)**

**Time: 3 hrs**

**Max marks: 80**

- Answer all questions
- Write section A and section B in separate answer books (32 Pages). Do not mix up questions from section A and section B.

**Q P Code: 113013**

**Section A – General Physiology**

**Marks: 40**

**Essay: (10)**

1. Define arterial blood pressure and give its normal value. Explain how blood pressure is regulated. (1+1+8)

**Short notes: (3x5=15)**

2. Micturition reflex
3. Carbon dioxide transport
4. Cerebrospinal fluid

**Answer briefly: (5x2=10)**

5. Lymphocytes
6. Functions of liver
7. Acclimatization
8. Synaptic transmission
9. Cushing's syndrome

**Fill in the blanks: (5x1=5)**

10. Normal tidal volume is .....
11. Collapse of alveoli is prevented by.....
12. Normal length of a nephron is .....
13. Hormone secreted by the juxtaglomerular apparatus is .....
14. Normal cardiac output of human heart is .....

**Q P Code: 114013**

**Section B – Ocular Physiology**

**Marks: 40**

**Essay: (10)**

1. Describe the photochemistry of vision. Add a note on the types of abnormalities of color vision.

**Short notes: (3x5=15)**

2. Functions of aqueous humour
3. Refractive error of the eye
4. Intraocular muscles.

**Answer briefly: (5x2=10)**

5. Hemianopia
6. Field of vision
7. Layers of retina
8. Dark adaptation
9. Vitamin A

**Fill in the blanks: (5x1=5)**

10. Primary colors are .....
11. Area of the retina devoid of the receptors is .....
12. Primary visual area is .....
13. Long sighted man is corrected by .....
14. Muscle that helps in accommodation of eye is .....