

**First Year B.Sc Optometry Degree Supplementary Examinations****April 2019****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. Describe regulation of respiration. Add a note on periodic breathing.

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

2. Heart sounds
3. Intrinsic mechanism of blood coagulation
4. Functions of bile and its regulation of secretions.

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

5. Anticoagulants
6. Peristalsis
7. Oxygen dissociation curve
8. Referred pain
9. Hormones regulating blood calcium level

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

10. Plasma protein that helps coagulation of blood is .....
11. Normal Hb % in adult man is .....
12. Normal urine output per day.....
13. HCl is secreted by ..... cells
14. Normal PR interval is .....

**Q P Code: 114013****Section B – Ocular Physiology****Marks: 40****Essay:****(10)**

1. Describe the visual pathway and effects of its lesion

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

2. Mechanism of accommodation
3. Depth perception
4. Refractive principles applied to human ocular lens

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

5. Trichromatic theory of color vision
6. Visual pigments
7. Parallax error
8. Astigmatism
9. Optical system of the human eye

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

10. Refractive index of human lens is.....
11. Thalamic nucleus related to vision is .....
12. Light vision is a function of .....
13. Visible range of wavelength of human eye is .....
14. Normal intraocular pressure of human eye is .....