

Reg. No.: .....

**First Year B.Sc Optometry Degree Supplementary Examinations**  
**February 2021**  
**General Physiology & Ocular Physiology**  
**(2014 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 (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 blood pressure. List the factors affecting blood pressure. Describe the short term regulation of blood pressure

**Short notes:**

**(3x5=15)**

2. Factors affecting glomerular filtration rate
3. Structure and functions of platelets
4. Hypoxia

**Answer briefly:**

**(5x2=10)**

5. Cystometrogram
6. Functions of middle ear
7. Parkinsonism
8. Neuroendocrine reflex
9. Rapid Eye Movement (REM) Sleep

**Fill in the blanks:**

**(5x1=5)**

10. Deficiency of ..... results in Infant Respiratory Distress Syndrome

11. Normal value of tidal volume is .....

12. Main hormone responsible for reabsorption of water from collecting duct is .....

13. Cushings Syndrome is caused due to excessive levels of .....

14. The principal regulating centre for heat regulation in the brain is .....

**Q P Code: 114013**

**Section B – Ocular Physiology**

**Marks: 40**

**Essay:**

**(10)**

1. Explain the errors of refraction and their optical correction. Add a note on night blindness

**Short notes:**

**(3x5=15)**

2. Types of ocular movements
3. Lesions of visual pathway
4. Binocular vision

**Answer briefly:**

**(5x2=10)**

5. Fovea centralis
6. Argyll Robertson Pupil
7. Near response
8. Primary and complementary colours
9. Visual angle

**Fill in the blanks:**

**(5x1=5)**

10. The normal intraocular pressure in eye is .....

11. Area of the retina where the optic nerve leaves the eye is called .....

12. Earliest visual abnormality in vitamin A deficiency is .....

13. ..... charts are used for testing colour vision

14. Colour perception is a function of .....

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