

First Year B.Sc Optometry Degree Regular/Supplementary Examinations**August 2021****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. Define erythropoiesis. Mention its different stages. Describe the factors affecting erythropoiesis. (1+4+5)

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

2. Mechanism of urine formation.
3. Enumerate the hormones of anterior pituitary.
4. Oxygen transport in blood.

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

5. Functions of saliva.
6. List two ascending tracts and sensations carried by them.
7. List two functions of cerebellum.
8. Two functions of WBC.
9. Tidal volume.

One-word answer:**(5x1=5)**

10. Pancreatic cells secreting insulin is.....
11. Normal coronary blood flow per minute is.....
12. Second heart sound is due to closure of.....
13. One enzyme presents in saliva.....
14. Normal bleeding time in minutes.....

Q P Code: 124013**Section B – Ocular Physiology****Marks: 40****Essay:****(10)**

1. Explain the changes occurring during accommodation reflex. Describe the neural pathway of accommodation reflex. (5+5)

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

2. Extraocular muscles and their role in eye movement.
3. Define colour blindness and mention the types.
4. Refractive errors of eye.

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

5. Factors causing changes in intra ocular pressure.
6. Name two tests of colour vision.
7. Physical changes that occur in ageing lens.
8. Name two factors that maintain corneal transparency.
9. Functions of tear film.

One-word answer:**(5x1=5)**

10. Visual acuity is measured using.....
11. Aperture present in the centre of iris.....
12. Normal intra ocular pressure is.....(specify unit).
13. Vision in dim light is called.....
14. All retinal layers except nerve fibers terminate at.....
