

First Year B.Sc Optometry Degree Examinations October 2018**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. Name the hormones of pituitary gland. Explain the functions and action of growth hormone. Add a note on hyper secretion of growth hormone. (2+5+3)

Short notes: (3x5=15)

2. Functions of neutrophils and eosinophils
3. Composition and functions of pancreatic juice
4. Transportation of carbon dioxide in the blood

Answer briefly: (5x2=10)

5. Draw and label normal electro cardiogram
6. List the peculiarities of renal circulation.
7. Define systolic and diastolic blood pressure. Give the normal values
8. Define sensory receptors. Give example for receptors for touch, pressure and pain
9. What is asphyxia. Mention the causes

One-word answer: (5x1=5)

10. Normal duration of cardiac cycle.....
11. Normal vital capacity
12. Normal respiratory rate.....
13. Normal RBC count in adult male
14. Partial pressure of oxygen in venous blood -----

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

1. Describe the structure and functions of retina. What is blind spot. (3+4+3)

Short notes: (3x5=15)

2. Control of eye movements.
3. Causes and corrections of short sightedness and long sightedness.
4. Draw and explain the pathway for pupillary light reflex

Answer briefly: (5x2=10)

5. What is cataract and how it is corrected.
6. Effect of lesion of visual pathway at optic chiasma.
7. What is binocular vision.
8. Changes taking place during dark adaptation.
9. Functions of eye lids

One-word answer: (5x1=5)

10. The pigment present in rods
11. Refractive index of lens
12. Red blindness is known as
13. Visual acuity is measured by using
14. The technique of recording field of vision is known as
