SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year Semester-III

March 2024 Examination

Bachelor of Optometry

Time: 2.30 Hrs. **Paper – I** **[Max. Marks: 80]**

Ocular Anatomy & Ocular Physiology

Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.

(Use separate answer booklet for Section A & B)

Section – A

Ocular Anatomy (40 Marks)

LONG ESSAY **1×10=10 Marks**

1. Describe the visual pathway with a neat labelled diagram. Describe the lesions and its effects.

SHORT ESSAY **3×5=15 Marks**

2. Describe the microscopic structure of retina with a neat labelled diagram
3. Describe the development of eyeball
4. Define generalised connective tissue. Classify with examples.

SHORT ANSWERS **5×3=15 Marks**

5. Classify simple epithelium with examples.
6. Name the bones forming bony orbit
7. Eyelid glands
8. Draw a neat labelled diagram of cell
9. Name the higher visual centres

Section – B

Ocular Physiology (40 Marks)

Q.P Code : K3196

(Use separate answer booklet for Section-B)

LONG ESSAY **1×10=10 Marks**

1.Describe the errors of refraction of the eye and its correction with the help of the neat diagram .

SHORT ESSAY **3×5=15 Marks**

2. Describe the factors affecting transparency of cornea
3. Name the intraocular fluid and list their function
4. Give the differences between light and dark adaptation

SHORT ANSWERS **5×3=15 Marks**

5. Describe the function of lacrimal apparatus
6. Define Astigmatism with its correction
7. Name the three layers of the eyeball
8. List the functions of the excrinsic muscles of the eye
9.Define focal length,principal axis and diopter

* * *

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year Semester-III

March 2024 Examination

Bachelor of Optometry

Time:2.30 Hrs. **Paper – I** **[Max. Marks: 80]**

Ocular Microbiology & Ocular Biochemistry

(Use separate answer booklet for Section A & B)

Section – A

Ocular Microbiology (40 Marks)

Q.P Code: K3205

Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.

LONG ESSAY **1 X 10 = 10 Marks**

1. Enumerate the causative agent of Trachoma? Describe the predisposing factors, clinical features, laboratory diagnosis of Trachoma?

SHORT ESSAY **3 X 5 = 15 Marks**

2. Enumerate Halogens used in disinfection. Describe the mechanism of action and uses of Halogens.
3. Describe the principle and applications of Autoclave.
4. Describe the predisposing factors, clinical features and laboratory diagnosis of Acanthamoeba keratitis.

SHORT ANSWERS **5 X 3 = 15 Marks**

5. Draw a neat diagram of bacterial growth curve.
6. Enumerate the immediate steps to be followed following a needle stick injury.
7. Enumerate 3 gram positive bacilli causing eye infections.
8. Describe the mode of action and 2 uses of Alcohol.
9. Enlist the types of Bacterial filters and their uses.

Section – B

Ocular Biochemistry (40 Marks)

Q.P Code: K3206

(Use separate answer booklet for Section-B)

Long Essay **1X10 = 10 Marks**

1. Describe the chemistry, RDA and biochemical role of Vitamin A in vision. Add a note on deficiency disorders of Vitamin A.

Short Essay **3X5 = 15 Marks**

2. Senile Cataract formation
3. Describe composition and metabolism of Lens.
4. Describe composition and metabolism of Aqueous humor.

Short Answers **5X3 = 15 Marks**

5. Mention three muscle proteins with their functions.
6. Glaucoma.
7. Mention three Plasma proteins with their functions.
8. Biochemical functions of Glutathione.
9. Irrigating solutions.

* * *

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year Semester-III

March 2024 Examination

Bachelor of Optometry

Time : 2.30 Hrs. **Paper-III** **[Max. Marks : 80]**

Subject: Physical & Physiological Optics

Q.P Code: K3210

Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.

LONG ESSAY **2 X 10 = 20 Marks**

1. Describe the etiology, clinical features and management of astigmatism.
2. Describe the principle and methods of retinoscopy.

SHORT ESSAY **6 X 5 = 30 Marks**

3. Write a note on determination of focal length &dioptric power of lens.
4. Discuss objective refraction.
5. Discuss convergence insufficiency.
6. Discuss keratoconus.
7. Discuss Cardinal points of eye.
8. Discuss Duochrome test

SHORT ANSWERS **10 X 3 = 30 Marks**

9. What is Angle kappa.
10. Correction of presbyopia.
11. Mention the types of myopia.
12. Maddox rod.
13. Pinhole
14. Astigmatic fan
15. Define surface tension and viscosity.
16. Features of concave lens.
17. Uses of prisms.
18. Define amplitude of accommodation.

* * *