### SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

### (A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year (Semester-IV)
September 2021 Examination
B.Sc. Ophthalmic Technology & Optometry

Time: 2.30 Hrs.

[ Max. Marks : 80]

### SUBJECT : OCULAR DISEASE-I (Anterior Segment Disease)

Q.P Code: J4640

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

### LONG ESSAY

 $2 \times 10 = 20 \text{ Marks}$ 

- Describe the anatomy of upper eye lid, list common eye lid swellings and their management.
- 2 Describe Blepharitis- its types, signs, symptoms, etiology, and management in detail.

### SHORT ESSAY (Answer any 6)

6 X 5 = 30 Marks

- 3 Write the symptoms, signs and types of scleritis.
- 4 What are the clinical signs of thyroid eye disease?
- 5 Give an account on stromal corneal dystrophies.
- 6 Write five causes of ectropion.
- 7 Define and describe the clinical features of External Hordeolum (Stye).
- 8 Describe the evaluation of ptosis.
- .9 Write a note on bacterial conjunctivitis.
- 10 Describe the etiology, Trachoma, clinical features, and management of Trachoma.

### SHORT ANSWERS (Answer any 10)

 $10 \times 3 = 30 \text{ Marks}$ 

- 11 Mention the types of cataract.
- 12 Describe the management of chalazion.
- 13 Describe buphthalmos.
- 14 List the diagnostic procedures for glaucoma.
- 15 Enlist the treatment modalities for diabetic retinopathy.
- 16 Describe the causes for conjunctivitis.
- 17 Give the etiological classification of the cataract.
- 18 Describe the pre operative evaluation of the cataract.
- 19 Define normal tension glaucoma(NTG)
- 20 Mention the instruments to measure intra ocular pressure (IOP).
- 21 Mention the types of glaucoma.
- 22 Define Subluxation.

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## B.Sc. Allied Health Sciences Second Year Semester-IV

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Time: 2.30 Hrs.

[Max. Marks: 80]

## Ocular Pathology, Ocular Pharmacy and Pharmacology

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 Pathology (40 Marks)

Q.P Code: J4655

LONG ESSAY

 $1 \times 10 = 10 \text{ marks}$ 

1. Write normal histology of Retina .Discuss aetiology , pathogenesis and pathology of Retinoblastoma.

SHORT ESSAY (Answer any Three)

 $3 \times 5 = 15 \text{ marks}$ 

- Infectious lesions of Eyelid .
- 3. Inflammation
- 4. Wound healing
- Corneal Dystropies

SHORT ANSWERS (Answer any five)

 $5 \times 3 = 15 \text{ marks}$ 

- 6. Draw and neatly label the diagram of Eyeball with optic nerve
- 7. Three causes for Ketonuria.
- 8. Three causes for Microcytic Hypochromic Anaemia .
- 9. Tuberculosis of eye.
- 10. Three causes for Oliguria.
- 11. Blepharitis.

Section – B Ocular Pharmacy & Pharmacology (40 Marks) Q.P Code : J4656

(Use separate answer booklet for Section-B.

LONG ESSAY

 $1 \times 10 = 10 \text{ Marks}$ 

 Classify anti inflammatory agents. Explain mechanism of action, uses and adverse effects of diclofenac (4+2+2+2)

SHORT ESSAY (Answer any Three)

3X 5 = 15 Marks

- 2. Explain the periocular route of administration with examples
- 3. Explain mechanism of action of five drugs from different category used in the treatment of glaucoma
- Explain mechanism of action, uses and adverse effects of doxycycline (2+2+1)
- Explain cycloplegia. Mention drugs causing it and write their uses (2+2+1)

### SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 6. Mention three drugs used in cytomegalovirus retinitis
- 7. Mention three ocular dyes and write their uses
- 8. Explain mechanism of action and write one use and one adverse effect for carboxymethyl cellusoe
- Explain mechanism of action and write two uses of tacrolimus
   Mention three types of contact lens solution
- 11. Mention three methods of preventing contamination in outpatient services

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Time: 2.30 Hrs.

[ Max. Marks : 80]

## Subject: Ophthalmic And Optical Instrumentation And Procedures

Q.P Code: J4660

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

### LONG ESSAY

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. Describe direct ophthalmoscopy in detail.
- 2 Explain Subjective Refraction in detail.

### SHORT ESSAY (Answer any 6)

 $6 \times 5 = 30 \text{ Marks}$ 

- 3 Mention different types of tonometers.
- 4 Give the principles of Fundus Fluoroscein Angiography (FFA).
- 5 Write the principle of radiuscope.
- 6 Give the characteristics of prism.
- 7 What are the different types of LASER?
- 8 Describe compound microscopes.
- .9 Give the clinical importance of Perimetry.
- 10 Differentiate between direct ophthalmoscope and indirect Ophthalmoscope.

### SHORT ANSWERS (Answer any 10)

 $10 \times 3 = 30 \text{ Marks}$ 

- 11 Explain Worth 4 dot test.
- 12 Describe the procedure of Ishihara test for colour vision.
- 13 What are the advantages of keratometer.
- 14 Describe Dynamic retinoscopy.
- 15 Decribe the procedure of Jackson cross cylinders.
- 16 Give the procedure of Humphrey visual field analyser.
- 17 Define Pachymeter.
- 18 Describe Schiotz tonometer.
- 19 Mention the clinical applications of direct ophthalmoscope.
- 20 Define Ophthalmic prism.
- 21 Define Spectrometer.
- 22 Expand LASIK.

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B.Sc. Allied Health Sciences Second Year (Semester-IV) September 2021 Examination

B.Sc. Ophthalmic Technology & Optometry

Time: 2.30 Hrs.

[ Max. Marks : 80]

### Subject: Refraction Investigative Ophthalmology

O.P Code: J4670

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

### LONG ESSAY

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. What is binocular single vision? Describe the three grades of BSV.
- Write a long note refinement and finalization of cylindrical lens axis and power.

### SHORT ESSAY (Answer any 6)

6 X 5 = 30 Marks

- 3 Write a note on abnormal head posture.
- 4 Describe Retinoscopy, principle and method.
- 5 Describe Myopia.
- 6 Give the types of occlusion therapy in managing amblyopia.
- Discuss the origin, insertion, nerve supply and actions of extra ocular muscles.
- Describe Astigmatism, its clinical features, types and management. 8
- 9 Describe a Maddox rod and add a note on its uses.
- Enumerate Keratoconus.

#### SHORT ANSWERS (Answer any 10)

 $10 \times 3 = 30 \text{ Marks}$ 

- What are the signs of fourth cranial nerve palsy? 11
- 12 Mention three types of ARC.
- 13 Write about uses of synaptophore.
- Name the test charts used for pediatric visual acuity assessment. 14
- Mention three uses of RAF ruler.
- What is Hering's law? 16
- Write a note on treatment modalities of astigmatism. 17
- 18 Hirschberg test.
- Mention any three types of amblyopia.
- Name the types of nystagmus. 20
- 21 Mention any three signs of paralytic squint.
- Mention three causes of Aphakia