

(A DEEMED TO BE UNIVERSITY)

B.Sc. Ophthalmic Technology Second Year Semester-IV

February 2020 Examination

Time: 2.30 Hrs.

Paper – I

[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 : J4265

LONG ESSAY

1 x 10 = 10 marks

1. Write normal histology of Lens. Discuss types, aetiology, pathogenesis and pathology of cataract.

SHORT ESSAY (Answer any Three)

3 x 5 = 15 marks

2. Tumors of Eyelid.
3. Diabetic Retinopathy
4. List Six Intraocular Tumors
5. Corneal Dystrophies

SHORT ANSWERS (Answer any five)

5 X 3 = 15 marks

6. What is polyuria and write two causes for polyuria.
7. Three causes for Ketonuria .
8. Three causes for Normocytic Normochromic Anaemia.
9. Internal Hordeolum.
10. What is Inflammation and write types of inflammation.
11. List tumors of optic nerves.

Section – B

Ocular Pharmacy & Pharmacology (40 Marks)

Q.P Code : J4266

(Use separate answer booklet for Section-B)

LONG ESSAY

1 x 10 = 10 marks

1. Classify aminoglycosides. Explain the mechanism of action, uses and adverse effects of gentamicin (4+2+2+2)

SHORT ESSAY (Answer any three)

3 x 5 = 15 marks

2. Mention mydriatics. Explain the uses and adverse effects of any **two** (2+3)
3. Explain mechanism of action of lignocaine and write **two** ocular techniques of administration with **two** uses for each (2+3)
4. Explain uses and contraindications to morphine (2.5+2.5)
5. Explain mechanism of action, uses and adverse effects of latanoprost and pilocarpine (2.5+2.5)

SHORT ANSWER (Answer any five)

5 x 3 = 15 marks

6. Mention **three** disinfectants and write **three** uses
7. Mention **three** ocular dyes and write **three** uses
8. List **three** drugs used to treat ocular fungal infection
9. Explain mechanism of action and write **one** ocular use and **one** adverse effect acyclovir
10. Mention **three** ocular preservatives
11. Explain mechanism of action and **two** uses of cyclosporine

**B.Sc. Ophthalmic Technology Second Year Semester-IV
February 2020 Examination**

Time : 3 Hrs.

[Max. Marks : 100]

Paper-II

Refraction Investigative Ophthalmology

Q.P Code : J4270

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 x 10 = 20 Marks

1. Describe the clinical features and management of hypermetropia.
2. What is binocular single vision? Describe the three grades of BSV.

SHORT ESSAY (Answer any ten)

10 x 5 = 50 Marks

3. How do you test for abnormal retinal correspondence?
4. Abnormal head posture.
5. What are the three grades of Binocular single vision?
6. Discuss Occlusion therapy in managing amblyopia.
7. How do you test for abnormal retinal correspondence?
8. What are the tests of stereopsis?
9. Discuss the origin, insertion, nerve supply and actions of extra ocular muscles.
10. Discuss the types of amblyopia.
11. What is transposition? How do you transpose +5.00 -3.00 x 850.
12. Describe prismatic aberration in an aphakic eye.
13. What is penalization and describe the technique?
14. Describe a Maddox rod and mention its role in the evaluation of phoria.

SHORT ESSAY (Answer any ten)

10 x 3 = 30 Marks

15. Mention three types of ARC.
16. Mention any three signs of paralytic squint.
17. Mention any three types of amblyopia.
18. Roving ring scotoma.
19. Mention three causes of Aphakia.
20. What are the signs of fourth cranial nerve palsy?
21. Hirschberg test.
22. What is Hering's law?
23. What is the origin, insertion and action of LPS muscle?
24. What are the components of binocular vision?
25. What is the Spherical equivalent of +2.00/-2.50 D cyl 90° ?
26. Mention three Yolk muscles.

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

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B.Sc. Ophthalmic Technology Second Year Semester-IV

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Time : 3 Hrs.

[Max. Marks : 100]

Paper-III

Ophthalmic Instruments and Appliances

Q.P Code : J4280

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 x 10=20 Marks

1. Describe the different methods of illumination in slit lamp
2. Explain the determination of cylindrical power and axis using Jackson cross cylinder

SHORT ESSAY (Answer any 10 questions)

10 x 5 = 50 Marks

3. Straddling method of Retinoscopy.
4. Describe the technique of Applanation tonometer.
5. Discuss the possible sources of 'error' in perimetry report.
6. What are the advantages and disadvantages of indirect ophthalmoscope?
7. Describe Perkins hand held tonometer.
8. Astigmatic dial.
9. How do you assess AC/A ratio?
10. Enumerate the optical problems of aphakic spectacles.
11. Non-contact tonometer.
12. What are the instruments used in Corneal examination and add a note on each?
13. Describe the optics, advantages and disadvantages of fundus camera.
14. Write briefly about Maddox wing and its uses.

SHORT ANSWERS (Answer any 10 questions)

10 x 3 = 30 Marks

15. Pin hole.
16. Mention any three Non -contact tonometer.
17. What are the uses of placido disc.
18. Mention four uses of prisms in ophthalmology.
19. Boundaries or peripheral limits of normal visual field.
20. Arden grating.
21. What is Andersons criteria.
22. Air puff tonometer.
23. Dark adaptometer.
24. +90D Lens.
25. The correct end point in applanation tonometry reading.
26. Three common visual field defect seen in HVF report.

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