

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

July/August 2019 Examination

B.Sc. Ophthalmic Technology

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 (50 Marks)

Q.P Code : J4265

LONG ESSAY

1 x 10 = 10 marks

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

SHORT ESSAY (Answer any Three)

3 x 5 = 15 marks

2. Corneal Dyatropies.
3. Physical examination of Urine.
4. List Six Intraocular Tumors
5. Squamous cell carcinoma

SHORT ANSWERS (Answer any five)

5 x 3 = 15 marks

6. Blepharitis.
7. Three causes for Glucosuria .
8. Three causes for Microcytic Hypochromic Anaemia.
9. Three causes Eosinophilia.
10. What is Inflammation and write types of inflammation?
11. List tumors of optic nerves.

Section – B

Ocular Pharmacy & Pharmacology (50 Marks)

Q.P Code : J4266

(Use separate answer booklet for Section-B)

LONG ESSAY

1 x 10 = 10 marks

1. Classify drugs used in glaucoma. Explain the mechanism of action and route of administration of **five** drugs from different category. (5+5)

SHORT ESSAY (Answer any three)

3 x 5 = 15 marks

2. Mention periocular routes of drug administration explain advantage and disadvantage of any **two** route (2+1.5+1.5)
3. Mention the mydriatics. Explain the therapeutic and diagnostic uses for them. (2+1+2)
4. Explain mechanism of action, ocular uses and adverse effects of diclofenac. (2+2+1)
5. Explain mechanism of action, ocular uses and adverse effects of sparfloxacin. (2+2+1)

SHORT ANSWER (Answer any five)

5 x 3 = 15 marks

6. Mention **three** drugs used in herpes keratitis
7. Mention **three** ocular dyes and write **three** uses
8. Explain mechanism of action and write **one** use and **one** adverse effect of carboxymethyl cellulose
9. Explain mechanism of action and write **two** uses of tacrolimus
10. Mention **three** components of contact lens solution
11. Mention **three** ocular preservatives

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

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

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B.Sc. Ophthalmic Technology

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. What is Astigmatism? Classify and enumerate the treatment options of astigmatism
2. How do you assess visual acuity in children of 5 -15 years' age group?

SHORT ESSAY (Answer any 10 questions)

10 x 5 = 50 Marks

3. How do you test abnormal retinal correspondence?
4. What is AC/A ratio?
5. Discuss the aetiology, clinical features and treatment of Aphakia
6. Antagonist and yolk muscles of the eye
7. How will you assess vision children below the age of two years?
8. Worth four dot test
9. Describe Diffraction and its applications
10. Describe the extraocular muscles and their actions
11. What is subjective refraction? Briefly describe different methods of it.
12. Mention the disadvantages of Aphakic glasses
13. Describe the clinical features of Keratoconus
14. Describe the fundus picture in pathological myopia with diagram

SHORT ESSAY (Answer any 10 questions)

10 x 3 = 30 Marks

15. Mention any three abnormal head posture and its causes
16. What are the advantages of contact lens over spectacles in treating aphakic patients?
17. Mention the tests where Red green goggles are used and what does it imply?
18. What is the principle of duochrome test?
19. Total internal reflection.
20. Name two Objective and two Subjective methods of refraction.
21. Coma.
22. End point of retinoscopy
23. What is retinoscopy?
24. What are Yolk muscles?
25. Causes of premature presbyopia.
26. Three signs of sixth cranial nerve palsy.

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[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. Discuss the optics of slit lamp and its uses.
2. Write in detail about standard lensmeter with schematic diagram.

SHORT ESSAY (Answer any 10 questions)

10 x 5 = 50 Marks

3. What is pinhole? Write about clinical significance of pinhole.
4. Jackson Gross Cylinders.
5. Fluorescein staining.
6. Describe the principle and limitations of Keratometer.
7. Discuss the advantages and disadvantages of Retinoscopy and Autorefractometer.
8. Auto refractometers.
9. Describe Maddox rod and mention its uses.
10. Describe a trial set briefly.
11. Straddling method of Retinoscopy.
12. Describe the technique of Applanation tonometer.
13. Discuss the possible sources of 'error' in perimetry report.
14. Describe the difference between Goldmann and Schoitz tonometry.

SHORT ANSWERS (Answer any 10 questions)

10 x 3 = 30 Marks

15. Arden grating.
16. Pin hole.
17. WFDT.
18. Placido disc.
19. Tinted lenses.
20. Trial frame design.
21. Astigmatic fan.
22. Ischiaras chart.
23. Stenopic slit.
24. Maddox rod.
25. Titmus test
26. Atropine

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