

**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)**

M.Sc. in Optometry (M.Sc. OPH) First Year (Semester-I)

February-2019 Examination

Time: 3.00 Hrs

[Max. Marks: 100]

Applied Optometry Optics

Q.P. Code: M1210

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary

LONG ESSAY

2X10=20 Marks

1. Discuss the treatment options of myopia
2. Write in detail about various theories of light, mentioning its drawbacks & application.

SHORT ESSAY

10x5=50 Marks

3. State and explain the laws of illumination with necessary diagrams
4. Define interference and the types. Applications of interference of light
5. Write about ophthalmic prisms, its base notations and uses in ophthalmology
6. What is the significance of R.I in terms of the characteristics of an ophthalmic lens.
7. Define dispersion and explain why the shorter wavelengths lights are bending more.
8. Describe the Glass lenses – material types and characteristics
9. Briefly explain about interference and its application in Spectacle Lenses.
10. Disadvantages of aphakic glasses
11. Describe Sturms conoid
12. Lens surfacing and polishing

SHORT ANSWER

10x3=30 Marks

13. Write about the use of stops and apertures in lens system.
14. Glazing
15. Classify aberrations
16. Total internal reflection
17. Principle of telescope
18. Define scattering and its significance
19. Refraction of toric surface
20. How are 'CTs' and 'Illuminance' related?
21. Gullstrand's Schematic eye
22. Differentiate between luminance and Illuminance

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Epidemiology and Community Ophthalmology

Q.P. Code: M1220

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary

LONG ESSAY

2 × 10 = 20 marks

1. Define Epidemiology. Classify Epidemiological studies. Describe steps of Conducting Randomized Control Trail with example. (2+4+4)
2. What are causes for blindness in Children in India? Describe the WHO Clinical Grading of Vitamin A Deficiency Manifestations in Eye. Add a note it's Prophylaxis Programme. (2+4+4)

SHORT ESSAY

10 × 5 = 50 marks

3. Who are Carriers? Classify the Carriers with examples.
4. Describe the Uses of Epidemiology?
5. What is Association? Discuss different types of Associations in causal studies.
6. What are the Tools of Measurements in Epidemiology?
7. What are the differences between Case Control and Cohort Studies?
8. Describe the Prevention and Control Measures for Trachoma?
9. Describe the Functions of DBCS?
10. Describe the Epidemiological Determinants for Blindness in India?
11. What is Avoidable Blindness? Enlist the causes for the avoidable blindness. (1+4)
12. What is an Eye Bank? What are its functions? (1+4)

SHORT ANSWER

10 × 3 = 30 marks

13. What is a Vector? Mention 3 Vectors and the Diseases Transmitted.
14. What is Incubation period? Name the types of incubation period.
15. What is VVM?
16. What is Relative Risk?
17. What is a Confounding factor? Give one example.
18. Name Three Vaccines given under National Immunization Schedule?
19. Define Absolute and Manifest blindness?
20. List the Major Obstacles for Eye Donation in India?
21. List Six Contraindications for Eye Donation?
22. What is the Role of School teacher in Prevention of Blindness in children?

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[Max. Marks: 100]

Advanced Ophthalmic Diagnostic Procedure and Instrumentation-I

Q.P. Code: M1230

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary

LONG ESSAY

2X10=20 Marks

1. Explain in detail about direct ophthalmoscope.
2. Discuss the principle and functions of Autorefractometr. Add a note on Fundus fluorescein angiography

SHORT ESSAY

10x5=50 Marks

3. What is tonometry? Write the principles of tonometer.
4. Photo-coagulation
5. Lensometer
6. Electroretinography
7. Tests of binocular single vision
8. Specular microscope.
9. Name the two theories of 'Colour'. Explain each with necessary diagrams
10. Potential Acuity Meter
11. Principle and uses of B –Scan
12. Difference between Direct and Indirect Ophthalmoscope

SHORT ANSWER

10x3=30 Marks

13. Hruby lens
14. What are indications of 'A' scan and 'B' scan?
15. Classify tonometers.
16. Hess Chart interpretation in III cranial nerve palsy
17. Schiottz tonometer.
18. Use of Jackson cross cylinder
19. Types of retinoscopy
20. Phoropter
21. Different microscope viewing systems used in slit lamp.
22. Kinetic perimeter

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