

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Optometry Degree Examination - 28-Nov-2023

Time: Three Hours

Max. Marks: 100 Marks

VISUAL OPTICS (RS-4)

Q.P. CODE: 3347

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice)

2 x 10 = 20 Marks

1. Define myopia and explain the clinical features (signs and symptoms) and management strategies for myopia.
2. What is the principle of retinoscopy? Explain the optics of retinoscopy with the stages involved among myopes with the help of ray diagram.

OR

Write in details about pediatric visual acuity charts used in clinical practice

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Write in detail about the properties of Gullstrand's schematic eye.
4. Explain the aetiology and clinical features of presbyopia.
5. Define visual acuity and write four differences between log MAR visual acuity chart Snellen's chart.

OR

Classify regular astigmatism with examples

6. Short note on trial box and its accessories.
7. Write in detail about the steps involved in subjective refraction.
8. Classify hypermetropia based on the accommodation involved.
9. Explain the optics of astigmatism with the help of Sturm's Conoid.
10. What is lag of accommodation? Name and explain the clinical procedure performed to estimate the lag of accommodation.

OR

Fogging procedure.

11. What is Mohindra's retinoscopy? Differentiate Mohindra's retinoscopy from routine static retinoscopy.
12. Describe the mechanism of accommodation.

SHORT ANSWER

10 x 3 = 30 Marks

13. What are the impacts of anisometropia on binocular vision?
14. Write a note on clinical tests available to evaluate aniseikonic patients.
15. What are the disadvantages of aphakic glasses?
16. Define contrast sensitivity. What are the two formulae used in construction of the contrast sensitivity charts?
17. Enlist the factors that influences the process of Emmetropization.
18. Explain briefly about the clinical test performed to estimate the near point of convergence.
19. What is cycloplegic refraction? What are the clinical indications to perform the cycloplegic refraction?
20. Explain the retinal image blur with the help of depth of focus and depth of field.
21. Enumerate the various causes of refractive anomalies.
22. What is binocular balancing? List down the various methods of binocular balancing in clinical practice.