# Rajiv Gandhi University of Health Sciences, Karnataka

### II Year B.Sc. Optometry Degree Examination - 26-Dec-2022

**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. Explain the mechanism of accommodation. Write in detail about etiology, diagnosis and treatment of Presbyopia.

2. Discuss the optics involved in Hypermetropia with a neat labelled diagram. Write classification, clinical features and management of Hypermetropia.
   **OR**
   What is Retinoscopy? Elaborate on the reflex characteristics and principle. Discuss the importance of working distance lens in retinoscopy.

**SHORT ESSAYS (Question No 5 & 10 choice)**              **10 x 5 = 50 Marks**

3. Explain about Trial set and trial set contents.

4. Discuss the clinical features of pathological myopia.

5. AC/A ratio. Explain the clinical importance.
   **OR**
   Problems encountered in retinoscopy.

6. Discuss Sturm's conoid.

7. Discuss the role of cornea and lens in ocular refraction.

8. Short note on Cycloplegic refraction.

9. Discuss the importance of accommodation in Hypermetropia.

10. Discuss the LogMAR chart.
    **OR**
    Draw the Schematic representation of reduced eye.

11. What is Anisometropia?

12. What is Fresnel prism? Write its advantages.

**SHORT ANSWER**                                          **10 x 3 = 30 Marks**

13. Optics of neutrality in retinoscopy.

14. Near point of accommodation.

15. What is Depth of focus?

16. Write about Maddox rod.

17. Short note on Aniseikonia.

18. Fogging.

19. With the rule Astigmatism, with an example.

20. Angle Kappa.

21. Dynamic retinoscopy.

22. Calculate the amplitude of accommodation required to see an object at 10cm for + 4.00D hyperopia.

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