

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Optometry Degree Examination - 19-May-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. Explain in detail about the principle, clinical procedure, characteristic of reflex in retinoscopy.
2. Define astigmatism. Write in detail about the aetiology and optical condition of astigmatism.

OR

What is contrast? What is contrast threshold? Explain about types of contrast sensitivity loss with example

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Write in detail about the construction of log MAR visual acuity chart.
4. Write short note on various methods of dynamic retinoscopy.
5. What are the various methods of estimating the near addition amongst the presbyopic patients?

OR

Importance of concave mirror retinoscopy in clinical practice.

6. Explain the clinical fundus findings in pathological myopia.
7. Axial vs refractive ametropia.
8. Write in detail about the clinical application of Jackson Crossed Cylinder.
9. Write short note on clinical signs, symptoms and complications of hypermetropia.
10. Define range and amplitude of accommodation. What are the accommodative anomalies seen in clinical practice?

OR

What is clock dial chart? Write about its clinical importance.

11. Write in detail about the pediatric visual acuity charts available in clinical practice.
12. What is Phoropter? What are the advantages and disadvantages of phoropter over trial set?

SHORT ANSWER

10 x 3 = 30 Marks

13. Explain Donder's Reduced eye concept.
14. Define the following terms: a) Conjugacy b) Catoptric power c) Anisometropia
15. How many Purkinje images are present in the eye? Write down the locations of same within the eye.
16. What is radical retinoscopy? In which clinical conditions are this procedure indicated?
17. Enlist the cycloplegic drops used in clinical practice along with their advantages and disadvantages.
18. What is the significance of having a pair of eyes?
19. Differentiate between spectacles magnification and relative spectacle magnification.
20. What is Biometry? Write down the formula used to calculate the IOL power.
21. What is Duochrome test? Write down the principle based on which it works.
22. What is jack in the box phenomenon? How can we overcome the same?