

Q.P.Code 302013

Reg. No.:.....

Third Year B.Sc Optometry Degree Supplementary Examinations - April 2014

Dispensing Optics, Mechanical Optics, Contact Lens and Low Vision Aids

Time : 3 hrs

Max marks : 100

- **Answer all questions**
- **Draw diagram wherever necessary**

Essays

(2x20=40)

1. Explain the optical and non-optical aids used in low vision care. Compare Galilean and Keplarian telescopes. (15 +5=20)
2. Describe the care and maintenance of soft contact lenses in detail. Add a note on various contact lens options available for keratoconus patients. (12+8=20)

Short notes

(5x5=25)

3. Convergence and accommodation with contact lenses
4. Explain the power, axis, and centration aspect of lens quality.
5. Explain the following lens defects: • Veins • Bubbles • Waves
6. Distance and near vision assessment in low vision patients
7. Polycarbonate lenses

Answer briefly

(10x3=30)

8. Non-invasive assessment of tear layer
9. Contrast sensitivity assessment in low vision patients
10. Geneva lens measure
11. Edging of lenses for rimless frames
12. Facial measurements in children for spectacle lenses
13. RGP static fit assessment
14. Different techniques of inspecting a spectacle lens surface.
15. Low vision management for retinitis pigmentosa
16. Edging of lenses for metal frames
17. Classification of contact lens materials

One word answer

(5x1= 5)

18. ----- cranial nerve is responsible for corneal innervations
19. FDA Group I classification for soft contact lenses involves-----
20. Amsler's chart covering an area of -----
21. ----- is the lenticular astigmatism in an eye with subjective refraction -3.00/-4.00 × 90° and Keratometry readings 44.00/47.00@180°
22. Mucin balls are most commonly seen in----- contact lenses
