

**Visual Optics  
(2010 scheme)****Time: 3 hrs****Max marks: 80**

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

**Essays****(2x15=30)**

1. What is retinoscopy and what are the stages of retinoscopy. Discuss the features of retinoscopy in myopia
2. What is aphakia. Discuss the optics and corrections of aphakia.

**Short notes****(5x5=25)**

3. Irregular astigmatism
4. Lensometer
5. What is transposition and explain with example
6. Describe the effective power of spectacle lens and derive its equation
7. Principles of auto refractometer

**Answer briefly****(10x2 = 20)**

8. Methods to measure corneal curvature
9. Cross cylinder
10. Indications of cycloplegics
11. Pin hole
12. Duochrome test
13. Anomalies of accommodation
14. Spectacle correction of presbyopia
15. Fundus changes in pathological myopia
16. Aniseikonia
17. Chromatic aberration

**One word answer****(5x1 = 5)**

18. Placido's disc is used to detect .....
19. In retinoscopy triangular shadow is seen in .....
20. Unicocular aphakia is corrected by .....
21. Two uses of bifocals
22. Refractive error of newborn babies.

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