Second Year B.Sc Optometry Degree Examinations - October 2012

Visual Optics

Time: 3 hrs   **Max marks : 80**

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

Essays   **(2x15=30)**

1. Define hypermetropia and mention its components. Describe its correction with spectacle lens.

2. Enumerate in detail the various techniques of subjective refraction.

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

3. Fresnel prism.

4. Draw the schematic representation of reduced eye and mark the cardinal points.

5. Pathological myopia

6. Presbyopia

7. Pin hole

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

8. Optics of neutrality in retinoscopy

9. Near point of accomodation

10. Depth of focus

11. Maddox rod

12. The prentice rule

13. Do the toric transposition of +3.5 D sph /+ 2.0 D cyl 1800 (Base curve +6.00 and -6.00)

14. Calculate the spherical equivalent of +1.0 D sph/ +3.0 D cyl 1800

15. Sturm conoid

16. Far point

17. Aniseikonia

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

18. Candela is the unit of measure for __ __ __ __ __ __ __

19. The angle between the pupillary axis and visual axis is called_____

20. Badal principle is used in __ __ __ __ __ __ __

21. Cycloplegic effect of atropine lasts for_____days .

22. Straddling is used to refine_____

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