

**B.Sc. (Hons.) IN OPTOMETRY AND  
OPHTHALMIC TECHNIQUES (BSCHOT)**

**Term-End Examination**

**June, 2013**

**BOS-008 : DISPENSING OPTICS**

*Time : 3 hours*

*Maximum Marks : 70*

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**PART - A**

Attempt *any four* questions. Each carries  
10 marks. 10x4

1. What is transposition ? Explain rules of simple and toric transposition in detail with an example of each.
2. Explain different types of bifocals and their advantages and disadvantages.
3. Explain different types of lens coatings.
4. Describe various methods of power measurement of a lens.
5. Describe in detail about the progressive addition lenses.
6. Enlist the various parts of a frame. Explain the boxing systems with the help of suitable diagram.

## PART - B

7. Write short notes on *any six* of the following. Each carries *five* marks :

5x6

- (a) Geneva lens measure
- (b) Effective power of a lens
- (c) Different methods of optical centre marking
- (d) Front vertex and back vertex power
- (e) IPD and its measurement
- (f) Prism and its uses
- (g) Write down the transposed form of following prescriptions :
  - (i)  $-3.00DS / -1.50DC \times 145^\circ$
  - (ii)  $+2.00DC \times 70^\circ$
  - (iii)  $+4.00Ds / +0.75DC \times 180^\circ$
  - (iv)  $+1.50DS / -1.00DC \times 40^\circ$
  - (v)  $-3.00DC \times 150^\circ$
- (h) Write down the spherical equivalent of following prescriptions :
  - (i)  $+3.00DS / +1.50DC \times 45^\circ$
  - (ii)  $-2.00DS / -1.00DC \times 70^\circ$
  - (iii)  $+4.00DS / -1.50DC \times 140^\circ$
  - (iv)  $+2.00DS / +0.50DC \times 180^\circ$
  - (v)  $-4.00DC \times 150^\circ$