

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

Term-End Examination

00117

June, 2016

BOS-008 : DISPENSING OPTICS

Time : 3 hours

Maximum Marks : 70

Note :

- (i) *Part A – Attempt any **four** questions. Each question carries 10 marks.*
- (ii) *Part B – Write short notes on any **six**. Each carries 5 marks.*

PART A

*Answer any **four** questions. Each question carries 10 marks.*

4×10=40

1. What are prisms ? Give the units for specifying power of a prism and explain the effect of prisms on the movement of the eye.
2. What is surfacing ? Explain the process of surfacing and describe the steps of lens surfacing.

- 3.** Describe the various glass lens materials and plastic lens materials available in the market. Explain the manufacturing process of plastic lenses.
- 4.** What is the importance of Interpupillary distance (IPD) ? Explain the various methods of measuring IPD.
- 5.** Describe in detail the methods of lens edging in various types of frames.
- 6.** Describe the process of frame selection for various cosmetic reasons.

PART B

Write short notes on any **six**. Each carries 5 marks. $6 \times 5 = 30$

7. (a) Trifocal lenses
(b) Prentice Rule
(c) Frame materials
(d) Photochromatics
(e) Temple-length
(f) Advantages and disadvantages of High Index Lenses
(g) Write down the spherical equivalent of the following prescriptions :
(i) $-5.00 / +1.00 \times 110^\circ$
(ii) $+4.0 \text{ cyl } 70^\circ$
(iii) $-2.00 \text{ cyl } 150^\circ$
(iv) $+4.00 / +2.00 \times 90^\circ$
(v) $-7.00 / +3.00 \times 110^\circ$
(h) Transpose the following in alternate forms :
(i) $-6.00 / +2.00 \times 120^\circ$
(ii) $-1.00 \text{ cyl } 40^\circ$
(iii) $+3.00 / -1.00 \times 90^\circ$
(iv) $+6.00 \text{ cyl } \times 180^\circ$
(v) $+5.00 / +2.00 \times 170^\circ$
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