

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

**Term-End Examination**

**December, 2010**

**BOS-007 : VISUAL OPTICS**

*Time : 3 hours*

*Maximum Marks : 70*

- Note :**
- (i) *This question paper contains Part-A and Part-B.*
  - (ii) *Part-A contains 6 questions. Answer any four :  
Each carries 10 marks.*
  - (iii) *Part-B contains 8 short notes. Answer any six :  
Each carries 5 marks.*

**PART - A**

*Attempt any four questions. Each question carries  
10 marks : 10x4=40*

1. Define and classify the astigmatism. Describe the causes, signs, symptoms and the prescription guidelines for astigmatism correction.
2. What do you understand by contrast sensitivity. Enlist the various tests for measurement. Describe any one method of contrast sensitivity measurement.
3. How do you clinically measure VA (visual acuity)? Explain with reference to chart illumination, testing distance, testing procedure. Enlist various VA measuring tests for children.

4. Define AC/A ratio. Explain various clinical measurement methods. How does AC/A ratio is altered by the use of miotics and cycloplegics?
  
5. Describe the method of static retinoscopy and the sources of error while doing retinoscopy.
  
6. Explain how will you determine the best vision sphere and spherocylindrical correction in subjective refraction. Describe the various tests.

## PART - B

Answer *any six*. Each carries 5 marks.

6x5=30

- (a) Refractive status in a new Born Child.
  - (b) Degenerative myopia.
  - (c) Spectacle magnification.
  - (d) Presbyopia.
  - (e) Signs and symptoms of hyperopia and its prescription guidelines.
  - (f) Autorefractors (AR).
  - (g) Binocular balancing method in subjective refraction.
  - (h) LogMAR charts.
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