

QP Code: 227013

Reg. No:.....

**Second Year B.Sc Optometry Degree Supplementary Examinations  
April 2019**

**Optometric Optics  
(2016 Scheme)**

**Time: 2 hours**

**Max. Marks: 40**

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

**Essay** (10)

1. Manufacturing techniques (methods) of ophthalmic lenses.

**Short Notes** (3x5=15)

2. A lens is said to have a power of +4.50D in the vertical meridian and -3.50D in the horizontal meridian. Write out its prescription in the toric form with -5.00D base curve.
3. Fresnel prisms
4. Principle of anti reflection coating

**Answer Briefly** (5x2=10)

5. Write on the steps for hand neutralization of prism spectacles
6. Write on thickness difference of prism with neat diagram.
7. What will be the back vertex powers of the lens which has surface powers +8.00D and -19.00D and central thickness of the lens being 8mm
8. Uses of high index ophthalmic lens
9. Role of photo chromatic ophthalmic lens

**GIVE PRECISE ANSWER** (5x1=5)

10. Transpose the prescription into one of its alternate forms: +4.25DS/ +5.50DC\*140
11. What is the power of a lens having its focal length at +57cm
12. Define centrad
13. Refractive index of crown glass is \_\_\_\_\_
14. Define aberration

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