

**Second Year B.Sc Optometry Degree Supplementary Examinations**  
**October 2021**

**Optometric Optics**

**(2014 scheme)**

**Time: 2 hrs**

**Max marks: 40**

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay** **(10)**

1. Write on the parts of frame in detail. Write on any three materials each used in plastics and metals in the construction of frames.

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

2. Explain surfacing. Describe the steps in surfacing.
3. Define real field of view and apparent field of view
4. Explain the phenomenon of destructive interference in Antireflection coatings.

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

5. What are Spectacle magnifiers.
6. List down four advantages of plastic safety lenses over glass lenses.
7. Explain the steps for hand neutralization of spectacles.
8. Chromatic Aberration.
9. Name the types of spectacle tools used to generate meniscus surfaces. Calculate the spectacle tool required to produce a +9.00DS surface on glass of refractive index 1.725.

**Give precise answers** **(5x1=5)**

10. Transpose the prescription into one of its alternate forms:  
 $+8.50\text{DS}/-4.75\text{DC} \times 90$
11. Sag of Lens
12. List two methods used for the inspection of glasses
13. Use of Risley prisms
14. Calculate the prismatic effect produced when a -5.00D lens is decentered 6mm inwards.