

Second Year B.Sc Optometry Degree Supplementary Examinations
May 2023

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. With a neat diagram. Explain progressive addition lenses. What are the advantages of progressive lenses over bifocal lenses

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

2. Define Bifocal lenses and its type
3. Toric Transposition
 $+5.00/+3.00 \times 120$; Base -3.00D
 $-6.50/-2.50 \times 20$; Base +2.00D
4. Explain in detail the process of Surfacing

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

5. Simple Transposition:
 $-1.00/-1.00 \times 180$
 $+2.00/+0.50 \times 45$
6. Define Spherical Equivalent and solve the following
 $+3.50/-1.50 \times 55$
7. Photochromatic lenses
8. Define Monocular Prismatic effect
9. Define Sagitta with the diagram

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

10. Prentice's Rule
11. Define curvature
12. Define effective power
13. Principle of Anti Reflection coating
14. Types of Toric surfaces
