

B.OPTOM
(New Syllabus 2015-2016)

THIRD YEAR

PAPER I – OPTOMETRIC OPTICS I & II AND DISPENSING OPTICS

Q.P. Code: 802721

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Write about the different types of bifocal its characteristics, advantages and disadvantages over each other and fitting of a bifocal lens.
2. What are the different types of tints used in dispensing and characteristic of each?
3. Draw a neat labelled diagram explaining the different parts of frame and the boxing system of frame measurement.

II. Write notes on:

(8 x 5 = 40)

1. Types of spectacle lenses.
2. Toric transposition for the given prescription : -1.00DS/-1.50DCx180 BC : -6D.
3. Lens surfacing.
4. What is prentice rule? Calculate the prismatic effect caused by the out ward decentration by 2mm and upward by 1mm in the following prescription.
-2.00DS / -0.50DC X 90.
5. Photochromatic lens.
6. Types of progressive lenses.
7. ANSI standards for single vision lenses.
8. Vertex distance.

III. Short answers on:

(10 x 3 = 30)

1. List three faults in the lens material.
2. Optical principle of the prism and its uses.
3. Parts and type of lenticular lenses.
4. List the types of bridges in a spectacle frame.
5. What are the different form of lenses?
6. Differences between a cylinder and a spherocylinder.
7. Advantage of aspheric lenses.
8. Principle of antireflection lenses.
9. Define abbe value and its use.
10. Test for impact resistance.
