

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. Classify frames based on its types and material.
2. Write the different types of special purpose frames and its uses.
3. Describe the steps of manual method of measuring monocular and binocular IPD.

II. Write notes on: **(8 x 5 = 40)**

1. Define vertex distance and its importance.
2. Faults of lens material.
3. Different material and its characteristic used for the manufacturing of frames.
4. Image jump in bifocals.
5. Compounding and resolving of prism.
6. Types and uses of lenticular lenses.
7. Steps in fitting a progressive lens.
8. Pupillometer.

III. Short answers on: **(10 x 3 = 30)**

1. Define distortion and name the two types of distortion seen in lenses.
2. Define refractive index and list the refractive index of CR39, Crown glass and trivex.
3. List the characteristic of a brown tint.
4. Types of bifocal lenses.
5. Factors affecting photochromatic lens.
6. What are the materials used for a manufacturing of glass?
7. Simple transposition – plano / -2.50DCX65.
8. Disadvantages of Fresnel prisms.
9. List three types of pliers commonly used in dispensing.
10. List the types of bevel in lenses.