

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0424]

APRIL 2024

Sub. Code: 2721

B.OPTOM

THIRD YEAR (Regulation 2015-2016 onwards)

PAPER I – OPTOMETRIC OPTICS I & II AND DISPENSING OPTICS

Q.P. Code: 802721

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Size, shape and mounting of Ophthalmic lens.
2. Classify frames based on its types and material, temple position and coloration.
3. What are the techniques used to measure interpupillary distance? What are the common reasons for errors during IPD measurement?

II. Write notes on:

(8 x 5 = 40)

1. Tinted lenses.
2. Problems encountered while dispensing spectacles.
3. Image jump in bifocals.
4. Boxing system.
5. Polycarbonate lenses, properties and uses.
6. ANSI standards.
7. What are the differences between flint glasses and crown glasses?
8. Polaroid lenses.

III. Short answers on:

(10 x 3 = 30)

1. Draw the image formation of a cylindrical lens.
2. Types of trifocal lens.
3. Disadvantages of Fresnel's Prisms.
4. Pliers commonly used in dispensing.
5. Knapps Law.
6. Faults in lens materials.
7. Three differences between a glass and plastic photochromatic lens.
8. Steps of manufacturing glass lenses.
9. Air blower.
10. Simple transposition: Plano/+3.00 cyl @80degrees.
