

2023
AUGUST

Dispensing Optics-I

Full Marks - 80

Time - 3 Hours

The figures in the margin indicate full marks for the questions

Answer all questions

- 1) Fill in the blanks: [1X10=10]
- a) In _____ lens form, the front surface is convex and the back surface is concave.
 - b) Material used primarily for sportswear is _____.
 - c) Power of lens is measured in _____.
 - d) _____ type of temple goes straight over the ear.
 - e) Soft design has a _____ corridor.
 - f) Refractive index of CR39 IS _____
 - g) The thick portions of prism are called _____
 - h) High index lenses are _____
 - i) refractive index of crown glass is _____
 - j) _____ is a defect of a lens causing crisscross cracks.
- 2) Write short note on (any five): [6X5=30]
- a) Effective power
 - b) PALS markings
 - c) Different types of temples with diagram
 - d) Astigmatic lenses

- e) Aberrations
- f) properties of prism
- g) prentice rule

3) Transpose the following in alternate form: [2X3=6]

- a) -3.00DS/+2.75DCx 100
- b) +2.00DS/ -4.00DCx 40
- c) +1.50DS/ +1.00DCx160

4) Totic transposition: [4]

+3.00DS/+1.00DC x90, Base curve=-6DS

5) Answer any three of the following: [10X3=30]

- a) What is lensometer? Write the procedure for determining the prescription with a lensometer.
- b) Discuss in details about different frame materials.
- c) Discuss in details about hand neutralization of lens.
- d) Define prisms. Explain about various nomenclatures of prisms.

Turn over