

2023
AUGUST

Visual Optics

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) The duochrome test is based on the principle of _____.
 - b) Binocular balancing is used for _____.
 - c) _____ is also known as flip cylinder.
 - d) Curvatural hypermetropia is due to _____ in curvature of the outer lens.
 - e) _____ may be seen in nuclear sclerosis.
 - f) The optic axis is _____.
 - g) The normal central corneal thickness is _____.
 - h) The far point of accommodation is at _____.
 - i) Emmetropization is a _____.
 - j) The axial length of adult human eye is _____.
- 2) Write short note on (any five): [5X6=30]
- a) Emmetropization
 - b) Irregular astigmatism
 - c) Fogging
 - d) Retinoscope and the process of neutralization in retinoscopy.

3) Answer any four of the following:

[10X4=40]

- e) Measurement of the near point of accommodation?
- f) Astigmatism.
- g) Presbyopia
- a) Define astigmatism. Explain its different types.
- b) Explain different optical components of the eye.
- c) What do you mean by subjective refraction? Explain different subjective refraction method.
- d) What is AC/A ratio? What are the methods to measure the AC/A ratio of the eye.
- e) What are the anomalies of accommodation? Explain in details with the management options.
