# BLDE (DEEMED TO BE UNIVERSITY)

## B.Sc. in Optometry

[Time: 3 Hours] [Max. Marks: 80]

### III SEMESTER

### PAPER - I (Physical Optics)

### QP CODE: 8340

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

**Long Questions** **10X1 = 10 Marks**

1. Laws of reflection and refraction of Light and its applications in Optics?

**Short Essays: (Any – 8)** **5 X 8 = 40 Marks**

2. Weber's law?
3. Explain the chromatic aberration
4. Explain other unit of light measurements?
5. Describe the basics of laser
6. Explain the resolutions of instruments
7. Explain the methods of producing polarized light
8. Describe the coherence of light by using interference
9. Explain double and multiple slits
10. Inverse square law of photometry

**Short Answers: (Any – 10)** **3 X 10 = 30 Marks**

11. Define concept of SHO
12. Scattering of light
13. Photometric units
14. Source of light
15. Note on grading
16. Explain birefringence
17. Define florescence and phosphorescence
18. Note on circular apertures
19. Fermat's principle
20. Define dispersion of light
21. Define visual acuity

(3/7/26 AM)

# BLDE (DEEMED TO BE UNIVERSITY)

## B.Sc. in Optometry

[Time: 3 Hours] [Max. Marks: 80]

### III SEMESTER

### PAPER – II (Geometrical Optics)

### QP CODE: 8341

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

**Long Questions** **10X1 = 10 Marks**

1. Describe simple and compound microscope and also explain magnifying power.

**Short Essays: (Any – 8)** **5 X 8 = 40 Marks**

2. The ray model
3. Wave theory of light
4. Huygen's wave theory
5. Dispersive power of prism
6. Refraction of light on plain surface
7. Aphakia
8. Dual nature of light
9. Fermat principle
10. Chromatic aberrations

**Short Answers: (Any – 10)** **3 X 10 = 30 Marks**

11. Myopia treatment options
12. Infrared spectrum
13. Double refraction
14. Types of astigmatism
15. Contrast sensitivity
16. Presbyopia
17. Thick prism
18. Depth of field
19. Applications of spatial filtering
20. Prentice's rule
21. Calculating lens equivalent

4|7126
A10

# BLDE (DEEMED TO BE UNIVERSITY)

## B.Sc. in Optometry

[Time: 3 Hours] [Max. Marks: 80]

### III SEMESTER

### PAPER – III (Visual Optics)

### QP CODE: 8342

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

**Long Questions** **10X1 = 10 Marks**

1. Write in details about optics –types, clinical features and management of myopia?

**Short Essays: (Any – 8)** **5 X 8 = 40 Marks**

2. Presbyopia
3. Pinhole test
4. Snellen's chart
5. Uses of prism in ophthalmology
6. Types of hypermetropia
7. Aphakia
8. Cardinal data of spectacle lens
9. Types and management of astigmatism.
10. Anomalies of accommodation.

**Short Answers: (Any – 10)** **3 X 10 = 30 Marks**

11. Jackson cross cylinder.
12. Identification of cylinder lens.
13. Define Anisometropia.
14. Pseudophakia.
15. Visual angle.
16. Facultative hypermetropia.
17. Vertex distance.
18. RAF ruler.
19. Angle kappa.
20. Correction of presbyopia.
21. Near Vision Charts

817126
Apr

# BLDE (DEEMED TO BE UNIVERSITY)

## B.Sc. in Optometry

[Time: 3 Hours] [Max. Marks: 80]

### III SEMESTER

### PAPER – IV (Ocular Disease I)

### QP CODE: 8343

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

**Long Questions** **10X1 = 10 Marks**

1. Define, clinical features and management of ptosis

**Short Essays: (Any – 8)** **5 X 8 = 40 Marks**

2. Endophthalmitis
3. Fungal Corneal ulcer
4. Intermediate uveitis
5. Cavernous sinus thrombosis
6. Optic neuritis
7. Papilledema
8. Allergic conjunctivitis
9. Scleritis
10. Entropion

**Short Answers: (Any – 10)** **3 X 10 = 30 Marks**

11. Types of retinal detachement
12. Types of ptosis
13. Sympathetic ophthalmitis
14. Chemical injuries classify
15. 3 causes for subluxation of lens
16. 6 layers of cornea
17. Classify diabetic retinopathy
18. Uveitis classification
19. Medical management of glaucoma
20. Classify secondary glaucomas
21. Define strabismus, esotropia, exotropia

10/7/26

# BLDE (DEEMED TO BE UNIVERSITY)

## B.Sc. in Optometry

**[Time: 3 Hours]** **[Max. Marks: 80]**

### III SEMESTER

### PAPER – V (Clinical Examination & Visual System)

### QP CODE: 8344

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

**Long Questions** **10X1 = 10 Marks**

1. Visual acuity recording in pre-school children

**Short Essays: (Any – 8)** **5 X 8 = 40 Marks**

2. Color vision
3. Snellen's chart
4. Schirmer's Test
5. Goldman's Applanation tonometer
6. Indirect ophthalmoscopy
7. Name Extra ocular muscles and its action
8. Retinoscopy
9. How you will check contrast sensitivity
10. RAPD

**Short Answers: (Any – 10)** **3 X 10 = 30 Marks**

11. Cover test
12. Direct and indirect light reflexes
13. ROPLAS test
14. Causes for defective near vision
15. Name some macular function test
16. Hirschberg test
17. Define malingering and name some tests for the same
18. Krimsky test
19. Name 3 causes for diplopia
20. Optokinetic nystagmus drum
21. Fluorescein stain