[LL 0817] AUGUST 2017 **Sub. Code: 2713**

B.OPTOM
(New Syllabus 2015-2016)

SECOND YEAR

PAPER III – OPTOMETRIC INSTRUMENTS

Q.P. Code: 802713

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Describe the optics and instrumentation of direct and indirect Opthalmoscope.
2. Explain the principle of Haploscope and describe any two instruments that used this principle.
3. Differences between Log MAR and Snellen chart.

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

1. Optics and instrumentation of a lensometer.
2. Explain the optics of fixed light source and movable lens type of retinoscope.
3. Types of Telescopes used in Low Vision Aids.
4. Different filters used in slit lamp and its uses.
5. Schiotz Tonometer.
6. Interpretation of corneal Topography.
7. Maddox rod - its principle, instrumentation and uses.
8. 15 hue test.

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

1. Give the normal extent of visual field.
2. List three uses of a Keratometer.
3. Advantages and disadvantage of Ultra sound pachymetry over indendation pachymetry.
4. Name the three grades of Binocular Vision.
5. State the principle of A-Scan.
6. What is the standard illumination and contrast used in standard visual acuity charts?
7. Name the different types of magnification system used in a slit lamp.
8. Give three advantages of used a hand magnifier over the stand magnifier.
9. Give the principle on which Anamoloscope works?
10. Differences between Electroretinogram and Electrooculogram.

****

[LM 0218] FEBRUARY 2018 **Sub. Code: 2713**

B.OPTOM
(New Syllabus 2015-2016)

SECOND YEAR

PAPER III – OPTOMETRIC INSTRUMENTS

Q.P. Code: 802713

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Define Binocular Vision. Give its prerequisite, advantages and grades.
2. Classify the different types of visual acuity charts based on the age group.
3. Explain the different types of illumination techniques used in a slit lamp examination.

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

1. Instrumentation and uses of Pupillometer.
2. Principle and instrumentation of direct Ophthalmoscope.
3. Uses of synoptophore.
4. Anamoloscope.
5. Bjerrum's screen.
6. Telescopes used in low vision aids.
7. Electroretinogram.
8. Ultrasound pachymetry.

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

1. Give the principle, age group and distance of Cardiff acuity test.
2. List three advantages of a streak over spot retinoscope.
3. State the principle of A-Scan
4. Tabulate difference between direct and indirect Ophthalmoscopy.
5. Principle of Applanation tonometery.
6. Name three non-optical devices of Low vision Aids.
7. Uses of worth four dot test.
8. What is false positive in Humphrey visual field analyser?
9. Three indications of doing a B Scan.
10. Any three applications of Visual Evoked potential test.

****

[LN 0818] AUGUST 2018 **Sub. Code: 2713**

B.OPTOM
(New Syllabus 2015-2016)

SECOND YEAR

PAPER III – OPTOMETRIC INSTRUMENTS

Q.P. Code: 802713

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Describe the optics and instrumentation of a streak retinoscope with neat ray diagrams.
2. List and classify different types of tonometer. Explain in detail the principle of Applanation tonometery.
3. Describe the optics and instrumentation of a manual keratometry.

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

1. Log MAR charts.
2. Instrumentation and indications of doing brightness acuity test.
3. Elaborate on the illumination techniques used in slit lamp examination.
4. Give a short description of a Royal Air Force Rule and its uses.
5. Write a short note on Ishihara color plates.
6. Tabulate the difference between static and kinetic perimetry with examples.
7. Magnifiers used in Low Vision Aids.
8. Test to assess Binocular vision.

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

1. Define hill of vision.
2. List types of near vision notations.
3. Uses of pupillometer.
4. Classify the types of color vision defects.
5. List different types of non-optical devices in Low vision Aids.
6. List any three applications of Electroretinogram.
7. Explain the term pleoptics giving an example.
8. Principle of Snellen acuity chart.
9. List the advantages of Topography Modelling system.
10. State the principle of Lensometer.

****

[LO 0219] FEBRUARY 2019 **Sub. Code: 2713**

B.OPTOM
(New Syllabus 2015-2016)

SECOND YEAR

PAPER III – OPTOMETRIC INSTRUMENTS

Q.P. Code: 802713

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Describe in detail about slit lamp illumination techniques.
2. Write in detail about direct and indirect opthalmoscope.
3. Describe in detail about keratometry.

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

1. Write about Pachymetry.
2. Identification of different types of lenses in the trial set.
3. Write about auto refractometer.
4. What are the indications of Amsler's grid charting? Explain the procedure and interpretation of the findings.
5. Write on A-SCAN and explain about different type of A-SCAN techniques.
6. Synoptophore.
7. Write about Jackson cross cylinder.
8. Foci meter.

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

1. Titmus test.
2. Write about SRK-I and SRK-II formula for IOL calculation.
3. Write about RAF ruler.
4. Uses of tonometer.
5. What is corneal topography?
6. Define gonioscopy.
7. Placidos disc.
8. Write about Prism bar.
9. Different types of distance vision charts.
10. Parts of schiortz tonomerty.

****

[LP 0819] AUGUST 2019 **Sub. Code: 2713**

B.OPTOM
(New Syllabus 2015-2016)

SECOND YEAR

PAPER III – OPTOMETRIC INSTRUMENTS

Q.P. Code: 802713

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Types of retinoscope, merits and demerits of retinoscope. Write in detail about cycloplegic refraction.
2. Give the names of the charts used for testing distance and near visual acuity. Write the procedure of testing distance visual acuity.
3. Write in detail about auto refractionometer.

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

1. Differentiate snellen and log mar chart.
2. Write about indirect ophthalmoscope.
3. Lensometer.
4. Automated perimetry.
5. Write about Pupillometer.
6. Electroretinogram.
7. Astigamatic fan test.
8. Write about B-scan.

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

1. Illumination in the consulting room.
2. Maddox rod.
3. Colour vision test.
4. Write about Low vision aids.
5. Vision drum – Description and uses.
6. Prisms in ophthalmology.
7. What is Diplopia chart?
8. Write about Stenopic slit.
9. OCT.
10. HFA.

****

[LQ 0220] FEBRUARY 2020 **Sub. Code: 2713**

B.OPTOM
(New Syllabus 2015-2016)

SECOND YEAR

PAPER III – OPTOMETRIC INSTRUMENTS

Q.P. Code: 802713

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Automated perimetry.
2. Describe the optics and instrumentation of direct and indirect opthalmoscope.
3. Explain the principle of haploscope and describe any two instruments that used this principle.

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

1. Ultrasound bio-microsurgery.
2. Brightness acuity test.
3. Direct ophthalmoscope.
4. Assessment of proptosis.
5. IOL power calculation.
6. Dacryocystography.
7. Gonioscopy.
8. Write about pachymeter.

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

1. Uses of pinhole.
2. Signs of neutralization in retinoscopy.
3. Red and green filter.
4. Indendation tonometer.
5. Give three advantages of used a hand magnifier over the stand magnifier.
6. Uses of prism bar.
7. Two methods to measure corneal curvature.
8. Slit lamp accessories.
9. Write about EOG.
10. Hess screen.

****

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

[AHS 0321] **MARCH 2021** **Sub. Code: 2713**

(AUGUST 2020 EXAM SESSION)

B.OPTOM

SECOND YEAR (Regulation 2015-2016)

PAPER III – OPTOMETRIC INSTRUMENTS

Q.P. Code : 802713

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(3 x 10 = 30)**

1. Write a detail on Fundus fluorescein Angiography?
2. Write about the function of Specular microscopy?
3. Hess Screen.

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

1. Gonioscopy.
2. Collagen Cross linking.
3. Posterior segment examination.
4. Tests for BSV.
5. Schimer's test.
6. Merits and Demerits of Indirect and Direct Ophthalmoscope.
7. Visual evoked potential.
8. Exophthalmometer.

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

1. T-BUT test.
2. Maddox rod.
3. Trail frame.
4. Pinhole.
5. Impression Cytology.
6. Tensilon test.
7. Conjunctival fluorescein staining.
8. Macular function test.
9. Photopter.
10. +90D lens.

****

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

[AHS 0222] **FEBRUARY 2022** **Sub. Code: 2713**
(AUGUST 2021 EXAM SESSION)

B.OPTOM
SECOND YEAR (Regulation 2015-2016)
PAPER III – OPTOMETRIC INSTRUMENTS
Q.P. Code : 802713

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(3 x 10 = 30)**

1. Explain in detail about Corneal topography and its uses?
2. Write in detail about Autorefractometer?
3. Write in detail about BSV and the instruments used to test BSV?

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

1. Electroretinogram.
2. Tests for dry eyes.
3. Tests for nasal lacrimal duct patency?
4. Keratometer.
5. Bjerrum tangent screen.
6. Ishihara colour vision chart.
7. Slit lamp Biomicroscopy.
8. Ultrasonography uses in Ophthalmology.

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

1. Logmar visual acuity chart.
2. Slit lamp accessories.
3. Applanation Tonometry.
4. Static Perimetry.
5. Nd YAG laser.
6. Diplopia charting in III nerve palsy.
7. Prism Bar.
8. Occluder and its uses.
9. Uses of +20 Diopter lens.
10. Indirect Ophthalmoscope.

****