#### B.OPTOM (New Syllabus 2015-2016)

## THIRD YEAR

## PAPER III – LOW VISION AIDS AND CONTACT LENS

## Q.P. Code: 802723

## **Time: Three Hours**

## Answer all questions

## $(3 \times 10 = 30)$

Maximum: 100 Marks

#### I. Elaborate on:

- 1. Write in detail about indication and contraindication of contact lens use.
- 2. Selection criteria and evaluation of trial lens fitting of soft contact lens.
- 3. Enumerate common disease condition leading to low vision. explain about the problems and management of optic atrophy, cataract, myopic degeneration.

## II. Write notes on:

- 1. Contact lens fitting in Aphakia.
- 2. Define magnification and explain the different types of magnification.
- 3. Properties of ideal contact lens.
- 4. Define glare. Explain about the types of glare.
- 5. Write in detail about stabilization technique in soft toric contact lens.
- 6. Cosmetic contact lenses.
- 7. Optics of contact lenses.
- 8. Therapeutic contact lenses.

## **III. Short answers on:**

- 1. Define oxygen permeability.
- 2. Properties of contact lens solution.
- 3. Contact lens fitting in children.
- 4. Define legal blindness.
- 5. List out common low vision disorder leading to peripheral vision loss.
- 6. Bi optic Telescope.
- 7. Name the deposits on soft contact lens.
- 8. Extended contact lens.
- 9. What is hybrid contact lens?
- 10. Define bandage contact lens.

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 $(10 \ge 3 = 30)$ 

 $(8 \times 5 = 40)$ 

[LO 0219]

## B.OPTOM (New Syllabus 2015-2016)

## THIRD YEAR

# PAPER III – LOW VISION AIDS AND CONTACT LENS

## Q.P. Code: 802723

## **Time: Three Hours**

## Answer all questions

 $(3 \times 10 = 30)$ 

**Maximum: 100 Marks** 

- I. Elaborate on:
  - 1. Write in detail about non optical devices.
  - 2. Classify contact lenses give their advantages and disadvantages.
  - 3. Discuss in detail about indication and contraindication of contact lens.

## II. Write notes on:

- 1. Electro optical devices.
- 2. Write in detail about advantages of contact lens over spectacles.
- 3. Albinism.
- 4. Terminologies in relation to contact lens.
- 5. Symptoms of loose fit and tight fit in soft contact lens and its remedy.
- 6. Disposable contact lenses.
- 7. Field loss in low vision.
- 8. Initial patient workup before contact lens fitting.

# **III. Short answers on:**

- 1. DK value.
- 2. Disadvantages of PMMA.
- 3. Define visual impairment.
- 4. Oxygen permeability.
- 5. Wetting angle.
- 6. Taco test.
- 7. Management of coloboma.
- 8. Characteristics of a correct contact lens fitting.
- 9. Chemical disinfection.
- 10. Define contrast sensitivity.

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## $(8 \times 5 = 40)$

#### $(10 \times 3 = 30)$

[LP 0819]

## B.OPTOM (New Syllabus 2015-2016)

## THIRD YEAR

# PAPER III – LOW VISION AIDS AND CONTACT LENS

## Q.P. Code: 802723

## **Time: Three Hours**

## Answer all questions

## $(3 \times 10 = 30)$

 $(8 \times 5 = 40)$ 

 $(10 \times 3 = 30)$ 

**Maximum: 100 Marks** 

#### I. Elaborate on:

- 1. Write in detail about contact lens fitting options in keratoconus patient.
- 2. What are the parameters required and the fitting assessment of an RGP lens?
- 3. Explain about different types of low vision devices.

## II. Write notes on:

- 1. Types of magnification used in low vision.
- 2. Albinism and its implications in low vision.
- 3. Fitting of soft toric lenses.
- 4. Classification of contact lens.
- 5. Typoscope.
- 6. Instruction given for a first time contact lens wear.
- 7. Complications seen in RGP lens wear.
- 8. Soft contact lens material.

## **III. Short answers on:**

- 1. Define low vision according to WHO.
- 2. Three difference between Galilean and kapelerian telescope.
- 3. Define oxygen transmissibility.
- 4. What is water content?
- 5. What happens to accommodation and convergence in a contact lens wear?
- 6. List two indication of bandage contact lens wear.
- 7. List three advantage of lenses that have iconicity.
- 8. What is monovision?
- 9. Name three ways of disinfecting contact lenses.
- 10. Name three methods for stabilization technique for toric lenses.

#### **B.OPTOM** (New Syllabus 2015-2016)

## THIRD YEAR

## PAPER III – LOW VISION AIDS AND CONTACT LENS

## Q.P. Code: 802723

## **Time: Three Hours**

#### Maximum: 100 Marks

#### Answer all questions

 $(3 \times 10 = 30)$ 

 $(8 \times 5 = 40)$ 

 $(10 \times 3 = 30)$ 

#### I. Elaborate on:

- 1. Write in detail the manufacturing techniques for contact lenses.
- 2. Elaborate on the contact lens option for presbyopia.
- 3. Write in detail the examination and evaluation done for a low vision patient.

## II. Write notes on:

- 1. Types of non-optical devices and assistive devices.
- 2. Optics of low vision devices.
- 3. FDA classification of contact lenses.
- 4. Stabilization technique for a soft toric lenses.
- 5. Static fitting of RGP lens.
- 6. Explain the physiology of cornea and oxygen supply with a contact lens.
- 7. Rose K lenses.
- 8. Rigid lenses insertion and removal.

## **III. Short answers on:**

- 1. Give three examples of diseases that cause peripheral field defect.
- 2. Give three advantages of stand magnifier over the hand magnifier.
- 3. Define sagittal depth and its importance.
- 4. What is a tear lens?
- 5. List three important features which an ideal contact lens material should have?
- 6. List three difference between soft and RGP contact lens.
- 7. The spectacle prescription is: -2.00Dsp/ -2.25DCx180. If the rotation of the lens is 10 degrees to the left what will the final lens order be.
- 8. What is piggy back lens?
- 9. Name three condition which are suitable for therapeutic lens wear?
- 10. Define base curve. Calculate the base curve for a soft contact lens. OD : <u>7.5@180</u> / 7.45@90.

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

[LR 1220]

## DECEMBER 2020 (AUGUST 2020 EXAM SESSION)

Sub. Code: 2723

Maximum: 100 Marks

#### **B.OPTOM**

(Regulation from 2015-2016)

## THIRD YEAR PAPER III – LOW VISION AIDS AND CONTACT LENS Q.P. Code: 802723

#### **Time: Three Hours**

#### **Answer all Questions**

 $(3 \times 10 = 30)$ 

 $(8 \times 5 = 40)$ 

 $(10 \times 3 = 30)$ 

- I. Elaborate on:
  - 1. Write in detail the Manufacturing Techniques for Contact Lenses.
  - 2. Elaborate on the Contact Lens option for Presbyopia.
  - 3. Write in detail the examination and evaluation done for a Low Vision patient.

#### **II.** Write notes on:

- 1. Types of Non-optical devices and Assistive devices.
- 2. Optics of Low Vision devices.
- 3. FDA classification of Contact Lenses.
- 4. Stabilization technique for a Soft Toric Lenses.
- 5. Static fitting of RGP lens.
- 6. Explain the physiology of Cornea and Oxygen supply with a Contact Lens.
- 7. Rose K lenses.
- 8. Rigid Lenses insertion and removal.

## **III. Short answers on:**

- 1. Give Three examples of Diseases that cause Peripheral Field Defect.
- 2. Give Three advantages of Stand magnifier over the Hand Magnifier.
- 3. Define Sagittal Depth and its importance.
- 4. What is a Tear Lens?
- 5. List Three important features which an Ideal Contact Lens material should have?
- 6. List Three difference between Soft and RGP Contact Lens.
- 7. The spectacle prescription is: -2.00Dsp/ -2.25DCx180. If the rotation of the Lens is 10 degrees to the Left, what will be the Final Lens Order .
- 8. What is Piggy Back Lens?
- 9. Name three condition which are suitable for Therapeutic Lens wear?
- 10. Define Base curve. Calculate the Base curve for a Soft Contact Lens. OD : <u>7.5@180</u> / 7.45@90.

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

# [AHS 0122] JANUARY 2022 Sub. Code: 2723 (FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

B.OPTOM THIRD YEAR (Regulation from 2015-2016) PAPER III – LOW VISION AIDS AND CONTACT LENS Q.P. Code: 802723

Time: Three Hours	Answer ALL Questions	Maximum: 100 Marks

 $(3 \times 10 = 30)$ 

 $(8 \times 5 = 40)$ 

 $(10 \times 3 = 30)$ 

## I. Elaborate on:

- 1. Write in detail about functional assessment of a low vision patient.
- 2. Write in detail about indications and contraindications for contact lens wear.
- 3. Write in detail about classification of contact lenses.

## II. Write notes on:

- 1. Management of central visual field defect.
- 2. Vision charts used for low vision patients.
- 3. Properties of an ideal contact lens material.
- 4. Normal corneal physiology metabolism, nutrition, hydration dynamics.
- 5. CL manufacturing techniques.
- 6. Write about the optics of contact lenses.
- 7. What are the signs, symptoms and characteristics of a steep fitting soft contact lens? How to correct the fit?
- 8. Toric lens stabilization techniques.

## III. Short answers on:

- 1. Eccentric viewing.
- 2. Reverse telescope.
- 3. Oxygen permeability.
- 4. Disposable contact lenses.
- 5. Prosthetic contact lenses.
- 6. Therapeutic contact lenses.
- 7. Name the instruments needed for contact lens verification.
- 8. Symptoms of a loose fitting soft contact lens.
- 9. Push up test.
- 10. LARS rule.

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

#### **SEPTEMBER 2022** [AHS 0922] Sub. Code: 2723 (FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

## **B.OPTOM THIRD YEAR (Regulation from 2015-2016)** PAPER III - LOW VISION AIDS AND CONTACT LENS *O.P. Code* : 802723

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

## I. Elaborate on:

- 1. List the common diseases causing low vision. Discuss the difficulties faced by a patient with Retinitis Pigmentosa and discuss the management.
- 2. Write in detail the complications of contact lens wear.
- 3. How do you diagnose a case of keratoconus? List the various contact lens options available.

#### **II.** Write notes on:

- 1. Indications for contact lens.
- 2. Write the optics of contact lens.
- 3. Therapeutic contact lens.
- 4. Discuss the types of cleaning solutions for contact lens.
- 5. Explain the types of vision charts used to test low vision.
- 6. What is contrast sensitivity? Explain the charts available to check contrast sensitivity.
- 7. Stabilization technique in soft toric contact lens.
- 8. Clinical features and management of albinism.

## III. Short answers on:

- 1. Legal blindness.
- 2. Write two diseases causing peripheral vision loss.
- 3. Amsler grid.
- 4. Name two non-optical low vision aids.
- 5. Layers of tear film.
- 6. Write two eyelid contraindications for CL wear.
- 7. Name two soft contact lens materials.
- 8. Features of flat fit contact lens.
- 9. What is base curve?
- 10. What is giant papillary conjunctivitis?

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## $(10 \times 3 = 30)$

 $(3 \times 10 = 30)$ 

 $(8 \times 5 = 40)$