

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

[AHS 0321]

**MARCH 2021
(OCTOBER 2020 EXAM SESSION)**

Sub. Code: 1623

**M.OPTOM
FIRST YEAR (From 2018-2019 onwards)
PAPER III – ADVANCED CONTACT LENSES - I
Q.P. Code : 281623**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. A 18 year old male has a refractive error of OD: -4.00/-3.00x170 (VA 6/12), OS: 0.00(VA 6/6). Keratometry values shows (OD) K1: 47.00 @170(7.18mm); K2: 50.00d @180(6.75mm).
 - a) Write down the steps how do you select the initial RGP trial lens.
 - b) Write in brief what are the steps you follow while assessing the RGP contact lens fit.
2. Contact lens solutions – Composition, necessity and advantages?

II. Write Short Notes on:

(10x6 = 60)

1. Explain fitting philosophies in keratoconus.
2. What is the relation between sagittal depth and base curve explain with diagram?
3. Bifocal and multifocal lens.
4. Explain in brief about Rose K2 contact lens.
5. Explain different stages of corneal edema due to hypoxia.
6. Explain functions of tear film and their properties. Explain different layers of tear film and their secretion.
7. What are the steps involved in toric soft lens fitting? List different types of toric lens designs.
8. Explain the parameters of materials that are directly involved with the oxygen permeability.
9. Indications and fitting of bandage contact lens.
10. Explain the rigid contact lens insertion and removal techniques.
