

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

[AHS 0522]

MAY 2022

Sub. Code: 1623

M.OPTOM

FIRST YEAR (Candidates admitted from 2018-2019 & 2020-2021 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) What are the various calculations and assessments that are required in order to finalize the rigid gas permeable contact lens parameters.
b) How will you check and verify the same contact lens received from the laboratory.
2. Discuss with the patient who is an athlete, the lens of choice, whose spectacle prescription is -8.00 sph. What are the various modalities of wear of soft contact lenses available, and what would you recommend that and why?

II. Write Short Notes on:

(10x6 = 60)

1. Explain the anatomy of the tear film.
2. What are the ocular and systemic conditions in which contact lenses are contraindicated and why?
3. Name three properties of an ideal contact lens materials. Explain each one.
4. As per the FDA classification, what are the advantages and disadvantages of Group 1 and Group 4 contact lenses.
5. Explain the process of lathing and spin casting in the manufacturing of Soft contact lenses.
6. What are the various pre-fitting examinations that needs to be done for successful fitting of rigid gas permeable contact lenses
7. Name any three disinfectants used in multi purpose solutions and their course actions against micro organisms
8. What are the various modifications that are possible with rigid gas permeable lenses
9. What are the special instructions that you will provide to a first time rigid gas permeable contact lens user.
10. What is the importance of vertex distance calculation in contact lens fitting. How will you calculate the power of the soft contact lens whose spectacle prescription is -6.00 sph, and vertex distance is 12mm.
