

00535

**B.Sc. (HONS) IN OPTOMETRY AND
OPHTHALMIC TECHNIQUES**

Term-End Examination

December, 2010

BOS-011 : CONTACT LENS

Time : 3 hours

Maximum Marks : 70

Note : Attempt all questions.

1. A 20 year female has -4.0 DS_{Fh} power in both eyes. The keratometry readings are 10

RE: $7.50 @ 180 / 7.40 @ 90$.

LE: $7.55 @ 180 / 7.50 @ 90$.

The patient has no ocular or systemic problem.
Write down the steps in fitting soft contact lens
for this patient.

OR

What are the various materials used in contact lenses? Classify on the basis of Rigid and soft lenses. Write the advantages and disadvantages and properties of each material.

2. List *any four* indications for prescribing the contact lenses. 4
3. Describe the Tear Break up time. Enlist the other tests to evaluate tear film? 4
4. Describe the measurements taken before fitting the contact lenses? 4
5. Explain thioroscein fitting pattern in a of Gp STEEP fitting contact lens with the help of a diagram. 4
6. Describe optic section illumination technique of slit lamp examination. 4

OR

How will you conduct a follow up examination of a soft contact lens patient?

7. Write short note on prosthetic contact lens. 4
8. Enlist *any four* complications of contact lenses and their causes. 4

9. Calculate empirically the C.L. Power if the spectacle prescription is 4
- (a) $-1.25 \text{ DS} / -h$
 - (b) $-4.25 \text{ DS} / -0.75 \text{ DC} \times 180$
 - (c) $-8.50 \text{ DS} / -h$
 - (d) $+02.50 \text{ DS} / +0.75 \text{ DC} \times 180$

10. Classify soft contact lenses according to FDA? 4
11. What are the advantages of disposable contact lenses over conventional soft contact lenses? 4

OR

Name *any four* options of refractive surgery. List a few complications of refractive surgery.

12. What are the sources of oxygen supply to cornea in open eye and closed conditions? 2
13. Write down the properties of silicone hydrogel material? 2
14. Calculate RCP lens power if the spectacle prescription is 2
 -3.25 DS and lens is fitted $0.50 \text{ Diopter Steeper}$ than K.

15. A patient has spectacle power of -3.0 DS/ -2.0 DC $\times 10$. The Keratometry is $42.0 @ 10/44.50 @ 100^\circ$. A soft toric soft lens of $8.5/ -2.0/ -1.25 \times 10/14.2$ is placed on the eye. The lens has good fitting relationship. However it rotates to left by 10° . Write the final prescription of the contact lens. 2
16. Write *two* components of deproxenisng enzyme tablets? 2
17. List *two* options of presbyopic correction with contact lenses. 2
18. Describe extended wear contact lens. 2
19. Define Base curve (w.r.t.contact lens) and sagittal depth. 2
20. Define Oxygen permeability. 2
21. Write down *any two* conditions in which only RGP contact lenses should be prescribed. 2
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