

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM
(Deemed to be University)**

M.OPTOMETRY DEGREE EXAMINATION – January 2021

Second Semester

ADVANCED CONTACT LENS -I

Three Hours

Maximum: 100 marks

I. Choose the Best Answer :

(10 x 1 = 10)

1. What is the Prevalence of Keratoconus?
 - a) 1.3 Per 10,000
 - b) 8.6 Per 10,000
 - c) 11.3 Per 10,000
 - d) 86 Per 10,000
2. Scleral lenses are fit to vault the central cornea by
 - a) 100 - 400 microns
 - b) 200 - 500 microns
 - c) 300 - 400 microns
 - d) 100 - 300 microns
3. Horizontal visible iris diameter (HVID) is
 - a) 10.5 mm
 - b) 11.00 mm
 - c) 12.00 mm
 - d) 11.7 mm
4. Effects of Corneal hypoxia – all except
 - a) Corneal dehydration
 - b) Stromal acidosis
 - c) Osmotic imbalance
 - d) Corneal edema
5. Total diameter in soft contact lenses
 - a) 15 – 16mm
 - b) 10 – 11mm
 - c) 13 – 14mm
 - d) 8 – 9mm

(p.t.o)

6. Major protein to corneal tear film
 - a) Albinism
 - b) Globulin
 - c) Lysozyme
 - d) Platelet

7. All contributed for PMMA- Scleral fixated contact lens except
 - a) Willam
 - b) Ernest Mutten
 - c) Joseph Dallos
 - d) Lstvan Gyorrffy

8. If 3% generic hydrogen peroxide is substituted for the solution in one of the FDA approved hydrogen peroxide care systems
 - a) A minimum of 4 hours is required
 - b) The lacrimal lens is a minus cylinder lens
 - c) Measuring magnifier
 - d) The solution may discolor the lens

9. If a GP lens fails to provide acceptable visual acuity, the fitter should first
 - a) It may dehydrate excessively due to the lid retraction and dry eye condition that often accompanies throid disease.Stability will be difficult to maintain since there are no lid forces to keep the lens in place
 - b) A thin, even layer of fluorescein and less than 180 degrees of bearing in the mid- periphery
 - c) Steepen the base curve
 - d) Have a sphero-cylindrical over refraction performed to see if the reduced acuity is due to residual astigmatism

10. A common characteristic of steep fitting RGP is
 - a) Minimal vertical movement
 - b) Central apical staining
 - c) Lateral decentration
 - d) Mid peripheral clearance

11. 3 and 9 o'clock staining can be improved by increasing
 - a) Dk of material
 - b) Lens diameter
 - c) Wetting angle of material
 - d) Edge thickness of lens
12. Compare with spectacles, the contact lenses:
 - a) Increase the field of vision
 - b) magnify images in hypermetropia
 - c) Minify images in myopia
 - d) Reduce aneisokonia
 - e) Reduce optical aberration
13. In order to determine the base curve for a patient's contact lens, should perform
 - a) Pupillometer
 - b) Keratometry
 - c) Lensometer
 - d) Tonometer
14. _____type of solution is used for eye dryness and irritation
 - a) Saline Solution
 - b) Rewetting solution
 - c) Enzymatic solution
 - d) Cleaning solution
15. _____can be called as the father of contact lens
 - a) John Herschel
 - b) Thomas young
 - c) Leonardo da vinci
 - d) Philipdelattire
16. In which of these is not an tear function test
 - a) Tear film breakup time test
 - b) Schirmers Test
 - c) Phenol red thread test
 - d) Siedels test

17. Which of the following is not an enzymatic cleaners?
a) Papain
b) Pancreatin
c) Ployaminopropyl
d) Subtilisin
18. Best quality Optical surface are produced by _____ processing
a) Surface polishing
b) Moulding
c) Centrifugal casting
d) Lathe cutting
19. Spin casting is a process of _____
a) Centrifugal casting
b) Anterior Polishing
c) Moulding
d) Posterior polishing
20. _____ gives details about posterior corneal curvature
a) Orbscan
b) Placido disc
c) Abberometer
d) Tonometer

II .Write an Essay on:

(4 x 10 = 40)

21. Classification of CL based on materials
22. Contact lens fitting in astigmatism
23. Important material properties for soft contact lens.
24. Explain about advanced fitting options available in Rose K lenses?

III .Write an Long Essay on :

(2 x 20 = 40)

25. Discuss optics of contact lens
26. Explain semisoft contact lens care and maintenance

(S.No.M22)

$$(2 \times 20 = 40)$$