



All question should be attempted

Marks

- 1- Discuss in brief ectatic corneal disorders. (10)
- 2- Describe the effect of corneal biomechanical properties on measurement of intra-ocular pressure. (10)
- 3- Describe herpetic anterior uveitis. (10)
- 4- Summarize differential diagnosis of enlarged blind spot. (10)
- 5- Discuss in brief opto-ciliary shunt. (10)
- 6- Summarize the role of anti-VEGF therapy in retinal vascular disorders. (10)
- 7- Outline the role of ultrasound biomicroscopy (UBM) in management of angle closure glaucoma. (10)
- 8- Outline scleritis related to systemic disorders. (10)

Good luck

Examination for Diploma Degree
Course Title: Physiology of The Eye
Date: 9/10/2016

Term: October 2016
Time Allowed: 2 hours

Total Assessment Marks: 80



Tanta University
Faculty of Medicine

Ophthalmology
Department

- All questions are to be attempted
- 10 Marks for each question

Give an account on the following:

1. EOG: technique, interpretation and clinical applications
2. Dark adaptation curve and influencing factors
3. Discuss: Horopter, Panum's area and fixation disparity
4. Tear film dysfunction and tests for tear film adequacy
5. Measurement of facility of aqueous outflow
6. Functions of retinal pigment epithelium
7. Effect of drugs on ocular circulation
8. Hering's law and its application in paralytic squint

- Good Luck -

Tanta University
Faculty of Medicine
Ophthalmology Department




Optics Examination
Master / Diploma Degree in Ophthalmology
September 2016
Time allowed: 3 hours
Total assessment marks: 30 marks

ANSWER ALL QUESTIONS

ILLUSTRATE WITH DIAGRAMS WHENEVER APPLICABLE

Discuss the following: (5 Marks Each)

1. Optical principle and significance of pinhole test.
2. Apparent position of the iris and size of the pupil.
3. Optical properties of the red reflex during retinoscopy.
4. Optical principle and methods of gonioscopy.




Multiple Choice Questions: (0.5 Marks Each)

1. The following rays have the shortest wavelength:
 - A. Radio waves.
 - B. Ultraviolet rays.
 - C. Gamma rays.
 - D. Cosmic rays.

2. The image formed by a convex mirror is:
 - A. Real and located between F and the mirror.
 - B. Erect and located between F and the mirror.
 - C. Erect and located between F and C.
 - D. Inverted and located between F and the mirror.

3. While doing Duochrome test on a myopic patient's right eye, the patient reported that he could see the letters in the green half of the chart better than those in the red one, this means that:
 - A. He needs adjustment of the optical centers of the glasses.
 - B. The glasses overcorrect his myopia.
 - C. The glasses undercorrect his myopia.
 - D. He needs base down prism addition.

4. A hyperopic patient reports that he sees distant objects better when he pushes his glasses back closer to his eyes. This means that his glasses:
 - A. Overcorrect his hyperopia.
 - B. Undercorrect his hyperopia.
 - C. Need prism base out addition.
 - D. Need adjustment of the inter-pupillary distance.

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5. How much must an emmetropic eye accommodate for a fixation object located at 20 cm?
- A. 2.0 D.
 - B. 5.0 D.
 - C. 4.0 D.
 - D. 10.0 D.
6. The image magnification of a 50 diopters prism located at 5 cm from an object is:
- A. 5X
 - B. 10X
 - C. 25X
 - D. None of the above.
7. The far point of an eye is located at 50 cm in front of that eye, while the near point is at 20 cm. The amplitude of accommodation of that eye is:
- A. 2 D.
 - B. 3 D.
 - C. 5 D.
 - D. 7 D.
8. A prescription of +2.25/-2.5X180 denotes:
- A. Mixed astigmatism.
 - B. Compound myopic astigmatism.
 - C. Compound hyperopic astigmatism.
 - D. Against-the-rule astigmatism.

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9. During retinoscopy at a working distance of 75 cm, the end point of refraction was reached using a +3.0 spherical lens at all meridians.

The corresponding prescription of that eye is:

- A. +4.5 DS.
- B. -4.5 DS
- C. +1.5 DS.
- D. -1.5 DC.

10. The original SRK formula is written as follows:

- A. $P=A-2.5K-0.9L$
- B. $P=A+2.5K+0.9L$
- C. $P=A-2.5L-0.9K$
- D. $P=A+2.5L+0.9K$

11. As light rays enter a prism, they show the following behavior:

- A. Bend towards the apex.
- B. Bend towards the base.
- C. Pass unchanged.
- D. Mostly reflect.

12. In Goldmann 3-mirror contact lens, the central portion of the lens is used for visualization of:

- A. The angle of the anterior chamber.
- B. The axial parts of the fundus.
- C. The retrolenticular part of the fundus.
- D. The mid-peripheral parts of the fundus.

14. Diplopia due to right sixth nerve palsy is relieved by:

- A. Prism base in.
- B. Prism base out.
- C. Prism base up
- D. Prism base down.

15. During visual acuity measurement, a vision of 6/60 is equivalent to:

- A. 20/40.
- B. 20/200.
- C. 0.2.
- D. 0.8.

16. The following is true about light:

- A. Shorter wavelengths have greater energy.
- B. Two waves in phase with one another result in constructive interference regardless the individual direction of travel.
- C. Coherent light is composed of waves that are out of phase.
- D. The photoreceptors of the human eye are sensitive to wavelength between 440 and 780.

17. Prisms are incorporated in:

- A. Panfundoscope.
- B. Goniolenses.
- C. Keratometers.
- D. Direct ophthalmoscopes.

18. The following is true in hyperopia:

- A. Hyperopia results when the posterior focal length of an eye is longer than its axial length.
- B. Absolute hyperopia is the amount of hyperopia that can be overcome by accommodation.
- C. Manifest hyperopia tends to decrease with age.
- D. Latent hyperopia tends to increase with age.

19. The following is true about dissociated image tests:

- A. The Maddox wing dissociates the eyes at distance.
- B. When the Maddox rod cylinders are horizontal, the image seen is also horizontal.
- C. With a Maddox rod in the vertical orientation in front of the right eye, the left eye sees a horizontal red line.
- D. Maddox rod may be used to determine cyclotropia.

20. Best form lenses are used to reduce:

- A. Spherical aberration.
- B. Chromatic aberration.
- C. Coma.
- D. Glare.

