

**Ophthalmology Department**  
**Faculty of Medicine**  
**Tanta University**

**Physiology Exam. For Diploma in Ophthalmology**  
**April 2016**  
**10-4-2016**

- All questions are to be attempted
- 10 marks for each question
- Time allowed: 3 hours

Give an account on the following:

1. Discuss aqueous humour outflow routes and measurement
2. Discuss factors responsible for corneal transparency
3. Discuss binocular fusion, Panum's area and fixation disparity
4. Contrast sensitivity: types, measurement and factors affecting it.
5. Discuss Hering's law and its clinical application in paralytic squint
6. EOG: technique, interpretation and its clinical applications
7. Draw a diagram for dark adaptation curve and discuss influencing factors
8. Functions of retinal pigment epithelium

-Good Luck-



**Second Part Diploma Degree  
April 10<sup>th</sup>, 2016**

**Total Marks: 80**

**Time allowed: 3 Hours**

**Tanta University  
Faculty of Medicine  
Ophthalmology Department**

**Ophthalmic Medicine Exam**

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**Write on the Following Items:**

- |   |                   |
|---|-------------------|
| <b>I. Thyroid related ophthalmopathy.</b> | <b>(20 Marks)</b> |
| <b>II. Peripheral corneal ulcers.</b>     | <b>(10 Marks)</b> |
| <b>III. Anisocoria.</b>                   | <b>(10 Marks)</b> |
| <b>IV. Ocular hypertension.</b>           | <b>(10 Marks)</b> |
| <b>V. Binocular diplopia.</b>             | <b>(10 Marks)</b> |
| <b>VI. Vogt Koyanagi Harada Syndrome.</b> | <b>(10 Marks)</b> |
| <b>VII. Optic disc drusen.</b>            | <b>(10 Marks)</b> |

**(END OF EXAM)**

**(GOOD LUCK FOR ALL)**



Second Part Diploma Degree  
April 17<sup>th</sup>, 2016  
Total Marks: 80  
Time allowed: 3 Hours

Tanta University  
Faculty of Medicine  
Ophthalmology Department

Ocular Pathology & Microbiology Exam

- I. Microbiology Of Chlamydia Trachomatis. (10 Marks)
- II. Discuss the immunology and pathology of vernal keratoconjunctivitis. (10 Marks)
- III. Discuss the pathological changes resulting from retained intraocular foreign body. (15 Marks)
- IV. Pathological differential diagnosis of benign pigmented conjunctival lesions. (15 Marks)
- V. Give an account on the Pathological Features Of:
  - i. Chalazion (10 Marks)
  - ii. Choroidal nevus. (10 Marks)
  - iii. Atrophic eye (10 Marks)

(END OF EXAM)  
(GOOD LUCK FOR ALL)



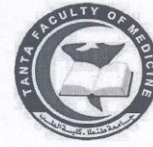
Tanta University  
Faculty of Medicine  
Ophthalmology Department

17/4/2016  
Diploma exam; Anatomy  
(All questions must be answered)  
Time allowed: 3 hours

1. Discuss gross and minute anatomy of the cornea.
2. Discuss anatomy of medial wall of the orbit.
3. Discuss anatomy of the 6<sup>th</sup> cranial nerve.
4. Discuss anatomy and applied anatomy of circle of Willis.

**Good luck**

Tanta University  
Faculty of Medicine  
Ophthalmology Department



Optics Examination  
Diploma Degree in Ophthalmology  
April 2016  
Date: 14/4/2016  
Time allowed: 3 hours  
Total assignment marks: 80 marks

**ANSWER ALL QUESTIONS**

**ILLUSTRATE WITH DIAGRAMS WHENEVER APPLICABLE**

**Discuss the following:**

1. Dispersion of light and its clinical applications. (10 Marks)
2. Spherical lens decentration. (10 Marks)
3. Optics of the schematic eye. (10 Marks)
4. Components of hyperopia. (10 Marks)
5. Stages of retinoscopy. (15 Marks)
6. Back vertex distance. (10 Marks)
7. Optical principle and methods of gonioscopy. (15 Marks)

**GOOD LUCK**



- 1-Indications and technique of pars plana vitrectomy in primary rhegmatogenous retinal detachment (10).
- 2-Management of posterior capsule rupture during phaco surgery (10).
- 3-Antifibrotic agents in glaucoma surgery (10).
- 4-Surgical management of epithelial down-growth after lasik surgery (10).
- 5-Management of inferior oblique overaction (10).
- 6-Discuss management of chalazion (10).
- 7-Pneumatic retinopexy (indications, types of gases used and complications) (10).
- 8-Transscleral diode laser cyclophotocoagulation (10).

Good luck

Tanta University  
Faculty of Medicine

General Surgery Exam

دبلوم طب وجراحة العيون

Exam 19 April 2016  
All questions to be answered

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1. Enumerate complications of blood transfusion (20 degrees)
2. Discuss the pathophysiology, clinical picture and management of septic shock. (20 degrees)
3. Discuss the eye signs in Grave's disease (15 degrees)
4. Enumerate the differential diagnosis of masses at midline of the neck (15 degrees)
5. What is the etiology, and the differential diagnosis of a case of ulcer in the face (15 degrees)
6. Discuss the etiology and management of a case of deep vein thrombosis. (15 degrees)

امتحان الشفوي والعملي يوم ٢٠١٥/٤/٢٠ بقسم الجراحة العامة بالمستشفى التعليمي الجديد الساعة  
الثامنة صباحا

Good luck

Tanta University  
Faculty of Medicine  
Ophthalmology Department



Optics Examination  
Master and Diploma Degrees in Ophthalmology  
April 2016 Semester  
Date: 4/4/2016  
Time allowed: 3 hours  
Total assignment marks: 80 marks

**ANSWER ALL QUESTIONS**

**ILLUSTRATE WITH DIAGRAMS WHENEVER APPLICABLE**

**Discuss the following:**

1. Interference of light and its clinical applications. (10 Marks)
2. Uses of prisms in ophthalmology. (10 Marks)
3. Purkinje-Sanson images. (10 Marks)
4. Optical properties of the red reflex during retinoscopy. (10 Marks)
5. Amplitude of accommodation; definition, measurement, and variations with different states of refraction. (15 Marks)
6. Jackson's cross cylinder. (10 Marks)
7. Optical principles of keratometry. (15 Marks)

**GOOD LUCK**





Tanta University  
Faculty of Medicine  
Internal Medicine Department  
Diploma of Ophthalmology (First Part)  
April 2016  
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All questions must be answered  
Time allowed: 3 hours  
Total marks: 45

Give an account on the following:

- 1- Precipitating factors and treatment of diabetic ketoacidosis. (10)
- 2- Differential diagnosis of jaundice. (10)
- 3- Extra-articular manifestations and treatment of rheumatoid arthritis. (10)
- 4- Oculomotor nerve palsy: etiology, clinical picture and investigations. (15)

يبدأ الإمتحان الشفوى والإكلينيكي فى الساعة الثامنة صباحا يوم الأحد  
الموافق ٢٠١٦/٤/١٠ بمستشفى الأمراض الباطنة.

GOOD LUCK



Tanta University  
Faculty of Medicine  
Ophthalmology Department

5/4/2016  
Master and Diploma exam; Anatomy  
(All questions must be answered)  
Time allowed: 3 hours

1. Discuss anatomy of the 4<sup>th</sup> cranial nerve.
2. Discuss anatomy of angle of anterior chamber.
3. Discuss anatomy of the superior orbital fissure.
4. Discuss anatomy of the cavernous sinus.

❖ Choose the correct answer

1. **Equatorial lens diameter**
  - a. Is 6.5 mm at birth
  - b. Increases to 9-10 mm in the 2nd decade
  - c. Does not increase in size after the 2nd decade
  - d. All of the above
2. **Corneal innervation is derived from:**
  - a. 7<sup>th</sup> cranial nerve
  - b. 5<sup>th</sup> cranial nerve
  - c. 6<sup>th</sup> cranial nerve
  - d. 4<sup>th</sup> cranial nerve
3. **All are true about the retina except:**
  - a. Have cones and rods on its inner surface.
  - b. Contain optic disc which is lateral to the macula.
  - c. Receive blood supply from the central retinal artery.
  - d. Represent the only nervous tissue visible to the naked eye in life.

4. **inside the orbit near its apex, there is the :**
  - a. Ciliary ganglion
  - b. Otic ganglion
  - c. Sphenopalatine ganglion
  - d. Genuiculate ganglion
5. **The superior orbital fissure transmits all of the following except:**
  - a. The frontal nerve.
  - b. The abducent nerve.
  - c. The trochlear nerve.
  - d. The infraorbital nerve.
6. **Trochlear nerve supplies:**
  - a. The superior oblique muscle.
  - b. The ciliary muscle.
  - c. The lateral rectus muscle.
  - d. The dilator pupillae muscle.
7. **The following structures form the medial wall of the orbit except:**
  - a. Sphenoid bone.
  - b. Frontal bone.
  - c. Lacrimal bone.
  - d. Maxillary bone.
8. **The following muscle is considered one of the muscles of facial expression:**
  - a. Lateral rectus
  - b. Muller's muscle
  - c. Orbicularis oculi
  - d. Ciliary muscle
9. **The following extraocular muscle can perform extorsion of the globe:**
  - a. Medial rectus.
  - b. Lateral rectus.
  - c. Inferior oblique.
  - d. Superior oblique.
10. **The cavernous sinuses:**
  - a. Extends from the inferior orbital fissure to the apex of the temporal bone.
  - b. Opens posteriorly into the petrosal sinuses.
  - c. Contain the internal carotid artery on its lateral wall.
  - d. Contains the abducent nerve on its lateral wall.
11. **The sixth cranial nerve:**
  - a. Innervates the lacrimal gland.
  - b. Passes through the medial wall of the cavernous sinus.
  - c. Is involved in the light reflex.
  - d. Arises from a nucleus closely related to the facial nerve.

- 12. Regarding the conjunctiva, all are true except:**
- The superior fornix lies 5 mm from the limbus
  - The lateral fornix lies 14 mm from the limbus
  - The posterior conjunctival artery arises mainly from the palpebral arterial arches
  - Large area of the conjunctiva is supplied by the superior peripheral arterial arch
- 13. Muller muscle receives:**
- Sensory supply
  - Parasympathetic supply
  - Motor supply
  - Sympathetic supply
- 14. Basal layer of corneal epithelium is attached to the underlying basement membrane by:**
- Desmosomes
  - Hemidesmosomes
  - Zonula occludens
  - Zonula maculae
- 15. As regards the upper and lower puncti:**
- Both are in the same vertical line
  - Both are equal in tear film drainage
  - The upper punctum is lateral to the lower one
  - The upper punctum is medial to the lower one
- 16. Corneal endothelium is characterized by:**
- Progressive increase with age
  - Progressive increase with age till 50 years old and then gradually decreases
  - Corneal decompensation occurs at an endothelial cell count of 2000 cell /mm<sup>2</sup>
  - Lost cells are replaced by polymegathism and pleomorphism.
- 17. In the iris, all are true except:**
- The sphincter papillae muscle is 4 mm wide
  - The sphincter papillae muscle is only found at the papillary zone
  - The dilator pupillae muscle receives sympathetic supply
  - The dilator papillae muscle lies between the papillary zone and the periphery of the iris
- 18. In the choroid, all are true except:**
- Thickest at the equator
  - Melanocytes are mainly found in its inner layers
  - Veins form the majority of choroidal vessels
  - Choroidal vessels are most concentrated at the macula
- 19. The sclera is not characterized by that:**
- It is 0.6 mm thick at the equator
  - It is 0.3 mm thick just behind the insertion of recti
  - It has 4 middle apertures found 4 mm in front of the equator
  - It contains an endothelial canal called canal of schlemm

20. All the following statements about the crystalline lens are true except:

- a. Radius of curvature of the posterior surface is 6 mm
- b. It lies 3 mm behind the posterior surface of the cornea
- c. Its transverse diameter is 10 mm
- d. It has an epithelium made up of a double layer of cells

**Good luck**