

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

**Pathology** *and microbiology*

**Diploma october 2018**

**Give Short notes on the following each 20 mark**

- 1- Pathology of primary optic nerve tumours
- 2- Pathology of pigmented lesions of conjunctiva
- 3- Microbiology and pathological changes in ocular affection by toxoplasmosis

**Choose the correct answer (one answer ) each 3 marks**

1-Basement membranes in the eye include all of the following except

- A- External limiting membrane of the retina
- B- Descemets membrane
- C- Bruchs membrane
- D- Lens capsule
- E- Internal limiting membrane of the retina

2- An eye with longstanding glaucoma, in which the dimensions of the eye are greater than the average of 24-25 mm in each diameter would fall into which of the following classification

- A- Phthisis bulbi
- B- Atrophy with shrinkage and disorganization
- C- Atrophy with shrinkage
- D- Atrophy without shrinkage
- E- Phthisis bulbi without shrinkage

3- Which of the following growth or aging processes of the eye is most likely to be associated with potentially severe systemic disease

- A- Fuch's adenoma
- B- Hyperplasia and proliferation of ciliary epithelium
- C- Corneal arcus in child or adolescent
- D- Clear or tear drop cyst of pars plana and pars plicata
- E- Peripheral microcystoid degeneration of the retina without schisis

4- when preparing an enucleated eye for subsequent microscopy , it is best to

- A- Open the globe immediately so that the fixative can freely permeate the tissue
- B- Freeze the globe before immersion in fixative
- C- Immediately immerse globe in fixative ( 10% formaldehyde) for several hours before sectioning
- D- Remove the vitreous via needle entering through pars plana to enhance retinal fixation
- E- None of the above

5- Hematoxylin is specific for what component of the cell

- A- Mucopolysaccharides
- B- Nucleic acid within the nuclei
- C- Mitochondria
- D- Calcium
- E- Smooth muscle

6- All of the following are common peripapillary changes in pathologic myopia except

- A- Tilted disc
- B- Temporal crescent
- C- Nasal supratraction
- D- Deepened physiologic excavation
- E- Temporal flattening

- 7- All of the following show granulomatous inflammation affecting the eye except
- A- Sympathetic ophthalmia
  - B- Acute fungal keratitis
  - C- Chalazion
  - D- Toxoplasmosis
  - E- Orbital pseudotumor with epithelioid cells
- 8- Hassel Henle warts
- A- Are major lesions associated with fuch's dystrophy
  - B- Have a viral cause
  - C- Cause significant corneal edema and visual impairment
  - D- Cosist of focal excrescence on descemet's membrane in central cornea
  - E- Are a normal aging phenomenon
- 9- Which statement regarding ectasia and staphyloma is incorrect
- A- Any condition that creates focal weakness of cornea or sclera
  - B- Major causes include trauma and corneoscleral melting diseases
  - C- Ectasia refer to protrusion of the cornea where as staphyloma refer to protrusion of sclera
  - D- They may occur in presence of a coloboma resulting in colobomatous cyst
- 10- The Kaiser –Fleischer ring
- A- May be caused by IOFB
  - B- Is a deposit of copper in Bowman's membrane
  - C- Is an iron line seen at the cone base in keratoconus
  - D- Usually appears initially as an acute pigmentation
  - E- Usually is associated with pigmentary glaucoma
- 11- Which of the following stains is most useful in diagnosing ocular siderosis
- A- Alcian blue
  - B- Colloidal iron
  - C- Luxol fast blue

- D- Prussian blue
- E- Mallory blue

12- The classic cataract seen with juvenile diabetes is

- A- Snowflake
- B- Sunflower
- C- Morgagnian
- D- Embryonal
- E- Zonular

13- Which of the following factor shown to be present in early post operative healing phase after PRK

- a- Type VII collagen
- b- Type III collagen
- c- Hyaluronic acid
- d- Fibronectin
- e- All of the above

14- The iris may undergo necrosis after acute or long standing glaucoma. Which of the following lesions of the iris could not be caused by glaucoma

- A- Iridodialysis
- B- Rarefaction of iris stroma
- C- Hyalinization of iris stroma
- D- Atrophy of iris pigment epithelium
- E- Atrophy of iris muscles

15- Which of the following does not contribute to the formation of a cyclitic membrane in uveitis and phthisis bulbi

- A- Metaplastic ciliary epithelium
- B- Organized inflammatory residua
- C- Lens capsule
- D- Organized blood in retrolental region
- E- Fibrous organization involving the anterior vitreous face

16- The following stains are useful in showing up calcium in the tissue:

- a. Prussian blue
- b. von Kossa
- c. crystal violet
- d. sudan black

17- Touton's giant cells occur in all except:

- a. histiocytosis X
- b. tuberous xanthoma
- c. juvenile xanthogranuloma
- d. Erdheim-Chester's disease
- e. liposarcoma

18- Oil red O stain is positive in:

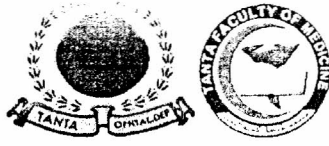
- a. sebaceous cell carcinoma
- b. xanthelasma
- c. chalazion
- d. crystalline dystrophy of schnyder
- e. all of above

19- Phthisis bulbi is associated with all of the following except

- a-Sclera thickening
- b- Disorganization of intraocular content
- c-Intraocular osseous metaplasia of RPE
- d-Intraocular cartilage formation
- e-Cyclitic membrane

20- Optic glioma:

- a. has a peak incidence in the middle age
- b. is associated with type II neurofibromatosis
- c. arises from the oligodendrocytes
- d. causes meningeal hyperplasia
- e. contains Rosenthal fibres which are essential for its diagnosis



Diploma Degree  
October 10<sup>th</sup>, 2018

Tanta University  
Faculty of Medicine  
Ophthalmology Department

Ophthalmic Surgery Exam  
Time allowed: 2 Hours

Total Marks: 120

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**I. Write in the following Items:**

1. Complications of penetrating keratoplasty. (20)
2. Types & Complications of glaucoma implants. (20)
3. Pars plana vitrectomy in rhegmatogenous retinal detachment. (20)

**II. MCQs (Choose one answer only): (3 marks each, total: 60)**

1. Which of the following is an indication that adequate suction has been obtained with mikrokeratome?

- a. Pupil dilation.
- b. Changes in size and color of the patient's fixation target.
- c. Eye rotation with the mikrokeratom
- d. Hand-held tonometer reading 40 mmHg.

2. The most common complication of dry eye after LASIK is :

- a. Diffuse Lamellar Keratitis (DLK).
- b. Epithelial Basement Membrane Dystrophy.
- c. Dislocation of the flap.
- d. Decreased vision.

**3. In which of the following refractive procedures is corneal sensation best maintained:**

- a. Epikeratoplasty.
- b. LASIK.
- c. Refractive lens exchange.
- d. Surface ablation.

**4. What mechanism of angle closure glaucoma can be treated with an iridotomy?**

- a. Iridocorneal endothelial syndrome
- b. Aqueous misdirection
- c. Neovascularization of the angle
- d. Pupillary block

**5 -A subluxated lens:**

- a. If visually significant may be an indication for surgery.
- b. Will always progress and should be removed.
- c. Is located outside the posterior chamber in the anterior chamber or vitreous compartment.
- d. If removed will protect against the development of angle-recession glaucoma.
- e. Should always be approached through a superior clear corneal incision.

**6. Which of the following is not a clinical manifestation of a failing filtering bleb:**

- a. Encapsulated bleb
- b. Tight scleral flap
- c. Scleral fibrosis
- d. Conjunctival microcysts

**7. The following statements regarding aqueous misdirection syndrome are likely to be true except:**

- a. Typically occurs in patients with open angle glaucoma who have undergone filtration surgery.
- b. Patients present with a flat anterior chamber.
- c. Discontinuation of cycloplegics may precipitate aqueous misdirection.
- d. The anterior chamber typically remains shallow despite a patent iridotomy.

**8. For performing forced duction test in diagnosis of Brown syndrome in right eye:**

- a. The conjunctiva is grasped at 3 and 9 o'clock and the globe is elevated and depressed.
- b. The conjunctiva is grasped at 4 and 10 o'clock and the globe is then retropulsed and elevated in a superonasal direction.
- c. The conjunctiva is grasped at 6 and 12 o'clock the limbus and the globe is then abducted and adducted without retropulsion.
- d. The conjunctiva is grasped at 2 and 8 o'clock and the globe is then retropulsed and elevated in a superotemporal direction.

**9. MMC can be used in the following operations except:**

- a. Trabeculectomy
- b. PRK
- c. DCR
- d. Cross linking

**10. Management of lagophthalmos due to 7<sup>th</sup> nerve palsy includes:**

- a. Lateral tarsal strip
- b. Recession of lower lid retractors
- c. Tarsal fracture
- d. Weis operation

**11. A patient has an anterior chamber intraocular lens placed into the eye after a complicated phacoemulsification procedure. Three months later the UGH syndrome results. All the following except one may be found as part of the syndrome:**

- a. Anterior uveitis.
- b. Hyphema.
- c. Glaucoma.
- d. Retinal detachment.

**12. Indications for lens surgery may include all the following *except*:**

- a. Vision-decreasing cataract.
- b. Phacolytic glaucoma.
- c. Dense nuclear opacity in a sightless eye.
- d. Phacoanaphylactic endophthalmitis.



**13-A full-thickness neural retinal macular hole shows all the following features except:**

- a. Yellow spots in the base of the hole.
- b. Cecocentral scotoma.
- c. Small surrounding cuff of subneural retinal fluid.
- d. Round central neural retinal tissue defect.

**14. Treatment for a leaking bleb may include all the following except:**

- a. Patching the eye.
- b. Bandage soft contact lens.
- c. Laser iridoplasty.
- d. Autologous fibrin tissue glue.

**15. An 89-year-old aphakic patient is scheduled for a secondary lens implant. All the following options are viable except:**

- a. Sulcus placement.
- b. Anterior chamber placement.
- c. Transscleral sutured posterior chamber placement.
- d. Iris-supported lens placement.

**16-A penetrating injury of the eye through the central cornea and into the lens is repaired by suturing of the cornea, followed by atropine drops and local and systemic antibiotics. About three weeks later a severe anterior uveitis develops. The intraocular pressure is slightly elevated. Which of the following should be done?**

- a. atropine should be restarted.
- b. a vitreous tap should be performed and cultured.
- c. phacoanaphylactic endophthalmitis must be considered.
- d. amphotericin B should be started.

**17. Congenital nasolacrimal obstruction, all true except:**

- a. should usually be treated by about age 1 year with irrigation and probing.
- b. should be treated with silicone intubation after two failed probing attempts.
- c. should be treated with dacryocystorhinostomy if nasal probing cannot be performed.
- d. associated with amniocoeles requires probing at an early age.
- e. spontaneously resolves in more than 90% of patients by age 1 year.

**18. Evisceration:**

- a. is contraindicated in cases of suspected intraocular malignancy.
- b. always requires corneal removal.
- c. does not obviate the risk of sympathetic ophthalmia.
- d. may be technically more difficult than enucleation in phthisical eyes.
- e. is contraindicated if precise histopathologic examination of the globe is needed.

**19. All the following modalities may be indicated in the treatment of retinopathy of prematurity *except*:**

- a. Retinal cryotherapy or laser photocoagulation.
- b. Pars plana lensectomy alone.
- c. Scleral buckling.
- d. Vitrectomy with lensectomy.
- e. Lens-sparing closed vitrectomy.

**20. During cataract surgery, a piece of the cataract falls posteriorly through a posterior capsular tear. Postoperatively, the lens remnant is noted in the inferior vitreous compartment in a "quiet" eye. The best immediate course of action is:**

- a. Vitrectomy and lensectomy.
- b. Continuation of routine corticosteroid eye drop therapy and close observation.
- c. Intravitreal injection of a corticosteroid.
- d. High dose systemic corticosteroid therapy.

**Good Luck**