**UNIVERSITY OF NAIROBI**

**OPHTHALMOLOGY MCQs**

**(NB: Some are TRUE/FALSE)**

1. Which of the pathogens can produce corneal infections in the presence of an intact epithelium?
2. *N. gonorrhoea*
3. *N. meningitides*
4. *Staphylococcus*
5. *C. Diptheriae*

* *Neisseria gonorrhoeae, Neisseria meningitides, Corynebacterium diphtheria* can invade a normal, intact epithelium.

1. Irrespective of the etiology of a corneal ulcer, the drug always indicated is:
2. Corticosteroids
3. Cycloplegics: 1% atropine to paralyze the ciliary muscles, dilate the pupil & relieve pain
4. Antibiotics
5. Antifungals
6. Corneal sensations are lost in:
7. Herpes simplex
8. Conjunctivitis
9. Fungal infections
10. Marginal keratitis

* Nerve supply of the cornea is purely sensory from the ophthalmic division of the 5th cranial nerve through the naso - ciliary branch.
* Corneal and skin anesthesias are characteristic and persist for a long time in Herpes Zoster Ophthalmicus.

1. Regarding Herpes simplex keratitis:
2. Herpes simplex keratitis is caused by HSV-2 (F; It is caused by HSV – 1)
3. Primary ocular infection occurs below the age of six months (F; presentation is between the age of 6 months and 5 years)
4. Steroids are contraindicated in viral keratitis (F)
5. Corneal sensations are normal following viral keratitis (F)

* Topical steroids are only useful in deep/ disciform keratitis. They are CI in epithelial lesions. If topical steroids are given to a patient with a dendritic ulcer, the ulcer will enlarge and perforate!!

1. Which is true regarding Herpes Zoster:
2. Varicella Zoster is antigenically identical to herpes simplex but morphologically different.
3. Approximately 50% of herpes zoster affects the ophthalmic division of the trigeminal nerve.
4. Hutchison’s sign is a pathognomonic sign (T: Ocular involvement associated with eruption of vesicles on the skin of the tip of the nose)
5. The condition is essentially bilateral (F: It is always unilateral affecting the gasserian ganglion from where the virus travels down the branches of the ophthalmic nerve)
6. In pre - septal cellulitis
7. The globe is involved
8. Ptosis is a feature
9. The ocular motility is normal
10. Pain and fever are uncommon finding
11. Incision and drainage is indicated in case of abscess formation
12. Retinoblastoma
13. Bilateral disease indicates a germinal mutation of the retinoblastoma gene.
14. Unilateral disease manifests earlier than bilateral disease
15. The commonest presentation is leucocoria
16. It does not occur in children under one month of age
17. Is more common in girls than boys
18. A 3-month old baby presents to the outpatient clinic with history of squinting of the right eye since birth
19. The mother should be advised to continue observing the baby until the age of 2 years
20. If the pupils appear normal there will be no cause of concern
21. The baby should be referred immediately to an opthalmologist
22. A positive family history of a squint is useful in making a diagnosis
23. An ocular ultrasound may be a useful investigation
24. In orbital cellulitis
25. The commonest source of infection is from the sinuses
26. *Haemophilus influenza* is a common etiology in children
27. Is usually self - limiting and does not require aggressive treatment
28. Crystallin penicillin is the drug of choice in treatment
29. Complications include otitis media, meningitis and cavernous thrombosis
30. **Commotio retinae** is seen in
31. Concussion injury
32. Retinopathy of AIDS
33. Central vein occlusion
34. Central artery thrombosis
35. Diabetic retinopathy
36. The following is a triad of early symptoms of congenital glaucoma
37. Blepharospasms, photophobia and tearing
38. Cloudy cornea, large disc and photophobia
39. Refractive error, tearing and large cornea
40. Blepharospasms, blue eyes and proptosis
41. Haab’s striae, Blepharospasms and cloudy cornea
42. Bitemporal hemianopia is associated with lesions of the
43. Optic tract
44. Central chiasma
45. Lateral part of the chiasma
46. Optic radiation
47. Visual cortex
48. A 20 year old man complains of difficulty in reading the newspaper with his right eye,3 weeks after evisceration of his left eye following penetrating injury.Likely diagnosis is/are
49. Macular oedema
50. Sympathetic opthalmicus
51. Optic nerve avulsion
52. Delayed vitreous hemorrhage
53. Cataract
54. In a worker engaged in stone breaking with a chisel and hammer, the most common foreign body lodged in his eye would be
55. Stone particle
56. Particle from the chisel
57. Particle from the hammer
58. None of the above
59. All the above
60. In a patient with a painful eye with cilliary injection, the following are common differential diagnosis
61. Episcleritis
62. Herpes simples keratitis
63. Anterior uveitis
64. Retinal vasculitis
65. Orbital cellulitis
66. Possible causes of corneal scarring in ocular leprosy include
67. Entropion
68. Interstitial keratitis
69. Exposure keratitis
70. Neurotrophic keratitis
71. Secondary infective keratitis
72. Regarding simple episcleritis
73. It is commonly benign and self-limiting
74. Typically affects children
75. Is seldom associated with a systemic disorder
76. Responds well to topical steroids
77. Commonly leads to scleromalacia perforans
78. The following are signs of optic nerve dysfunction
79. Reduced visual acuity
80. Afferent pupillary defect
81. Diminished light brightness sensitivity especially in red light
82. Loss of red fundus reflex
83. Positive Seidel’s test
84. Optic neuritis associated with ingestion of cheap locally brewed liquor such as chang’aa
85. Is related to methanol toxicity
86. Is associated with metabolic acidosis
87. Leads to demyelination
88. Is reversible in the early stages (24-48 hours)
89. Can be treated by giving the patient more methanol to take orally
90. Features of papillo - edema include
91. Is usually bilateral
92. Vision is mostly spared
93. Dull disc margins
94. Absent venous pulsations
95. Splinter hemorrhages around the disc
96. Well established treatment modalities for glaucomas are:
97. Laser Iridotomy for Angle Closure Glaucoma (ACG)
98. Beta - blocker eye drops to cause miosis
99. Oral Acetazolamide for very high intra-ocular pressures
100. Steroid eye drops for congenital glaucoma
101. Trabeculectomy for Primary Open Angle Glaucoma
102. Signs of congenital glaucoma are
103. Photophobia
104. Lachrymation
105. Cataract
106. Hazy cornea
107. Small eyes
108. Regarding the treatment of diabetic retinopathy and cataract
109. Central laser is an effective treatment in managing diabetic maculopathy
110. Intravitreal injection of Triamcinolone can assist in treating diabetic retinopathy
111. Extensive panretinal laser coagulation has no significant side effects
112. Vitrectomy is an important treatment modality for advanced diabetic proliferative vitreo-retinopathy
113. Cataract extraction in diabetics can be done to improve visual acuity of the patient and to facilitate diagnosis and management of diabetic retinopathy
114. Major ocular complications and findings of leukaemia include
115. Spontaneous subconjunctival haemorrhage
116. Retinal hemorrhages and Roth spots
117. Infiltrative optic neuropathy
118. Orbital involvement (eg in children)
119. Cataract
120. Which of the following are risk factors of developing blinding Vitamin A deficiency
121. Allergic eyes
122. Breast feeding for too long
123. Many years in prison
124. Prolonged treatment with steroids
125. Young age
126. About trachoma developmental cycle
127. The causative agent is a bacterium
128. Metabolically active infectious elementary body (EB) infects susceptible host cells by endocytosis
129. Reticulate body (RB) has no cytochrome system and relies on host ATP and transform to infective EB within 20 hrs
130. EBS and RBs enclosed in inclusion bodies and cannot make the cell rupture
131. Domestic animals are known reservoir of infection
132. Regarding the treatment of Cytomegalovirus retinitis in patients with HIV/AIDS
133. Steroids always be combined with antiretroviral therapy
134. Foscarnet and Gancylovir are appropriate first line drugs
135. Can only be treated systemically
136. Intravitreal antiviral induction therapy is given twice per week for 14 days
137. Maintenance therapy is lifelong for non-responders to antiretroviral therapy (ARV)
138. Which of the following is/are true about Herpes Zoster opthalmicus
139. It is associated with chicken pox infection
140. The condition is essentially bilateral
141. It is associated with HIV infection
142. It is treated with acyclovir
143. The color of fluorescein staining in a corneal ulcer is
144. Orange
145. Green
146. Cobalt blue
147. Red
148. The following are predisposing factors for corneal ulcers
149. Dry eyes
150. Lagopthalmos
151. Contact lenses
152. Topical steroids
153. The most common organism causing orbital cellulitis in children less than 5yrs is
154. Pneumococcus
155. Staphylococcus aureus
156. Streptococcus pyogenes
157. Influenza
158. Toxic optic neuropathy is caused by
159. Streptomyci
160. Ethanol
161. Ethambutol
162. Pyrazinamide
163. Pupil-sparing third nerve lesion is caused by
164. Trauma
165. Diabetes
166. Aneurysm of the posterior communicating artery
167. Meningioma
168. Blunt trauma to the eye can lead to
169. Posterior sub - capsular cataract
170. Intra - ocular foreign body (IOFB)
171. Lens subluxation
172. Iridodialysis
173. The following ocular tumors are associated with HIV infection
174. Kaposi’s sarcoma
175. Choroidal melanoma
176. Squamous cell carcinoma of the conjunctiva
177. Rhabdomyosarcoma
178. The following lead to blindness in leprosy
179. Glaucoma
180. Acute iritis
181. Cataract
182. Lagopthalmos
183. Hypermetropia may result from
184. Age related changes in the lens
185. A longer antero-posterior length of the eyeball
186. Congenital aphakia
187. Atropinization of the eye
188. Squint
189. Myopia
190. May be accompanied by vitreo-retinal degenerations
191. May be complicated by macula haemorrhage
192. Is not accompanied by astigmatism
193. Is best corrected by convex lenses
194. May be caused by higy blood sugar
195. Uveitis is caused by
196. Trauma
197. Tuberculosis
198. Syphilis
199. Rheumatoid arthritis
200. Cytomegalovirus
201. Complications of uveitis include
202. Corneal opacity
203. Posterior synechiae
204. Glaucoma
205. Cataract
206. Vitiligo
207. Squints may result from
208. Cataract
209. Retinoblastoma
210. Refractive error
211. Trigeminal nerve palsy
212. Grave’s disease
213. Regarding the ocular features of tuberculosis
214. Most of the lesions are immune related
215. Uveitis is the most common manifestation
216. Phlyctenulosis (Phlyctenular keratoconjunctivitis) has allergic origin
217. Primary infective keratitis is rare
218. Uveitis in these patients responds well to steroids
219. The following are known risk factors for rhegmatogenous retinal detachment
220. Myopia
221. Ocular trauma
222. Prior cataract surgery
223. Family history of retinal detachment
224. Rhegmatogenous detachment in the fellow eye
225. The following are disadvantages of using aphakic spectacles after cataract surgery
226. Jack in the box phenomenon
227. Images are magnified 33%
228. Chromatic aberrations
229. Pin-cushion effect
230. Which of the following s6a/are true about ophtalmia neonatorum
231. *N. gonorrhoea* is the commonest cause in Kenya
232. Crede’s prophylaxis is commonly used in Kenya
233. Chlamydia usually presents within 1-2 days of birth
234. Tetracycline eye ointment prophylaxis is effective
235. A dense corneal scar with incarceration of iris is known as
236. Adherent leucoma
237. Staphyloma
238. Iris bombe
239. Posterior synechia
240. In control of trachoma,the acronym “SAFE” stands for
241. S=Surgery for trachoma scars
242. A=Avoiding flies
243. F=Facial cleanliness
244. E=Eating healthy foods
245. A=Antibodies treatment for active disease
246. Which of the following parasites are known tocause blindness
247. Pthiriasis palpebrum
248. Onchocerciasis
249. Loa loa
250. Ascaris lumbricoides
251. Toxoplasmosis
252. About ocular onchocerciasis
253. It is an important cause of blindness in Kenya
254. Affects all tissues of the eye including the lens
255. Optic neuritis and keratitis are causes of blindness
256. The causative agent is a somatic nematode
257. The treatment of choice for the ocular disease is niclosamide
258. Regarding the cornea
259. It is the main refracting structure in the eye
260. The stroma is the thinnest layer
261. The bowman’s layer is able to regenerate after damage
262. Damage to the endothelium leads to corneal oedema
263. Regarding the crystalline lens
264. It is an avascular tissue
265. The main source of nutrients is the aqueous
266. Metabolism of glucose is mainly through anaerobic glycolysis
267. It contains high levels of vitamin C
268. It has a similar protein composition to the cornea
269. Which of these lasers is used for treating diabetic retinopathy
270. Excimer laser
271. Carbon dioxide lase
272. Diode laser
273. Infrared
274. The following is true about acute angle closure glaucoma
275. It presents with painless loss of vision
276. It is commoner in females
277. It is rare in Kenya
278. Pilocarpine is used in its treatment
279. The most common cause of visual loss in background of diabetic retinopathy is
280. Flame shaped hemorrhages
281. Vitreous hemorrhage
282. Macula oedema
283. Vasodilation
284. About ocular toxoplasmosis
285. Macular scars are always bilateral
286. Recurrence may occur next to a healed congenital lesion
287. May present as chronic endopthalmitis in adults
288. Systemic steroids are contraindicated
289. AIDS patients require treatment only when the recurrence is progressively spreading towards the optic disc or macula
290. Which of the following are clinical features of Xeropthalmia
291. Conjunctival scarring
292. Bitot spot
293. Trichiasis
294. Night blindness
295. Uveitis
296. Regarding the tear film
297. The aqueous layer is produced by the accessory lacrimal glands
298. It is important in the refractive function of the cornea
299. It consists of 4 layers
300. It contains immunoglobulins
301. The innermost layer is mucinous
302. The following are features of Horner’s syndrome
303. Miosis
304. Ptosis
305. Anhydrosis
306. Exophthalmos
307. Pulsatile proptosis with a bruits is seen with
308. Encephalocoele
309. Meningocoele
310. Carotid-carvenous fistula
311. Orbital cellulitis
312. A common cause of adult unilateral proptosis is
313. Thyroid orbitopathy
314. Metastasis
315. Lymphoma
316. Meningioma
317. Decrease in visual acuity in proptosis is due to
318. Optic nerve compression
319. Choroiditis
320. Exposure keratopathy
321. Choroidal folds
322. Most common cause of epiphora in children is
323. Congenital glaucoma
324. Retinoblastoma
325. Nasolacrimal duct block
326. Puncta blockage
327. In Xeropthalmia
328. Measles is an aggravating factor
329. On diagnosis give oil based 100,000 i.u of Vitamin A intramuscularly
330. On diagnosis give Vitamin A 100,000 i.u orally if the child is 6 years old
331. On diagnosis give 200,000 of Vitamin A if the child is 8 years
332. On diagnosis give antihelminthic full course of septrin and injection of Vitamin A water-based 5,000 i.u
333. The following are complications of trachoma
334. Uveitis
335. Entripoin
336. Keratinization of the lower conjunctiva
337. Corneal opacity
338. Herbet’s pus
339. In blow-out fracture involving the floor of the orbit,the followingmay be found
340. Crepitus around the lower orbital region
341. Fluid level is seen radiologically in the maxillary antrum
342. Superior rectus muscle incarceration
343. Hypoaesthesia of the infraorbital region
344. The most preferred treatment for Cicatricial entropion is
345. Wedge resection with base-tip
346. Skin graft with nasal septum to replace the tarsus
347. Tarsal plate rotation of the tarsus
348. Mucous graft
349. Conjunctival graft
350. Left Homonymous hemianopia indicates lesion in the
351. The chiasma postero-inferiorly
352. Left meyer’s loop
353. Left optic radiation
354. Right optic tract
355. Right optic nerve
356. Which of the following will present with bruit in the supra-orbital area
357. Pseudotumor
358. Carotid-carvenous fistula
359. Haemangioma of the lower lid
360. Meningioma of the sphenoidal ridge
361. Cavernous haemangioma of the orbit
362. Pinpoint pupils can be caused by
363. Organophosphate poisoning
364. Cocaine
365. Alcohol
366. Barbiturates
367. Features of herpes simplex keratitis include the following
368. Dendritic ulcer
369. Geographical ulcer
370. Corneal anaesthesia
371. Satellite lesions
372. Papilledema is commonly associated with
373. Visual sparing
374. Flame shaped hemorrhages at the disc
375. Raised intraocular pressure
376. Unilateral involvement
377. Complications of topical steroid use in the eye include the following except
378. Herpes simplex keratitis
379. Glaucoma
380. Cataract
381. Hypertension
382. The following are effective intraocular prophylaxis against opthalmia neonatorum
383. Tetracycline eye ointment
384. 2.5% povidone iodine solution
385. 1% copper sulphate
386. 0.5% erythromycin ointment
387. Regarding the extra - ocular muscles
388. The inferior oblique muscle is responsible for elevation in adduction
389. A palsy of the 6th cranial nerve will lead to an esotropia of the affected eye
390. All the recti muscles are supplied by the occulomotor nerve
391. They consist of smooth muscle fibers
392. All the muscles insert into the eyeball
393. Incision for draining a Chalazion should be
394. Vertical on the skin
395. Vertical on the tarsal conjunctiva
396. Horizontal on the tarsus if infected
397. Oblique to enable excusion of the capsule
398. Star shaped to allow for more room
399. In the visual fields, the Blind spot for the left eye is situated:
400. On the right of the centre
401. On the left of the centre
402. At the centre
403. On the left but inferior to the centre
404. Chronic dacryocystitis
405. In children is commonly due to injuries
406. Affected patients complain of epiphora
407. Pressure on lacrimal sac causes pus regurgitation
408. Treatment of chronic is surgery
409. The following could be true of chronic simple glaucoma
410. Presence of severe painful symptoms
411. Early visual acuity compromise
412. Normal findings on slit-lamp examination
413. Elevated intraocular pressures
414. Unilateral aphakia may be managed with
415. Aphakia spectacles
416. Spectacles with prisma
417. Spectacles with cylinders
418. Contact lenses
419. The earliest organic pathological change in diabetic retinopathy:
420. Pre-retinal hemorrhages
421. Hard exudates
422. Soft exudates
423. Micro - aneurysms
424. The normal refractive state of the eye is contributed by
425. The cornea
426. The anterior chamber
427. The axial length of the eye
428. The lens
429. The following are seen in acute anterior uveitis except
430. Pain
431. Cilliary injections
432. Mucopurulent discharge
433. Small pupil
434. Scleritis is associated with the following
435. Rheumatoid arthritis
436. Systemic Lupus Erythematosus
437. Herpes Zoster Opthalmicus
438. Ocular surgery
439. The following is true about cataracts
440. Cortical cataract is the most common type in adults
441. Cataract is the commonest cause of blindness worldwide
442. Diabetic cataract can be treated by controlling the patient’s blood sugar
443. Zonular cataract is the most common type of congenital cataract
444. The most common cause of congenital cataracts
445. Rubellla
446. Rubella
447. Toxoplasmosis
448. Diabetes in pregnancy
449. Regarding the lacrimal system
450. Nasal lacrimal duct obstruction (NLDO) is a common cause of epiphora in children
451. The tear-break-up time evaluates the quantity of the watery component of the tear fim
452. Reduction in tear production can lead to keratoconjunctivitis sica
453. 95% of children with NLDO require surgery by the age of 12 months
454. Lacrimal gland carcinoma has a good prognosis
455. Major ocular complications and findings of Systemic Hypertension include:
456. Retinal arteriosclerosis
457. Retinal vein occlusion
458. Retinal artery occlusion
459. Arteritic anterior ischemic optic neuropathy
460. Ocular motor nerve palsy
461. In patients with HIV/AIDS
462. Ocular and cerebral toxoplasmosis lesions concurrently present in upto 25% of patients
463. Conjunctival squamous cell carcinoma is an established marker of HIV/AIDS in Eastern Africa
464. Herpes Zoster Opthalmicus (HZO) is best treated with foscarnet eye drops
465. Ocular lues and cytomegalovirus retinitis never appear simultaneously
466. Immune recovery uveitis (IRU) can be a sight threatening complication of successful antiretroviral treatment
467. Established screening guidelines for diabetic retinopathy (DR) are
468. Type 2 diabetics should be screened first for DR three years after diagnosis
469. Slit lamp biomicroscopy (eg 90 or 78 D loupes) is highly sensitive and specific as it combines high magnification with stereoptic view
470. Direct ophthalmoscopy can be a useful screening tool for DR but has the disadvantage of monocular vision
471. Type 1 diabetics must be screened for DR on onset of their condition
472. All diabetics must undergo Fluorescein Angiography
473. Orbital cellulitis should be treated:
474. With systemic steroids
475. With antibiotic drugs and drainage of paranasal sinuses if involved
476. Excision of involved tissue
477. With steroid antibiotic eye drops
478. Rhegmatogenous detachment of the retina is caused by
479. Inflammation of the orbit
480. Formation of a hole or tear in the retina
481. Systemic diseases like diabetes or hypertension
482. Retinoblastoma
483. Corneal ulcers
484. Are not caused by fungi
485. Can be stained by fluorescein dye
486. Are caused by bacteria except pseudomonas
487. During treatment rarely requires padding of the affected eye
488. This is true about eyelashes
489. There are two rows at eye margin
490. Are absent at the medial part of the eyelid
491. Helps in warding off foreign bodies entering the eye
492. Helps in directing tears flowing on the cornea
493. Which of the following is not a cause of cataract
494. Trauma
495. Advancing age
496. Conjunctivitis
497. Uveitis
498. The following are contraindications to the use of contact lens
499. Inflammatory condition of cornea
500. Muscle imbalance
501. Dusty environmental condition
502. Keratoconjunctivitis sicca
503. Cicatricial entropion occurs secondarily to which of the following condition?
504. Cicatricial pemphigoid
505. Trachoma
506. Chemical burns
507. Steven-Johnson syndrome
508. The bacterial conjunctivitis which causes purulent lymphadenopathy
509. *Pneumococcus*
510. *Staphylococcus aureus*
511. *Gonococus*
512. *C.diptheriae*
513. Regarding trachoma:
514. Commonly caused by serotypes D to K
515. Follicles present are generally small 0.5 mm
516. Herbet’s pits are present at the superior limbus
517. Healed trachoma generally has no activity
518. Regarding the following
519. Chalazion is a chronic lipo - granulomatous inflammation secondary to retention of sebum caused by obstruction of meibomian gland.
520. Hordeolum internum is a small abscess of meibomian gland caused by an acute streptococcal infection.
521. Hordeolum externum is commonly associated with staphylococcal blepharitis
522. Chalazion is not a true cyst
523. The following are risk factors for retinal detachment
524. Myopia
525. Blunt trauma
526. Previous cataract surgery
527. Previous retinal photocoagulation
528. Regarding trachoma
529. It is caused by chlamydia subtypes D to K
530. Chlamydia trachomatis is an obligate intracellular organism
531. Its vector *Musca sorbens* prefers animal dung to human feces
532. It is the commonest infectious cause of blindness
533. The following are causes of leukocoria except
534. Retinal detachment
535. Retinoblastoma
536. Coat’s disease
537. Toxoplasmosis
538. The following is true about retinoblastoma except:
539. Autosomal dominant inheritance
540. Treatment is enucleation
541. Radiotherapy is also given
542. Treatment is evisceration
543. Bull’s eye maculopathy is associated with
544. Chlorpheniramine
545. Chloroquine
546. Chlorpromazine
547. Clofibrate
548. Main site of obstruction in primary open angle glaucoma is
549. At Schlemm’s canal
550. Juxtacanalicular trabecular meshwork
551. Episcleral veins
552. Scleral spur
553. Features of an acute attack of ACG (Angle Closure Glaucoma) include:
554. Eye becomes red and congested
555. IoP rises markedly
556. Attack broken only with treatment
557. AC has flare and cells and no KP’s
558. In retinal detachment, fluid accumulates between:
559. Layers of outer plexiform layer and inner nuclear layer
560. Neurosensory retina and layer of retinal pigment epithelium
561. Nerve fiber layer and rest of retina
562. Between the retinal pigment epithelium and Bruch’s membrane
563. Most common cause of visual loss in background of diabetic retinopathy
564. Retinal hemorrhage
565. Pre - retinal hemorrhage
566. Maculopathy
567. Vascular dilatation
568. Proliferative diabetic retinopathy includes
569. Cotton wool spots
570. Intraretinal microvascular abnormality
571. Venous looping and beading
572. Flame shaped haemorrhage
573. The following is/are true of allergic conjunctivitis
574. Papillae are seen in the tarsal conjunctiva
575. It is treated with topical steroids
576. It is the commonest eye disease in Kenya
577. Horner-Trantas dots can be found at the limbus