

Centurion University of Technology of Management and Science, Department of Optometry,
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Ocular Anatomy Question Bank

1. Ocular structure and development

Long questions

1. What is embryopathy*
2. Enumerate factors affecting growth of eye in foetus*
3. Dis. stages of vitreous development, des. its developmental anomalies

Shot Notes

1. Development of orbit

2. Cornea, Limbus, Sclera

Long Questions

1. Des. Anatomy and congenital anomalies of cornea.
2. Des microanatomy and biochemistry of cornea*
3. Des. Metabolism of cornea*
4. Des. Factors responsible for corneal transparency*.
5. Des. Effect of contact lens on corneal metabolism*

Shot Notes

1. Corneal endothelium
2. Corneal transparency

3. Uvea, Aqueous humour, intraocular pressure

Long question

1. Des gross anatomy of choroid*
2. Des arterial supply of iris, ciliary body and choroid
3. Des anatomy and anomalies of angle of anterior chamber
4. Des gross and microanatomy of angle of anterior chamber and various methods of studying it.
5. Des developmental defects resulting in development of glaucoma
6. Des development of ant. Segment of eye, what are the mesodermal dysgenesis affecting it.

7. Des abnormalities of angle on gonioscopy*
8. Des mechanism & site of production, circulation and drainage of aqueous humour *
9. Dis. theories of aqueous formation*
10. Des aqueous houer dynamics
11. How IOP is maintained at normal level in eye/ factors affecting the IOP*

Short note

1. Physiology of aqueous humour
2. Tonography
3. Applanation tonometry

4. Crystalline lens

Long question

1. Des development and surgical anatomy of human crystalline lens
2. Des anatomy and physiology of lens*

Short note

1. Microscopic anatomy of lens
2. Biochemical composition of lens
3. Metabolism of crystalline lens
4. Cateractogenesis

5. Vitreous humour

Long question

1. Des developmental anatomy of vitreous body, How age effects it

Short note

1. Vitreous biochemistry

6. Retina, visual pathway and physiology of vision

Long question

1. Des anatomy and physiology of retina in detail
2. Des congenital anomalies of optic disc
3. Des anatomy and physiology of retina
4. Des anatomy of macule. Enumerate macular function tests
5. Des photochromatic cells*
6. Des anatomy and development of optic nerve*
7. Des anatomy of visual pathway*
8. Des anatomy of optic chiasma*
9. Des visual field defects due to chiasmal lesion
10. Des various field defects caused by lesions at diff. levels in visual pathway *
11. Des metabolism of retina*
12. Des physiochemical changes in retina occurring when light falls on it*.
13. Des physiology of vision, its applied impotence in stereoscopic vision and field
14. Des concept of trichromacy and colour vision defect
15. Des theories of colour vision*
16. Des anomalies of colour vision*
17. Des colour blindness, CLx, its clinical impotence*
18. Des tests to find out colour perception*

Short note

1. Hene's nerve fiber layer of retina
2. Physiology of vision
3. Electroretinography
4. E O G
5. Visually evoked potentials
6. Dark adaptation/physiology
7. Colour vision

7. The Pupil

Long question

1. Des Mechanism of pupillary reflexes and their clinical significance

Short note

1. Abnormal pupillary reaction
2. Marcus Gunn sign

8. Extra ocular muscles and ocular motility

Long question

1. Des anatomy of superior, inferior oblique muscle*
2. How to evaluate the function of oblique muscles*

Short note

1. Anatomy of inferior rectus

9. Physiology of Binocular vision

Long question

1. Des physiology of binocular vision*
2. Des anomalous retinal correspondence*
3. Des theories of development of binocular vision*,
4. Des clinical test to evaluate binocular vision*

10. Conjunctiva, Lacrimal apparatus and Tear film

Long question

1. Des anatomy and development of lacrimal apparatus
2. Des Surgical anatomy of lacrimal passage (with Diagram), its assessment in health and disease*
3. Des Tear film / various component*
4. Methods of Tear film assessment/ Ix to Dx dry eye*

Short note

1. Binocular diplopia and diplopia testing
2. Schirmer's test
3. Conjunctival impression cytology
4. TNO test

11. Eyebrows and eyelids

Long question

1. Des anatomy of upper eyelid and its applied impotence in various lid pathological conditions.
Des Mx of severe ptosis
2. Des applied anatomy of lid, Mx of bilateral congenital ptosis
3. Des anatomy of levator palpebrae superiaris muscle*

4. How to decide the Surgical procedure in Rx of ptosis

12. Blood vessels and ocular circulation

Short note

1. Arterial supply of eye

13. Orbital nerve

Long question

1. Des anatomy/ course, distribution, clinically applied aspect and lesions of oculomotor nerve.
2. Des anatomy of abducent nerve, des syndromes associated with it

Short note

1. Trochlear nerve
2. Trochlear nerve palsy
3. 6th cranial nerve – abducent nerve palsy
4. Sympathetic innervation of eye

14. Skull, Orbit, PNS

Long question

1. Des development and anomalies of orbit
2. Des gross anatomy of bony orbit, its relation with surrounding structure,
Draw and label the structures passing through orbital apex
3. Des anatomy of sup. Orbital fissure and its clinical importance
4. Des anatomy of apex of orbit
5. Des Blow out orbital fracture and its Mx*

Short note

1. Development of orbit