



TOPIC-WISE OPHTHALMOLOGY  
DNB QUESTION BANK

**JUNE 2020**

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## CONJUNCTIVA, CORNEA AND REFRACTIVE SURGERY

1. a) Neural pathway for tear secretion by lacrimal gland. b) Tests for evaluating tear film. c) Etiopathogenesis of Sjogren's syndrome. (3+3+4)
2. Enumerate two immunosuppressive agents used in allergic eye diseases. Elaborate their mechanism of action and side effects. (10)
3. a) Describe microscopic structure of cornea. b) Discuss factors responsible for maintaining transparency of cornea. (4+6)
4. a) Clinical manifestation and complications of myopia. b) Surgical correction of myopia. (5+5)
5. Types, indications, advantages & disadvantages and complications of anterior lamellar keratoplasty. (2+2+4+2)
6. a) What is Dua's classification of chemical injuries? b) How it is better than Roper-Hall classification? c) Management strategies of grade III and grade IV chemical injuries. (3+2+5)
7. a) Etiopathogenesis and histopathology of ocular surface squamous neoplasia (OSSN). b) Use of anti-metabolites in the management of OSSN. ((2+3)+5)
8. What are the indications for biopsy with management strategies in a case of Primary Acquired Melanosis (PAM)? (5 – Part of a full question)
9. A 12-year-old child sustained injury to right eye while playing with bow and arrow. Discuss the management of corneoscleral perforation with iris prolapse in this patient. (10)
10. a) Enumerate various types of keratoplasty. b) Indications, procedure and complications of Deep Anterior Lamellar Keratoplasty (DALK) along with complications. (5+5)
11. a) Lamellar Keratoplasty: types and indication. b) DMEK. (5+5)
12. Differentiate between Regression, Progression and Ectasia post LASIK with respect to refractive errors. What is WF-Optimized, WF-Guided and Contoura procedures? (5+5)
13. a) Diagnosis of Meibomian gland dysfunction. b) DEWS 2 definition of dry eyes. c) Intense pulsed light therapy. d) Lipiflow. (4+2+2+2)
14. Risks and complications of phakic IOLs implantation. (5 – Part of a full question)

## RETINA, VITREOUS AND CHOROID

1. Electrophysiological basis of ERG and EOG and its clinical applications. (5+5)
2. a) Anatomy b) Biochemical composition, and c) Functions of retinal pigment epithelium. (3+2+5)
3. a) Draw a labelled diagram to describe the anatomy of macula. b) What are macular function tests? c) What is their clinical significance? (3+4+3)
4. a) Macro and Micro anatomy of the vitreous. b) Discuss vitreous substitutes in detail. (5+5)
5. Diagnosis and management of a non-resolving diabetic macular oedema. (4+6)
6. Etiology, evaluation, classification and management of retinopathy of prematurity. (2+2+2+4)
7. a) Eale's disease. b) Vitreous substitutes. (5+5)
8. Indications and complications of pars plana vitrectomy. (5+5)
9. Intravitreal Aflibercept Injection: mechanism of action, indications, dosage and adverse events. Add a note on comparative effectiveness with other drugs of same group. (5+5)
10. a) DRCR.net protocols for macular edema. b) VEGF-trap. (5+5)
11. What are the differential diagnosis and features to differentiate from each other, in a patient with pigmented lesion on fundus examination? (5 – Part of a full question)

## GLAUCOMA

1. a) Anatomy of angle of anterior chamber. b) Principle of gonioscopy and various types of gonioscopes. (5+5)
2. Differentiate between:
  - a) Iris processes and PAS (Peripheral Anterior Synechia). b) Pigmentary glaucoma and pseudoexfoliation. c) Spaeth and Shaffer classification angle. (2+4+4)



3. Indications, techniques and adverse effects of laser iridotomy, selective laser trabeculoplasty and argon laser trabeculoplasty. (3+4+3)
4. a) Rho kinase inhibitors in Ophthalmology. b) Micro-Invasive Glaucoma Surgery (MIGS). (5+5)

### **OCULOPLASTY**

1. A middle age female presents with unilateral proptosis of one-year duration. Discuss differential diagnosis, evaluation, and management. (3+3+4)
2. a) Surgical options for management of cicatricial entropion b) Describe types of orbital exenteration with their indications. (5+5)
3. a) Balloon Assisted Lacrimal Surgery. b) Implants used for orbital reconstruction - advantages and disadvantages. (5+5)
4. What is canaloplasty? Discuss indications, technique, IOP lowering efficacy and adverse effects. (3+7)
5. a) Topical chemotherapy for ocular tumours. b) Enumerate options for management of uveitic macular oedema (UMO). (5+5)

### **NEURO-OPHTHALMOLOGY**

1. Differential diagnosis of painful ophthalmoplegia in a 40-year-old woman. (10)
2. a) Ocular manifestations of neurofibromatosis. b) Ocular manifestations of Hansen's disease? (5+5)
3. a) Traumatic optic neuropathy. b) Optic nerve sheath fenestration surgery. (5+5)
4. a) Enumerate presenting features of 3rd nerve palsy. b) When will you decide for surgical intervention? Discuss surgical techniques.

### **OPTICS AND REFRACTION**

1. What are prisms? Describe their clinical and therapeutic applications in ophthalmology. (3+7)

### **LENS**

1. Enumerate options to overcome small pupil in cataract surgery. (5 – Part of a full question)

### **STRABISMUS**

1. Classification and management of esotropia in a child. (5+5)

### **MISCELLANEOUS**

1. Use of smartphone for Ophthalmic imaging & tele ophthalmology.