

DNB Question Paper  
DECEMBER 2018

**PAPER I**

**PART A**

1. a) Electrophysiological basis of Electroretinography (ERG) and Electro-oculography (EOG). 5+5  
b) Clinical applications of ERG and EOG
2. a) Anatomy and relations of the medial and lateral orbital wall.  
b) Indications of orbital decompression.  
c) Common causes of severe bleed during external dacryocystorhinorhaphy (DCR). 5+2+3
3. a) Types of afferent pupillary defect  
b) Causes of light-near dissociation  
c) Pharmacological tests for Horner syndrome 4+3+3
4. a) Ultra-structure of the trabecular meshwork  
b) Mechanisms of aqueous formation  
c) Physiology of aqueous humour drainage through trabecular meshwork 4+3+3
5. a) Neural pathway for tear secretion by lacrimal gland  
b) Test for evaluation of tear film  
c) Etiopathogenesis of Sjogren syndrome 3+4+3

**PART B**

6. a) Chemical fixatives for histopathological examination of ophthalmic specimens.  
b) Application of routine and special stains in histopathology 4+6
7. Discuss various preoperative and perioperative aseptic approaches for prevention of intraocular infection. 10
8. a) Define and enumerate vital dyes used in Ophthalmology  
b) Clinical applications of vital dyes in diagnosis and treatment of ophthalmic diseases.  
(1+2) +7

9. a) Sensory adaptation to strabismus  
b) What is fusional vergence?  
c) Tests to measure visual acuity in preverbal children. 3+3+4
10. a) Essential components of modular ophthalmic operating room.  
b) Disinfection and sterilization of operating room. 5+5

## PAPER 2

### PART A

1. Clinical features, evaluation and management of Meibomian gland disease. 3+3+4
2. a) Etiopathogenesis and clinical features of cicatricial conjunctivitis.  
b) Complications and management of cicatricial conjunctivitis. 5+5
3. A 64-year-old individual presents with sudden profound unilateral loss of vision. Discuss etiology, evaluation and management. 3+2+5
4. A 14-year-old boy is brought by his parents with occasional deviation of the eyes? Discuss differential diagnosis, evaluation and management of such a case. 2+4+4
5. Clinical features, complications and management of a case of Herpes Zoster Ophthalmicus. 4+3+3

### PART B

6. Clinical features, causes, evaluation and management of a case endophthalmitis, six weeks after cataract surgery. 2+2+3+3
7. a) Pathogenesis and differential diagnosis pigment dispersion syndrome.  
b) Evaluation and management of pigment dispersion syndrome 5+5
8. a) Causes of heterochromia iridis  
b) Clinical features and management of Fuch's uveitis syndrome. 2+4+4
9. Clinical features, Investigations and treatment of a case of primary intraocular lymphoma. 2+3+5
10. Clinical features, investigations, treatment and prognosis in a case of CMV retinitis. 2+2+4+2

## PAPER-3

### PART A

1. Causes, evaluation and management of eyelid retraction 3+5+4
2. How will you evaluate and manage an anophthalmic socket in a 3-year-old child? 5+5
3. a) Evaluation of pre-existing astigmatism in a patient with cataract  
b) Various surgical methods to manage preoperative astigmatism during cataract surgery? 4+6
4. a) Etiopathogenesis and clinical features of necrotizing scleritis  
b) Evaluation and management of necrotizing scleritis 5+5
5. What are the predisposing factors, per-operative signs and management of a case of suprachoroidal hemorrhage during an intraocular surgery? 3+3+4

### **PART B**

6. Evaluation and management during failure of filtration surgery in glaucoma. What are the indications of antimetabolite in this surgery? (4+4)+2
7. a) A 45-year-old patient presents with sudden onset vertical diplopia. What is the differential diagnosis?  
b) Evaluation and management of acute onset vertical diplopia 3+(3+4)
8. a) Indications and evaluation of a case for lamellar keratoplasty  
b) What are the causes of failure of a DSAEK procedure?  
c) How does DSAEK differ from DMEK surgically? 5+2+3
9. A 45-year-old patient presents with central scotoma. Discuss differential diagnosis, evaluation and management of such a case. 2+4+4
10. a) Indications and procedure for use of various tamponading agents in retinal surgery.  
b) Advantages and disadvantages of tamponading agents used in retinal surgery. 5+5

### **PAPER-IV**

### **PART A**

1. A 50-year-old female presents with abaxial proptosis.  
Discuss differential diagnosis, evaluation and management 3+3+4
2. Clinical feature, evaluation and management of ocular cysticercosis. 2+3+5

3. Evaluation and management of a case presenting with Iridodialysis 4+6
4. A 60-year-old patient presents with noduloulcerative lesion involving central lower lid. Discuss differential diagnosis, evaluation and management of such a case. 2+3+5
5. How will you suspect, investigate and treat a case of preclinical keratoconus? 3+3+4

### **PART B**

6. Indications, procedure, advantages and disadvantages of chemo-reduction for retinoblastoma 2+3+5
7. Evaluation and management of traumatic sub-retinal hemorrhage over the macula. 4+6
8. Evaluation and management of post uveitic cataract. 4+6
9. A patient present with central unilateral metamorphopsia. Discuss differential diagnosis evaluation and management of such a case. 3+3+4
10. a) Categories of low vision and classification low vision aids (LVA).  
b) Evaluation of a patient with low vision. (2+3) +5