



**DNB Ophthalmology  
Question Bank  
Neuro-Ophthalmology  
1999-2019**



**Eye Learn**

All about the Eye

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## NEURO-OPHTHALMOLOGY

1. Anatomy
  - a) Visual pathway
  - b) Blood supply of optic nerve
  - c) Posterior ciliary circulation
  - d) Pupillary pathway and anisocoria
2. Scotoma
3. Optic nerve dysfunction
4. Optic neuropathy
  - a) Hereditary optic neuropathy
  - b) TON
  - c) AION
  - d) NAION
5. Optic neuritis
6. Papilledema
7. BIH
8. Optic nerve tumors
9. Headache

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## ANATOMY

### VISUAL PATHWAY

1. a) Describe Pie on the floor" in visual field with respect to visual pathway. b) What are the options of treatment for a case of amblyopia in a child of 10 years of age? Explain the physiology in brief. (4+6) D2019(GUWAHATI)
2. a) Visual pathway and its blood supply.  
b) Anatomy of lateral geniculate body and visual cortex (5+5) J2019
3. Describe anatomy and lesions of optic tracts, chiasma and optic radiations. J2014
4. Causes and ocular manifestations of chiasmal lesions. (3+7) D2017
5. Draw a labeled diagram of visual pathways and briefly write about the correlation between level of lesion and clinical presentation. (10) D2011
6. Draw a labeled diagram of the visual pathways indicating the lesions and their causes at different levels. (5+5) J2011
7. Draw a diagram of visual pathway and show visual defects in craniopharyngioma and occipital lobe lesion. J2010
8. Visual field defects in pituitary tumors. (2008)

### BLOOD SUPPLY OF OPTIC NERVE

9. Blood supply of optic nerve head and intraorbital optic nerve with well-labelled diagrams, and highlight its clinical importance. (7+3) J2016
10. Discuss the vascular supply of optic nerve. Describe fluorescein angiographic details of optic nerve head. Give the relevance of optic nerve head blood supply in AION. (4+3+3) D 2011, 2008,2007
11. Draw a labeled diagram of the vascular supply of the optic nerve and its implications for papilledema and ischemic optic neuropathy. (6+2+2) J2011

### POSTERIOR CILIARY CIRCULATION

12. Write down anterior and posterior ciliary circulation and depict it by diagram. D2010
13. Describe posterior ciliary circulation. J2009

### PUPILLARY PATHWAY & ANISOCORIA

14. a) Pupillary pathway. b) Pathway for accommodation. (5+5) D2019
15. a) Types of afferent pupillary defect.  
b) Causes of light-near dissociation.  
c) Pharmacological tests for Horner syndrome (4+3+3) D2018
16. a) Pupillary pathways with diagram. b) Causes, grading and clinical importance of relative afferent pupillary defect. (5+5) J2017
17. Describe sympathetic nerve supply to the eye with the help of a diagram. Describe various pharmacological tests to diagnose the abnormalities of sympathetic system. J2014
18. Describe the pupillary pathway of the eye. Write in brief about the lesions light near dissociations and its implications. (5+5) J2013
19. Draw a labelled diagram of pupillary reflex pathway. Discuss approach to diagnosis of anisocoria. J2012
20. Causes, differential diagnosis and clinical implications of anisocoria. 3+3+4 J2011

## SCOTOMA

21. A 45-year-old patient presents with central scotoma. Discuss differential diagnosis, evaluation and management of such a case. (2+4+4) D2018
22. Define scotoma. How do you differentiate between positive and negative scotoma? Discuss the approach to diagnosis in a patient presenting with left hemianopia. J2012

## OPTIC NERVE DYSFUNCTION

23. a) Signs of optic nerve dysfunction. b) Various investigations available to assess the optic nerve function. (4+6) J2015

## OPTIC NEUROPATHY

### HEREDITARY OPTIC NEUROPATHY

24. What is Leber's Hereditary Optic Neuropathy? Describe briefly its evaluation and management 3+(4+3) D2019 (GUWAHATI)



### TON

25. Describe clinical features and management of Traumatic Optic-neuropathy. (5+5) D2011

### NAION

26. Etiology, clinical picture and management of NAION. J 2009
27. Diagnosis and treatment of temporal arteritis. (1999)

### AION

28. Describe typical and atypical clinical features, evaluation and management of arteritic AION (anterior ischemic optic neuropathy). (3+3+4) D2019
29. Ischemic optic neuropathy- diagnosis & management (5+5) D2017
30. How will you diagnose, investigate and treat a case of acute anterior ischemic optic neuropathy? (2+4+4) June 2016
31. Anterior ischemic optic neuropathy: types, clinical manifestations, investigations and management. (2+2+2+4) D2014

### OPTIC NEURITIS

32. Discuss the etiology, clinical feature, diagnosis and management of optic neuritis in a 40 years old female. J2012
33. Multiple Sclerosis - Clinical features in ophthalmology. Also enumerate associated systemic features. Discuss management and prognosis of the disease. (2008)
34. Ocular manifestations of demyelinating diseases. (2004)
35. Clinical features, investigations & treatment in a case of neuromyelitis optical ( Devic's disease). (2003)
36. Investigative profile in papillitis. (2002)
37. Signs, symptoms and diagnosis of papillitis. (2000)
38. Optic neuritis. (1999)

### PAPILLEDEMA

39. Describe pathogenesis and pathological features of papilledema. J2014
40. Causes & recent advances in management of papilledema. (2008)
41. Pathology of papilledema. (2003,2001)
42. Unilateral papilledema. (2000)
43. Optic nerve sheath decompression. (2000)

### BIH

44. Describe the clinical features, evaluation and management of idiopathic intracranial hypertension (3+3+4) D2019
45. Give clinical presentation, causes, and diagnostic modality and treatment options in benign intracranial hypertension. (2+3+2+3) D2013
46. Pseudotumor Cerebri. (2005)
47. Benign intracranial tension. (2001)

### OPTIC NERVE TUMORS

48. a) Neurofibromatosis-ocular manifestations.  
b) Differential diagnosis of optic nerve glioma. (5+5) J2019
49. What are the common tumors of optic nerve in adults? Give clinical features to differentiate them clinically and give salient pathologic features of these tumors. (3+2+5) J2013

### MIGRAINE/ HEADACHE

50. a) Approach to headaches related to Ophthalmology. b) Approach to a case of Amaurosis Fugax. (5+5) D2019
51. a) What are the main types of migraine? b) Differential diagnosis of the visual phenomena that accompany an attack of migraine. (3+7) J2015
52. Transient loss of Vision. (2002)
53. Investigations of Amaurosis Fugax and management. (2005)
54. Ocular Headache. (2001)
55. Localizing signs of Intra-Cranial tumors. (2003)

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