

FINAL EXAM  
JUNE 2018

NATIONAL BOARD OF EXAMINATIONS

OPHTHALMOLOGY

## PAPER-I

TIME: 3 HOURS  
MAX. MARKS: 100

OPH/J/18/26/I

**IMPORTANT INSTRUCTIONS**

- This question paper consists of 10 questions divided into Part "A" and part "B", each part containing 5 questions.
- Answers to questions of part A and part B are to be strictly attempted in separate answer sheet(s) and the main + supplementary answer sheet(s) used for each part must be tagged separately.
- Answers to question(s) of Part A attempted in answer sheet(s) of part B or Vice versa shall not be evaluated.
- Answer sheets of Part A and Part B are not to be tagged together.
- Part A and Part B should be mentioned only on the covering page of the respective answer sheets.
- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

Write short notes on:

**PART A**

1. a) Anatomical structure of upper eyelid. 5+3+2  
b) Its blood supply, venous drainage & lymphatic drainage.  
c) Clinical implications of its blood supply.
2. a) Anatomy of the medial wall of orbit. 5+3+2  
b) What is its importance in Orbital decompression?  
c) What is the most common cause of severe bleed during external DCR?
3. a) Detailed structure of retinal rods and cones. 6+2+2  
b) Their distribution over the retina.  
c) Implications in vision quality with rod and cone dysfunction.
4. a) What are mechanisms of aqueous formation? 5+3+2  
b) Detailed anatomy of the trabecular meshwork and Schlemm canal.  
c) Optical principle to see the angle structures.
5. a) What is a "Randomized Control Trial"? 3+3+4  
b) What is randomization and why is it required?  
c) What are confounding factors in a study and how to avoid them?

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## PAPER-I

**Please read carefully the important instructions mentioned on Page '1'**

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- Answers to question(s) of Part A attempted in answer sheets of Part B or vice versa shall not be evaluated.

**PART B**

6. a) What is anisocoria and indications for its investigation? (1+3)+(4+2)  
b) Give the physiological basis and causes of Light-near reflex dissociation.
7. a) Name 3 commonly used Ophthalmic preservatives in topical medication. 1+4+5  
b) What are the adverse effects of preservatives in ophthalmic medications?  
c) What are the various means of preventing these adverse effects?
8. a) What is AC:A ratio for convergence? 1+5+4  
b) What are the methods of measuring it?  
c) Briefly discuss the disorders resulting from altered AC:A ratio.
9. a) What is the principle of Optical Coherence Biometry? 2+2+6  
b) Which Ophthalmic equipment uses this principle?  
c) What are the advantages and disadvantages of this type of biometry?
10. a) Metabolism of the lens in the eye. 4+6  
b) How does the lens maintain transparency?

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