



Candidate Number

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**OPHTHALMIC BASIC SCIENCE EXAMINATIONS
ANATOMY
12 June 2009**

Duration of paper:

3 hours

Total Marks: 120

Total No. of questions:

26 (Sections A and B)

- ◆ Candidates must attempt all questions
- ◆ If you cross out an area of your own writing, it will not be considered by the examiners
- ◆ Please write legibly

SECTION A

- ◆ Write your answers in the spaces provided using LEGIBLE writing, use diagrams and point form where appropriate
- ◆ All twenty questions should be attempted.
- ◆ Each question is worth 3 marks.

Question 1

Name the ocular tissues derived from surface ectoderm.

Question 2

Name the muscles paralysed by interruption of the inferior division of the oculomotor nerve.

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Question 3

Name the bones which form the osseous canal of the nasolacrimal duct.

Question 4

Name the location of drainage of the ethmoid sinuses: anterior, middle and posterior.

Question 5

Name 2 structures which pass through the foramen ovale.

Question 6

List the actions of the superior oblique muscle.

Question 7

What is the blood supply of the optic radiation?

Question 8

List the attachments of the Levator Palpebrae Superioris aponeurosis.

Question 9

List the skin areas innervated by the ophthalmic division of the trigeminal nerve.

Question 10

List three microscopic features of the corneal endothelium which are responsible for its role in controlling hydration of the cornea.

Question 11

List the 3 sensory nuclei of the trigeminal nerve & the sensory modality subserved by each one.

Question 12

List the four rectus muscles and the distance of their insertion from the limbus.

Question 13

a) Which rectus muscle has the shortest tendon? (State its average tendon length)

b) Which rectus muscle has the longest tendon? (State its average tendon length)

Question 14

a) The pterion is at the junction of which skull bones?

b) What important structure lies on the deep surface of the pterion?

Question 15

List three destinations of the fibres of the optic tract.

Question 16

Indicate the 2 features which are responsible for the blood retinal barrier.

Question 17

Name the terminating channels of the following dural venous sinuses.

a) Transverse sinus: _____

b) Superior sagittal sinus: _____

c) Sigmoid sinus: _____

Question 18

Name the cells or fibres comprising these layers in light microscopic examination of retina:

a) Outer Nuclear Layer: _____

b) Inner Nuclear Layer: _____

c) Outer Limiting Membrane: _____

Question 19

Name the structures seen on gonioscopy of the anterior chamber angle of a normal open-angled eye, from anterior to posterior.

Question 20

Name the bones that form the medial wall of orbit.

END OF SECTION A

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SECTION B

- ◆ This section contains six (6) short essays
 - ◆ Each question is worth 10 marks
 - ◆ Candidates must attempt all questions
 - ◆ Make sure to put your candidate number on the top of each page
 - ◆ Start a new page for each question
 - ◆ Do not write on the reverse of any answer booklet page
 - ◆ Write your answers in the answer booklet using LEGIBLE writing
 - ◆ Labelled diagrams and common abbreviations may be used where appropriate
 - ◆ If you cross out an area of your own writing, it will not be considered by the examiners
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Question 1

Give an account of the iris, including its blood supply and innervation.

Question 2

Give an account of the blood supply of the optic nerve and chiasm.

Question 3

Describe the origin, course and distribution of the Trochlear nerve.

Question 4

Give an account of the venous drainage of the orbit including orbital contents.

Question 5

Give an account of the choroid including its functions.

Question 6

Describe the microscopic anatomy of the photoreceptors of neural retina and their relationship to other cells of the retina.

END OF PAPER: SECTION B