



Candidate Number

**The Royal Australian and New Zealand
College of Ophthalmologists**

A.C.N. 000 644 404

94 – 98 Chalmers Street,
SURRY HILLS NSW 2010 AUSTRALIA
Telephone 61 2 9690 1001 Facsimile 61 2 9690 1321

E-mail: ranzco@ranzco.edu

<http://www.ranzco.edu>

**OPHTHALMIC BASIC SCIENCE EXAMINATIONS
ANATOMY
09 November 2007**

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

List three signs and symptoms arising from damage to the nerves located within the cavity of the cavernous sinus.

Question 2

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

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Question 3

List the attachments of the suspensory ligament of Lockwood.

Question 4

List the bones which form the floor of the orbit.

Question 5

List in order the nerves involved in lacrimation from their attachment to the brain stem to the lacrimal gland.

Question 6

List three important features of the capillaries of choriocapillaris.

Question 7

List three nuclei that are connected by medial longitudinal fasciculus.

Question 8

List the destinations of the nerve fibres of the optic tract.

Question 9

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

Question 10

An object of visual interest is seen by the nasal half of the macula lutea of the left eye. Where specifically is this topographically represented within the following ?

i) optic chiasm _____

ii) optic radiation _____

Question 11

List the three cell types in corneal epithelium.

Question 12

Name the ocular tissues derived from neuroectoderm.

Question 13

List the three prominent nuclei that characterize a section through the brainstem at the level of the superior colliculus.

Question 14

List the structures superior to the levator palpebrae superioris within the bony orbit.

Question 15

Identify the regions of the head where branches of the internal and external carotid arteries anastomoses freely.

Question 16

List the sensory nerves supplying the cranial dura.

Question 17

Name the bones which form the osseous canal that conducts the nasolacrimal duct.

Question 18

Name the two main venous channels that drain the cavernous sinus.

Question 19

Name the muscles supplied by the mandibular division of the trigeminal nerve

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Question 20

Name the structures traversing the superior orbital fissures.

END OF PAPER: 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

Describe the origin, course, and distribution of the Oculomotor nerve (Cranial Nerve III).

Question 2

Give an account of the anatomical substrate of pupil miosis (pupil contraction) and mydriasis (pupil dilation).

Question 3

Give an account of the anatomy of the Ciliary Body. Include the innervation and blood supply.

Question 4

Describe the stroma of the cornea, including its microscopic structure and nerve supply.

Question 5

Give an account of the orbicularis oculi muscle, including its relations.

Question 6

Describe the gross anatomy, relations, nerve supply, action, and microscopic anatomy of the superior oblique muscle.

END OF PAPER: SECTION B