

THE ROYAL COLLEGE OF OPHTHALMOLOGISTS

DUKE ELDER PRIZE EXAMINATION 2016



The ROYAL COLLEGE *of*
OPHTHALMOLOGISTS

INFORMATION FOR CANDIDATES

Please read the following information carefully

This examination is intended for medical students who have completed their ophthalmology undergraduate teaching, but it is open to all medical undergraduates provided they have not graduated at the time of the examination.

Students may take the examination on more than one occasion provided they have not yet graduated and have not previously won the prize.

All candidates will receive their percentage score and rank position, as well as a pass or fail result. All successful candidates will receive a certificate.

The 1 ½ hour examination will be held on **Wednesday 9 March 2016** at 2.30pm.

Candidates should liaise with the medical school organiser if they wish to sit this examination. The College is only able to accept applications via medical schools in the British Isles. We are not able to accept individual applications.

Candidates must ensure that they have given their name to their medical school organiser prior to the closing date of **Wednesday 16 December 2015**. No candidates will be accepted after this date. Medical school organisers will submit the names of their medical students wishing to sit the examination to the Royal College of Ophthalmologists. Candidates will then be sent instructions on how to pay the examination fee. The deadline for fee payment is **Wednesday 13 January 2016**. Candidates who have not paid their fee by this date will not have a place at the exam. Examination fees should not be submitted to your medical school.

If you have any further queries please contact the:

Examinations Department
Royal College of Ophthalmologists
18 Stephenson Way
London
NW1 2HD
Email: exams@rcophth.ac.uk

Important Dates

Application Deadline All candidates should apply to their medical schools by this date	Wednesday 16 December 2015
Payment Deadline All candidates should pay the £10.00 exam fee by this date. Instructions on how to pay will be sent directly to candidates after the application deadline. <u>Candidates should not submit payment directly to medical schools.</u>	Wednesday 13 January 2016
Exam Date	Wednesday 9 March 2016
Results Date Results letters will be sent to your medical school. Successful candidates will also receive a certificate.	Friday 6 May 2016

THE DUKE-ELDER UNDERGRADUATE PRIZE IN OPHTHALMOLOGY

An undergraduate prize examination will be sponsored again this year on a national basis by The Royal College of Ophthalmologists. This examination is intended for medical students who have completed their ophthalmology undergraduate teaching, but it is open to all medical undergraduates provided they have not graduated at the time of the examination.

Students may sit the examination on more than one occasion provided they have not yet graduated and have not previously won the prize. The candidate gaining the highest mark will be offered to chance to visit St John's Eye Hospital in Jerusalem. The winning candidate can alternatively choose a cash prize of £400. There is no second prize.

The 90 minute examination consists of:

15, three stem Extended Matching Questions (EMQs)

20 one in four Multiple Choice Questions (MCQs)

Marking is on the basis of +1 for a correct answer and 0 marks for an incorrect answer (i.e. there is no negative marking).

The standard is high and candidates should anticipate a stiffer examination than they may encounter in their own university's undergraduate examinations in ophthalmology. Questions are mostly based on clinical ophthalmology but other areas covered include ocular physiology, anatomy and pathology as well as genetics of eye conditions and socio-economic medicine relevant to ophthalmology e.g. blind registration or world blindness. In the clinical questions all the sub-speciality areas within ophthalmology are covered including:

Cornea and external eye disease

Cataract

Glaucoma

Medical retina and vitreo-retinal surgery

Strabismus and paediatric ophthalmology

Neuro-ophthalmology

Ocular adnexal and orbital disease

Refractive errors and optics

Recommended Reading List

The Eye: Basic Sciences and Practice. Forrester JV, Dick AD, McMenemy P, Roberts F. WB Saunders, Elsevier. 2007 ISBN-10: 070202841X ISBN-13: 978-0702028410

MCQ companion to the Eye. Basic Sciences in Practice. Galloway PH, Forrester JV, Dick AD, Lee WR. WB Saunders 2001. ISBN-10: 0702025666 | ISBN-13: 978-0702025662 -

Clinical Optics. Elkington AR, Frank HJ and Greaney MJ. John Wiley & Sons, Blackwell Science, 1999. . ISBN: 0632049898/9780632049899 –

Clinical Anatomy of the Eye. Snell RS, Lemp MA. Blackwell Scientific Publications 1998. ISBN: 063204344X – old but can't have changed much

Clinical Ophthalmology: A Systematic Approach. JJ Kanski, B Bowling. Butterworth-Heinemann, Elsevier, 2011. ISBN-10: 0702040932 ISBN-13: 978-0702040931.

Clinical Ophthalmology: A Self-Assessment Companion. JJ Kanski, Agnes Kubicka Trzaska. Elsevier, 2007. ISBN-10: 0750675381, ISBN-13: 978-0750675383

EMQs And MCQs For The FRCOphth Part 2 [Paperback]
Patrick Chiam. Lulu Marketplace, 2011. ISBN 9781447806615

Extended Matching Questions (EMQs)

Extended matching questions are multiple choice items organised into sets that use one list of items in the set. The extended matching set includes four components:

1. A theme
2. An option list
3. A lead in statement
4. Three item stems

Example Questions

1. Options –Theme/ Topic

- A. Acute angle closure glaucoma
- B. Age-related macular degeneration
- C. Anterior ischemic optic neuropathy
- D. Cataract
- E. Central retinal artery occlusion
- F. Optic neuritis
- G. Papilloedema
- H. Retinal detachment
- I. Retinal vein occlusion
- J. Vitreous haemorrhage

Lead in: For each patient with loss of vision select the most likely diagnosis.

Stems:

1. An 80-year-old Caucasian woman complains of recent problems with reading vision, specifically words appearing distorted and blank patches being present. **Correct Answer B**

2. A 32-year-old female patient experiencing weakness and numbness in her left arm gives a three day history of increasing loss of vision in her right eye and pain on moving the eye **Correct Answer F**

3. A 54-year-old man complains of headaches that are made worse by coughing. They appear to be increasing in frequency. He admits to occasionally losing vision but only for a few seconds at a time. His visual acuities are normal. **Correct Answer G**

2. Options

- A. Bitemporal hemianopia
- B. Fifth cranial nerve palsy
- C. Fourth cranial nerve palsy
- D. Homonymous hemianopia
- E. Miosed pupil
- F. Optic atrophy
- G. Relative afferent papillary
- H. Seventh cranial nerve palsy
- I. Sixth cranial nerve palsy
- J. Third cranial nerve palsy

Lead in: Select the most appropriate option that would fit with the clinical scenario.

Stems:

1. A 68-year-old hypertensive man with poorly controlled diabetes (Type 2) presents with sudden onset horizontal diplopia. **Correct Answer I**

2. A fit 48-year-old woman complains of a very severe headache and droopy left upper lid she gets double vision when she lifts up her eyelid.

Correct Answer J

3. An 82-year-old hypertensive woman collapses at home. In casualty she is found to have a right hemiparesis, an up-going planter reflex and is dysphasic.

Correct Answer D

3. Options

- A. Aciclovir ointment
- B. Antibiotic drops
- C. Beta-blocker drops
- D. Corticosteroids drops
- E. Intravenous antibiotic
- F. Oral acetazolamide
- G. Oral aciclovir
- H. Oral corticosteroids
- I. Oral cyclosporin
- J. Prostaglandin drops

Lead in: Select the most appropriate therapy for the clinical scenario.

Stems:

1. A 55-year-old man has intra-ocular pressures of 32mmHg in each eye. His optic discs are pathologically cupped. He is using a salbutamol inhaler for his asthma.

Correct Answer J

2. A 73-year-old woman develops a painful rash on the right side of her forehead. Her right eye is closed because of associated lid oedema. She feels generally unwell.

Correct Answer G

3. A 32-year-old gardener develops a red eye with a purulent discharge. After two days it spreads to the other eye. His young daughter has a similar problem.

Correct Answer B

Multi Choice Questions (MCQs)

Multi Choice Questions are questions consisting of one best answer out of four options.

Example Questions

1. What would be the MOST likely diagnosis in a patient with uveitis that shows bilateral and symmetric hilar adenopathy on chest X ray and has raised serum angiotensin converting enzyme level?

- A. Behcet's Disease
- B. Sarcoidosis
- C. Syphilis
- D. Toxoplasmosis

Correct Answer B

2. What is thought to be the MAIN mechanism of action of prostaglandin analogues in their use for glaucoma treatment?

- A. Decrease aqueous production in the ciliary body
- B. Increase trabecular outflow
- C. Increase uveo-scleral outflow
- D. Neuroprotection of the optic nerve head

Correct Answer C

3. Centrocaecal scotomas are MOST commonly found in patients suffering from which of the following?

- A. Amblyopia due to squint
- B. Cerebrovascular Accident (Stroke)
- C. Nutritional Optic Neuropathy (Tobacco/alcohol amblyopia)
- D. Primary Open Angle Glaucoma

Correct Answer C

(Example Front Sheet)



ROYAL COLLEGE OF OPHTHALMOLOGISTS'

Duke Elder Undergraduate Prize Examination EMQ and MCQ Question Paper

Candidate Number: 12345
Candidate Name: Mr J Smith

Instructions to candidates

1) PLEASE COMPLETE THE ANSWER SHEET USING THE PENCIL PROVIDED. **BIROS AND PENS MUST NOT BE USED.**

2) Please **PRINT** your name on the MCQ Answer Sheet and fill in the Candidate Number box as follows:

Last Name: SMITH
Other Names: JOHN
Examination: Duke Elder

	Candidate number
	=0= =1= =2= =3= =4= =5=
1	=0= =1= =2= =3= =4= =5=
2	=0= =1= =2= =3= =4= =5=
4	=0= =1= =2= =3= =4= =5=
5	=0= =1= =2= =3= =4= =5=
2	=0= =1= =2= =3= =4= =5=

3) Candidates must decide whether each item is **CORRECT** and mark the Answer Sheet **BOLDLY**, with the pencil provided by filling in the appropriate response for each item.

e.g. For the EMQ section: if you think the answer to Question 1 is E then complete the mark sheet as follows:

~~=A=~~ ~~=B=~~ ~~=C=~~ ~~=D=~~ **=E=** ~~=F=~~ ~~=G=~~ ~~=H=~~ ~~=I=~~ ~~=J=~~

e.g. For the MCQ section: if you think the correct answer for Question 46 is Option A, the mark sheet should be completed as follows:

~~=A=~~ ~~=B=~~ ~~=C=~~ **D=** ~~=E=~~

PLEASE ENSURE THAT ONLY ONE BOX IS COMPLETED FOR EACH ITEM.

4) Candidates should mark their answers **CLEARLY**.

5) The following system of marking will apply: (NEGATIVE MARKING DOES NOT APPLY)

1 Correct
0 Incorrect

IF A BOX IS NOT COMPLETED, THE CANDIDATE SHALL BE AWARDED A MARK OF ZERO (0).

6) Candidates may change their selections by erasing them completely with the rubber provided and making an alternative selection.

7) Candidates are advised to go through the paper, answering what questions they can, before returning to the uncompleted questions. **PLEASE ENSURE YOU LEAVE SUFFICIENT TIME TO TRANSFER YOUR ANSWERS TO THE ANSWER SHEETS.**

8) **CANDIDATES SHOULD REMAIN IN THEIR PLACES AT THE END OF THE EXAMINATION** until their Question Papers, Answer Sheets, pencils and rubbers have been collected by an Invigilator.

EMQ AND MCQ PAPERS AND INSTRUCTIONS FOR CANDIDATES MUST NOT BE REMOVED FROM THE EXAMINATION HALL. IF ANY PAPER GOES MISSING, THE CANDIDATE CAN BE IDENTIFIED AND THE MATTER WILL BE REFERRED TO THE COLLEGE COUNCIL

TIME ALLOWED FOR EXAMINATION: 1 ½ HOURS