

The Royal College of Ophthalmologists

Part 2 FRCOphth Examination

Candidates' Information Pack

(Updated May 2014)

The Examination

The Part 2 FRCOphth is a synoptic exit examination that uses several different and complementary assessment methods. Success in this examination allows a doctor to become a Fellow of the Royal College of Ophthalmologists. It is a necessary but insufficient requirement for completion of specialty training in the UK.

The examination is blueprinted against the General Medical Council's (GMC) *Good Medical Practice* and the detailed learning outcomes of the curriculum for Ophthalmic Specialist Training (OST), which has been approved by the GMC.

Candidates are expected to demonstrate a depth of knowledge and understanding expected of an independent specialist (consultant) not sub-specialising in the field being tested. Candidates are required to pass this examination by the end of year **seven** of ophthalmic specialist training.

From 1 August 2014, candidates will be permitted a maximum of four attempts in which to pass the Part 2 FRCOphth Written Component and four attempts in which to pass the Part 2 FRCOphth Oral Component. Examination attempts prior to August 2014 will be discounted.

The assessment methods selected for the Part 2 FRCOphth are:

Written Component:

- Single best answer from four multiple choice questions (MCQ)

Oral Component:

- Structured viva (SV)
- Objective structured clinical examination (OSCE)

From late 2014 the Part 2 FRCOphth Written Component will be held twice yearly in June and December. The Part 2 FRCOphth Oral Component is held twice yearly in April and November..

The validity of a pass in the Part 2 FRCOphth Written Component will be limited to 7 calendar years. Candidates who have not successfully completed the Part 2 FRCOphth Oral Component within this time will be permitted to re-sit the written component on the proviso that they have not exhausted the permitted four attempts at the written component and retain at least one attempt at the oral component.

Required Reading

Candidates should be familiar with the following documents

- The Ophthalmic Specialist Training Curriculum (<http://curriculum.rcophth.ac.uk>).
- The Part 2 FRCOphth Examination Syllabus, which is available in the Part 2 FRCOphth Application Pack (www.rcophth.ac.uk/examinations)
- Good Medical Practice, GMC (http://www.gmc-uk.org/guidance/good_medical_practice.asp)
- Policy on allegations of cheating and misconduct, which is available under 'Admissions to Examinations' (www.rcophth.ac.uk/examinations)

Part 2 FRCOphth Written Component

The Part 2 FRCOphth Written Component consists of 180, single best answer from four, multiple choice questions (MCQ). For logistical reasons, the written examination is sat in two halves of 90 MCQ, each lasting two hours. The total examination time is four hours. There is no negative marking.

The blueprint for the written examination is detailed below. The numbers provided for each sub category (e.g. Glaucoma – 10 MCQ; Cataract – 10 MCQ) are an approximation for illustrative purposes.

Blueprint Topic	Total Number of MCQ	Sub-category	Approximation of MCQ
Clinical Ophthalmology	128	Trauma	4
		Plastics / Orbit	10
		Glaucoma	10
		Strabismus / Paediatrics	16
		Retina (Medical & Surgical)	20
		Cataract	10
		Cornea / External	20
		Uveitis / Oncology	12
		Neurology	16
		Medicine	10
Pharmacology/Therapeutics	12		12
Investigations	16	Ophthalmic	9
		Orthoptic	3
		Neuro-imaging	3
		Other	1
Miscellaneous	16	Statistics/Epidemiology	3
		Research/ EBM	3
		Nutrition	1
		Ethics / Driving	4
		Economics	1
		Guidelines / Standards	4
Basic science	8	Anatomy/Physiology	2
		Pathology	2
		Genetics	3
		Optics	1
TOTAL	180		180

Example MCQ:

Laser trabeculoplasty is MOST likely to be effective in an eye with which of the following?

- Angle recession glaucoma
- Posner Schlossman glaucoma (inflammatory glaucoma)
- Pseudo-exfoliative glaucoma
- Reigers syndrome.

Correct Response – C

Standard Setting for the MCQ

The pass mark for the MCQ paper will be set by a panel of examiners using Ebel's method prior to the examination.

Part 2 FRCOphth Oral Component

Structured Viva

Introduction

The Structured Viva consists of a series of strictly timed assessment 'stations', where various areas of competence are tested by examiners using an objective marking scheme.

Format of the Structured Viva

The Structured Viva will consist of a series of five stations, each of which will be timed for precise periods of 10 minutes. Station 7 of the OSCE, Communication Skills, will not be conducted in a clinical setting and will be held at the same time as the Structured Viva, lasting for a precise period of 10 minutes.

The stations are set out as follows:

Station 1: Patient investigations and data interpretation

Station 2: Patient management 1

Station 3: Patient management 2

Station 4: Attitudes, ethics and responsibilities

Station 5: Audit, research and evidence based practice and Health promotion and disease prevention

Two examiners will be present at each station for the duration of the cycle.

The start and finish of each station is controlled by a timekeeper and clearly signalled.

Conduct of the Structured Viva

The timekeeper will announce the commencement of the station and the candidate will enter. The examiners will begin the questions, following pre-agreed questions to ensure the same information is requested of each candidate. At the end of the 10 minute session the timekeeper will signal the end of the station. **However it is possible that the structured questions may have been completed prior to the end of allotted time. Under these circumstances the viva will terminate ahead of schedule and the candidate will be informed that that viva station is complete and will be asked to leave that station. The candidate should then wait outside that station until asked to move on by the timekeeper.** The candidate will leave the station and be directed to the next station. 5 minutes will be allowed for changeover and for examiners to independently complete the mark sheet. The examiners are requested to avoid giving signals suggesting a correct or incorrect answer.

Station 1: Patient investigations and data interpretation

Case-based discussion may include (but not be restricted to) the following:

- Interpretation of biometry
- Ocular and neuro-imaging
- Hess charts
- Electrophysiology
- Working with uncertainty

Stations 2 & 3: Patient management 1 & 2

Case-based discussion may involve cases which are infrequently seen but essential to manage by all ophthalmologists and unlikely to be represented in the OSCE examination. It may include (but not be restricted to) the following:

- Endophthalmitis
- Ocular Trauma
- Intraocular and orbital neoplasia
- Emergency presentations (e.g. neurological, ophthalmic and those requiring medical referral)
- Complex cases

Station 4: Attitudes, ethics and responsibilities*

Case-based discussion may include (but not be restricted to) the following:

- Suspected child abuse
- Medical ethics
- Consent
- Confidentiality
- Duties of a doctor
- Appraisal and revalidation
- Management of complaints
- Critical incident reporting
- Poor performance in a colleague

Station 5: Audit, research and evidence based practice* and Health promotion and disease prevention

Case-based discussion may include (but not be restricted to) the following:

Audit, research and evidence based practice

- Principles of audit and research
- Use of published evidence
- Published clinical guidelines

Health promotion and disease prevention

- Screening for ophthalmic disease
- Prevention of cross infection
- Hospital acquired infection
- Drug side effects

* Candidates are advised to read and make themselves familiar with:

- NICE Guidelines
- College Guidelines
- GMC documents e.g. Good Doctors Safer Patients, Revalidation, Good Medical Practice etc
- DVLA
- Strategic papers
- In some instances candidates may receive advance notification asking them to read a particular paper for discussion at the forthcoming examination

Timetable

An example of the timetable for a cycle of the examination is set out below. The Communication Skills OSCE station is conducted at the same time as the Structured Vivas for logistical reasons.

		Examiners A&B	Examiners C&D	Examiner s E&F	Examiners G&H	Examiners I&J	Examiners K&L
		Station 1	Station 2	Station 3	Station 4	Station 5	Station 6 (Communication Skills)
10 MINS	09.00-09.10	Candidate 1	Candidate 2	Candidate 3	Candidate 4	Candidate 5	Candidate 6
5 MINUTE INTERVAL							
10 MINS	09.15-09.25	Candidate 6	Candidate 1	Candidate 2	Candidate 3	Candidate 4	Candidate 5
5 MINUTE INTERVAL							
10 MINS	09.30-09.40	Candidate 5	Candidate 6	Candidate 1	Candidate 2	Candidate 3	Candidate 4
5 MINUTE INTERVAL							
10 MINS	09.45-09.55	Candidate 4	Candidate 5	Candidate 6	Candidate 1	Candidate 2	Candidate 3
5 MINUTE INTERVAL							
10 MINS	10.00-10.10	Candidate 3	Candidate 4	Candidate 5	Candidate 6	Candidate 1	Candidate 2
5 MINUTE INTERVAL							
10 MINS	10.15-10.25	Candidate 2	Candidate 3	Candidate 4	Candidate 5	Candidate 6	Candidate 1

At each station, the examiner should remind the candidate of the time available and the signals used to indicate the timing. It is vital that the timing of the station is strictly adhered to.

Method of Assessment for the Structured Viva

The mark sheets

10 marksheets, in total, will be completed for each candidate by the examiners i.e. two examiners per station, 5 stations. Each structured viva is divided into four marking sections to be judged on a 4 point Likert scale as follows:



Marking guidance for each Viva section is included for examiners within the structured question. Each examiner will therefore award up to 12 marks per viva station, with each mark counting towards the final overall score. The maximum total score for the Structured Viva exam is therefore 120.

For all candidates – whether pass or fail – detailed notes will be made on the reverse of the mark sheet so that constructive feedback can be forwarded to the candidate including the type of cases and questions asked. This feedback will be given as “satisfactory performance” and “unsatisfactory performance”. Both examiners score the candidate independently.

Standard Setting for the Structured Viva

For each station, in addition to a numerical score, candidates receive a global score of pass, borderline or fail used only to identify the pass mark for the Structured Viva using the borderline group method.

Red Flags

Candidates whose performance in any viva station has given the examiners cause for concern e.g. indicated unsafe practice, will alert the Senior Examiner by way of a ‘red flag’ on the marksheet. The cause for concern must be documented clearly on the marksheet. Candidates receiving a red flag should reflect that their practice has been deemed particularly poor by the examiner/s and should discuss this with their Educational Supervisor.

Objective structured clinical examination (OSCE)

Introduction

The OSCE consists of a series of strictly timed assessment 'stations', where various areas of competence are tested by examiners using an objective marking scheme.

Structure of the OSCE

The OSCE consists of 5 stations each timed for a precise period of 20 minutes. Station 6, Communication Skills, will not be conducted in a clinical setting and will be held at the same time as the Structured Viva, lasting for a precise period of 10 minutes.

The stations are set out as follows:

Station 1: Anterior segment

Station 2: Glaucoma and lid

Station 3: Posterior segment

Station 4: Strabismus and orbit

Station 5: Neuro-ophthalmology

Station 6: Communication Skills (takes place logistically with Viva aspect of the exam)

The subject matter is to be viewed as a guide. Patients may be presented in any station, and a degree of overlap is expected to occur.

Two examiners will be present at each station for the duration of the cycle. In station 6, an ophthalmologist is paired with a trained lay examiner. Other than the communications skills station, the examination will take the form of short cases.

The candidate will be examined on three patients at each station.

The start and finish of each station is controlled by a timekeeper and clearly signalled. For the Communication Skills station the timekeeper will indicate when there are two minutes remaining.

Conduct of the OSCE

The timekeeper will announce the commencement of the station. The candidate will remain standing beside the station. One examiner will take the candidate to the station and instruct the candidate on the task required for the first patient. This should involve giving the candidate a brief clinical scenario/history and asking the candidate to examine the patient appropriately. After examination of the patient, the candidate will be asked to describe his/her findings and there will follow a short discussion on the investigation and management of the clinical problem. The second examiner should take the candidate to the second patient and ask the candidate to examine them. This will be repeated, as appropriate, for the number of patients in the station. Candidates should be careful to undertake appropriate hand hygiene during the examination. Candidates need to be aware that because of time constraints, they may be asked to terminate their examination to move onto the questions.

It is also technically possible for the examiners to complete their questions in advance of the allotted time. If this is the case the candidate will be asked to leave the room. This is not to be taken as a particularly good or bad sign.

At the end of allotted time, the timekeeper will signal the end of the station. The candidate will leave the station and be directed to the next station. Time is scheduled to allow for changeover and for examiners to independently complete the mark sheets.

Equipment

The host centre are responsible for providing appropriate large items of equipment, such as slit lamps, couches, indirect ophthalmoscope and distance fixation targets. Candidates are advised to consider bringing items of equipment with which they are familiar. These might include (but are not restricted to) direct ophthalmoscope, occluder (with ruler), pen torch, near fixation target, hat pins (for fields) and condensing lens for slit lamp fundus examination.

Station 1: Anterior segment

The candidate will be examined on three cases.

Skills to be tested may include (but not be restricted to) the assessment, interpretation, diagnosis and management of:

- Abnormal lid position (ectropion, entropion, ptosis, trichiasis, lagophthalmos and exposure)
- Abnormal lid swelling (chalazion, benign and malignant tumours)
- Blepharitis
- Epiphora
- Infectious external eye disease including conjunctivitis and keratitis
- Dry eye
- Cicatricial conjunctival disease
- Corneal and conjunctival degenerations
- Peripheral ulcerative keratitis
- Corneal dystrophies
- Allergic and atopic disease
- Complications of contact lens wear
- Corneal oedema, opacity, ectasia, corneal transplantation and corneal graft rejection and other complications
- Episcleritis, scleritis
- Peripheral ulcerative keratitis
- Conjunctival and anterior uveal tumours
- Aniridia and other dysgenesis
- Anterior uveitis
- Anterior segment injury
- Lens dislocation
- Assessment, diagnosis and management of all forms of cataract and the complication of cataract surgery
- Diagnosis and management of associated medical conditions
- Genetic diseases affecting the anterior segment

In this section candidates must be proficient in the use of the slit lamp microscope in examining the anterior segment employing direct and indirect illumination, retro-illumination, specular reflection and scleral scatter as appropriate to best demonstrate signs.

Station 2: Glaucoma and lid

The candidate will be examined on three cases.

Skills to be tested may include (but not be restricted to) the assessment, interpretation, diagnosis and management of:

- Ocular hypertension and all forms of glaucoma and its management, including the use of hypotensive agents and glaucoma drainage surgery and its complications
- Ocular hypotension following glaucoma surgery and its management
- Abnormal lid position (ectropion, entropion, ptosis, trichiasis, lagophthalmos and exposure)
- Abnormal lid swelling (chalazion, benign and malignant tumours)
- Blepharitis
- Diagnosis and management of associated medical conditions
- Genetic diseases associated with glaucoma and lids

Station 3: Posterior segment

The candidate will be examined on three cases.

Skills to be tested may (but not be restricted to) include the assessment, interpretation, diagnosis and management of:

- Vitreous disorders
- Retinal detachment
- Retinoschisis
- Degenerative retinal disorders
- Choroidal disorders
- Macular disorders
- Intraocular tumours (primary and secondary)
- Injury involving the posterior segment
- Retinal disease including inflammatory and vascular disorders
- Diagnosis and management of associated medical conditions
- Genetic diseases affecting the retina

Candidates must be proficient in the examination of the posterior segment and including the use of the direct ophthalmoscope, indirect ophthalmoscope (indentation to be avoided) and slit lamp lenses.

Station 4: Strabismus and orbit

The candidate will be examined on three cases.

Skills to be tested may include (but not be restricted to) the assessment, diagnosis and management of:

- Concomitant strabismus
- Amblyopia and disorders of binocular vision
- Incomitant strabismus
- Nystagmus
- Ocular motility syndromes (e.g. Duane's, Brown's)
- Ocular myopathies
- Supranuclear eye movement disorders
- Abnormalities of eye movements including saccades and pursuit
- Neuromuscular disease
- Orbital swelling, exophthalmos, orbital masses, thyroid eye disease
- Diagnosis and management of associated medical conditions

Candidates should be proficient in eye movement evaluation and cover test (including alternate cover and prism cover test) and methods of examining orbital disease.

Stations 5: Neuro-ophthalmology

Skills to be tested may include (but not be restricted to) the assessment, interpretation, diagnosis and management of:

Neuro-ophthalmology

- Visual pathway disorders including optic nerve disorders
- Visual field loss secondary to disorders of the visual pathway
- Field testing using confrontation techniques
- Cranial nerve abnormalities
- Pupil abnormalities
- Abnormalities of eye movements including saccades and pursuit
- Disorders of the extrapyramidal system
- Headache
- Ocular myopathes

- Nystagmus
- Incomitant strabismus
- Supranuclear disorders of eye movements
- Neuromuscular disease

Candidates should be proficient in assessment of cranial nerves, pupils, the assessment of visual fields by confrontation and coordination/cerebellar function. Candidates may be asked to examine a fundus or optic disc using a direct ophthalmoscope during the neuro-ophthalmology station.

Station 6: Communication Skills (*one ophthalmologist examiner and one lay examiner*)

This station will take place within the Structured Viva component of the exam for logistical reasons.

The Communications Skills station involves an interaction with one simulated patient and is worth half the marks of Stations 1-5. The station is assessed by an ophthalmologist and a trained lay examiner. The candidate will receive a GP letter or case scenario to read. The candidate may make notes on the paper provided, which will be destroyed afterwards and not used for assessment. The timekeeper will announce commencement of the station. The interview will last for a 10 minute duration and involve interaction between the candidate and the patient/subject and may include history taking, taking consent for surgery, some form of counselling or advising patients. The interview will commonly take the following format:

- being given a brief background to the patient, a GP letter or an optometrist report to read
- taking a relevant history
- being presented with the findings of examination or investigation
- counselling the patient
- alternatively, a scenario may be suggested, e.g. a patient complaining about their treatment

History taking skills includes eliciting the presenting complaint systematically, enquiring about past medical history, family/smoking/alcohol treatment history. The candidate should be able to follow relevant leads and use appropriate verbal and non-verbal responses. There should be a good balance of open and closed questions and the interview should be conducted at an appropriate pace, without rushing or interrupting the subject inappropriately but covering the main aspects. The candidate should be able to interpret the history and discuss the implications of the patient's main problem.

Communication skills: The candidate introduces himself or herself to the subject and explains their role clearly. They should put the subject at ease and establish a good rapport, exploring their concerns, feelings and expectations – while demonstrating empathy, respect and a non-judgemental attitude. The candidate should be able to provide clear explanations, free of jargon, which the patient/subject understands. They should be able to summarise the interview and check the patient understands of the discussion.

It is vital that the information given to the patient is accurate and appropriate. This is an important aspect of this assessment. Candidates will be informed by the timekeeper when there are two minutes remaining in order to appropriately conclude the consultation.

Timetable

An example of the timetable for a cycle of the examination is set out below.

Time	Examiners A&B	Examiners C&D	Examiners E&F	Examiners G&H	Examiners I&J
	Station 1	Station 2	Station 3	Station 4	Station 5
0900-0920	1	2	3	4	5
0920-0925	Rotation break & marking				
0925-0945	5	1	2	3	4
0945-0950	Rotation break & marking				
0950-1010	4	5	1	2	3
1010-1015	Rotation break & marking				
1015-1035	3	4	5	1	2
1035-1040	Rotation break & marking				
1040-1100	2	3	4	5	1
1100-1105	Rotation break & marking				

At each station, the examiner should remind the candidate of the time available and the signals used to indicate the timing. It is vital that the timing of the station is strictly adhered to.

OSCE – Method of Assessment

The mark sheets

12 mark sheets in total will be completed for each candidate by the examiners i.e. two examiners per station, 6 stations. Each aspect of the OSCE station is judged on 4 point a Likert scale as follows:



For stations 1-5 examiners are asked to reach a judgment for both of the following elements:

- Examination
- Diagnosis and Management

For station 6 the examiners are asked to reach a judgement for each of the following elements:

Lay Examiner:

- Establishment of Rapport and Information Gathering
- Understanding of Information Given
- Patient Input re Overall Communication Skills

Ophthalmologist Examiner:

- Establishment of Rapport and Information Gathering
- Information delivery
- Appropriateness of Advice and Accuracy of Information

This will generate 2 marks per element per patient. Stations 1-5 are equally weighted with a maximum of 18 marks available per examiner, per station. A maximum of 9 marks per examiner are available for Station 6, Communications Skills. The maximum total score for the OSCE is therefore 198. All marks count towards the final overall score.

For all candidates – whether pass or fail – detailed notes will be made on the reverse of the mark sheet so that constructive feedback can be forwarded to you. This feedback will be given as “positive performance” and “negative performance”, although the examiners are free to provide feedback using other titles.

Both examiners score the candidate independently.

Standard Setting for the OSCE

For each station, in addition to a numerical score, candidates receive a global score of pass, borderline or fail. This is used only to identify the pass mark for the OSCE (for the whole exam) using the borderline group method.

Red Flags

Candidates, whose performance in any OSCE station has given the examiners cause for concern e.g. indicated unsafe practice, will alert the Senior Examiner by way of a 'red flag' on the marksheet. The cause for concern must be documented clearly on the marksheet. Candidates receiving a red flag should reflect that their practice has been deemed particularly poor by the examiner/s and should discuss this with their Educational Supervisor.

Important Note:

Aggressive or inconsiderate behaviour, physical or verbal, to a patient will invariably result in a red flag.

Part 2 FRCOphth Written Result

To pass the Part 2 FRCOphth Written Component, candidates are required to achieve the pass mark plus one standard error of measurement (SEM),

Part 2 FRCOphth Oral Result

To pass the Part 2 FRCOphth Oral Component, candidates are required to pass both the Structured Viva and OSCE sections. Candidates must re-sit the entire oral component, even if a pass was previously achieved in any section.

Cross Compensation

If a candidate marginally fails the Structured Viva, their total marks for both the Viva and the OSCE will be added together. If this mark exceeds the combined pass marks for both components, they will be allowed to pass the examination. **It is NOT possible to compensate a poor OSCE with a good viva result.**

Notification of Results

The results of the Part 2 FRCOphth Written Component will be dispatched by post two weeks after the day of examination.

The results of the Part 2 FRCOphth Oral Component will usually be released four weeks after the final day of examinations. Final results will be sent to candidates by first class post and the pass list will be displayed on the College website. Candidates are not permitted to telephone the College for examination results.

Counselling

The College places great importance on providing guidance to those candidates whose performance failed to meet the standard to pass the examination. For the Part 2 FRCOphth Written Component candidates will receive the percentage of questions correctly answers per blueprint category. For the Part 2 FRCOphth Oral Component, examiners are asked to provide notes to assist in this process, particularly if there is concern regarding a candidate's conduct during the examination (e.g. if the clinical method of the candidate was rough or caused patient discomfort). All candidates will receive details of their performance for formative purposes. It is intended that this is for personal information and that the candidate should only share this with his/her educational supervisor. Candidates receiving a red flag should reflect that their practice has been deemed particularly poor by the examiner/s and should discuss this with their Educational Supervisor.

Appeals

A copy of the College's Appeals Procedure is available online at www.rcophth.ac.uk/examappeal. The sole grounds for appeal are:

- There is evidence of a procedural irregularity in the conduct or content of the Examination or Assessment (including administrative error) which has adversely affected the candidate's performance

OR

- There were exceptional circumstances which adversely affected the candidate's performance in the Examination or Assessment

The College will endeavour to deal with exceptional circumstances fairly and consistently. Please note that candidates presenting for an examination are thereby deemed to be fit and healthy to do so. Please note, appeals will not be accepted on the grounds that a candidate considers his/her effort were under-marked, that the candidate did not understand or was unaware of the Examination or Assessment Regulations or because the candidate seeks to question professional or academic judgement.