



**RCSI**

## **Membership of the Royal College of Surgeons in Ireland Ophthalmomogy**

### **Regulations & Guidance Notes**

Revised August 2021



# RCSI

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## Introduction

The MRCSI (Ophth) is an internationally recognised examination that assesses competence in clinical ophthalmology and the relevant basic sciences. It focusses on the assessment of the key components of clinical competence: knowledge, clinical skills, communication, clinical reasoning ability and professionalism. Candidates are required to demonstrate competence in all of these areas to achieve success in the examinations.

The MRCSI (Ophth) examination is exclusive to trainees in the Basic Specialist Training (BST) programme in ophthalmic surgery and the Basic Medical Training (BMT) programme in medical ophthalmology in Ireland.

The standard of the MRCSI examination is commensurate with the degree of competence in clinical ophthalmology and relevant basic sciences required to perform the duties of a junior registrar or first year trainee in Higher Specialist/Medical Training (HST/HMT). Therefore, to pass this examination, candidates will need to demonstrate a breadth of knowledge and clinical skill that enables them to work with a degree of clinical independence in all areas of ophthalmology but under the supervision of a senior clinician/consultant ophthalmologist.

Performance in the MRCSI (Ophth) examination forms an important part of the scorecard (approximately 15% of the total) for trainees in the BST/BMT programme in Ireland aiming to enter HST/HMT. The examination is mandatory for trainees on the National Training Programme in Ireland.

## The examination

The examination is in three parts:

- 1. MRCSI (Ophth) Clinical Optics and Refraction**
- 2. MRCSI (Ophth) Written Examination**
- 3. MRCSI (Ophth) Clinical Examination**

## Eligibility to take the examinations

- Candidates must be on the BST or BMT training programme in Ireland.
- Candidates must have completed 18 months of ophthalmology training in order to become eligible to take the MRCSI (Ophth) Clinical Optics and Refraction examination.
- In order to progress to the MRCSI (Ophth) Written Examination, candidates must have passed the FRCOphth Part 1 Examination.
- Candidates must have completed 2 years of ophthalmology training in order to become eligible to take the MRCSI (Ophth) Written Examination.
- Success in the MRCSI (Ophth) Written Examination is required to progress to the MRCSI (Ophth) Clinical Examination.

**No other examinations will be accepted for progression to the MRCSI (Ophth) Written and Clinical Examinations.**

**The FRCOphth Refraction Certificate will be accepted in place of the MRCSI (Ophth) Clinical Optics and Refraction Examination for the award of MRCSI (Ophth). No other examinations will count towards the award of MRCSI (Ophth).**



# RCSI

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**Candidates who are qualified optometrists who can demonstrate that they have been registered with the General Optical Council in the United Kingdom or CORU in Ireland within 5 years of sitting the MRCSI (Ophth) Clinical Optics and Refraction examination are exempt from sitting this component of the examination.**

## **Examination calendar**

**MRCSI (Ophth) Clinical Optics and Refraction Examination** – this is held in April each year. A supplementary (repeat) examination will be held in June each year for candidates who were unsuccessful in their April attempt.

**MRCSI (Ophth) written Examination** – this is held in October each year. A supplementary examination will be held in January each year for candidates who were unsuccessful in their October attempt.

**MRCSI (Ophth) Clinical Examination** – this is held in February each year. A supplemental examination will be held in March each year for candidates who were unsuccessful in their February attempt.

All examinations are held in Dublin.

**It is recommended that trainees aim to complete the FRCOphth Part 1 in the first 18 months of BST/BMT or earlier, the MRCSI (Ophth) Clinical Optics and Refraction Examination between months 18 and 24, and the MRCSI (Ophth) Written and Clinical Examinations in year 3 of basic training.**

## **Limit on attempts**

Each part of the MRCSI (Ophth) may be attempted a maximum of 4 times. The MRCSI (Ophth) Clinical Examination must be passed within 2 years of success in the MRCSI (Ophth) Written Examination.

## **MRCSI (Ophth) Clinical Optics and Refraction Examination content and format**

This component of the examination assesses competence in refraction and practical clinical optics. Extensive practice and experience in clinical refraction is required to pass this component. Candidates should also ensure they receive adequate tuition and supervision in practical refraction from a senior trainee, consultant or optometrist prior to the examination.

The refraction component of examination is strictly 30 minutes long and is supervised by two ophthalmologists. In the first 20 minutes of the examination the candidate will be asked to perform the following on a patient:

- Take a brief relevant history
- Assess visual acuity for distance and near
- Perform retinoscopy and an accurate subjective refraction and provide an appropriate spectacle prescription for distance and near
- Assess the patient's binocular cooperation and understand the practical implications of the findings

In the remaining 10 minutes of the refraction component the candidate may be asked to perform and demonstrate knowledge of any of the following (if not already assessed):

- Focimetry (manual or automated)
- Duochrome/+1 blur test/Binocular balance
- Lens neutralisation
- Maddox rod
- Near addition



# RCSI

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- Cycloplegic refraction
- Measurement of interpupillary distance
- Prescribing prisms
- Visual acuity testing of a child

The ability to provide an accurate spectacle prescription within the allotted time is required to pass this component. The candidate will receive a pass or a fail in the MRCSI (Ophth) Clinical Optics and Refraction Examination. The performance at the refraction exam will not contribute to the scorecard for progression to HST/HMT.

### **MRCSI (Ophth) Written Examination content and format**

This is an examination of clinical ophthalmology, clinical optics and refraction, and ophthalmic pathology. General basic science questions that have relevance to the practice of ophthalmology will also be asked. See below for a detailed examination syllabus.

The examination comprises a multiple-choice question (MCQ) paper comprising 100 single best answer questions (also known as type A). Three hours is allowed for the examination. Each question consists of an initial stem followed by 5 possible answers, identified A, B, C, D and E. Candidates should select one item they believe to be correct. Every other item in that question must be left blank. Questions may include printed photographic reproduction of clinical findings including photographs, imaging and graphical data or pathological material relating to the questions concerned. There is no negative marking. A detailed examination syllabus is provided below.

### **Standard setting**

The pass mark is determined in advance of each examination by the Examinations Committee using the Angoff method of standard setting.

### **Overall result**

Candidates will receive a pass or fail based on their performance against the pass mark determined by the standard setting examination committee. The score from the written examination will account for 25% of the total examination score that contributes to the HST scorecard. Trainees who are required to repeat the examination will have their score capped at a pass mark for supplementary or repeat attempts.

### **MRCSI (Ophth) Clinical Examination**

A pass in the MRCSI (Ophth) Written Examination is required to progress to this examination. This is an examination of clinical ophthalmology and ophthalmic pathology. General basic science questions that have relevance to the practice of ophthalmology will also be asked. A detailed examination syllabus is provided below.

- The format is that of a multi-station clinical and data OSCE examination in which the full spectrum of subspecialties of ophthalmology, including ophthalmic pathology and related basic sciences, will be examined.
- The candidate, will be asked to assess between one and 3 clinical cases or scenarios at each of the clinical stations.
- The examination will focus on the following core clinical competencies:



# RCSI

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- Communication skills: this may be assessed in any of the stations, for example through history taking, obtaining consent for a proposed procedure, explaining a management plan to the patient or breaking bad news.
- Interpretation of investigations
- Knowledge of relevant evidence base medicine and audit
- Clinical examination skills: these will be examined in detail and the ability to perform a competent examination of the patient(s) is a requirement of the examination.
- Professionalism including attitude, ethics and responsibilities
- Clinical management skills and knowledge
- Clinical material including photographs of pathological preparations, microbiology or other laboratory investigations and clinical photographs and investigations will be central to some of the stations.
- All candidates will be asked similar questions in each station.
- Equal marks are awarded for each station and the cumulative score will be used to determine the overall score of the examination. Different levels of attainment will be scored appropriately from 0 - 100% and will be entered into the scorecard. A mark of 40% or less is a fail, a borderline fail is 45% and a pass is 50%.
- Candidates receiving a borderline fail in a station will be able to compensate with a higher score from another station. However, a fail mark in any station will result in an overall fail in the examination.
- The score from the clinical exam will account for 75% of the total exam score that is used in the HST scorecard.
- Trainees who are unsuccessful on their first attempt in the MRCSI (Ophth) Clinical Examination in February of year 3 of BST/BMT may sit a supplemental examination in March, prior to the selection process for the higher training schemes. Trainees who need to sit the supplemental examination will have their score capped at a pass mark.

## Further guidance

In the clinical examination there is a particular emphasis on communication skills, clinical examination techniques, the ability to formulate an appropriate differential diagnosis based on the clinical findings, and the ability to propose a suitable management plan based on current best practice for each case examined. Candidates are rewarded for thoroughness and efficiency in their clinical skills so these should be very well practiced under the supervision of senior trainees and consultants before the examination. All equipment that is required for the examination is provided. However, it is recommended that candidates bring their own equipment such as pin hole occluder, fixation targets, targets for confrontation field testing, pen torch, etc if they wish to avoid being unfamiliar with the equipment provided. The trial lenses and trial frames used in the refraction component are standard and should be familiar to all candidates.

During the examination, it is important that you understand what the examiner is asking you to do. Therefore, do not hesitate to ask the examiners to repeat the instructions if they are not clear.

You need to be clear and precise in your replies, making sure that the answers are given in a logical manner. If you feel that you have done badly in any of the questions, you should not dwell on this but concentrate on answering the next question well. A weaker performance on one question may be counterbalanced by a stronger performance elsewhere. Examiners are there to assess your knowledge and understanding on essential issues. The degree of difficulty of the questions will vary during the examination.



# RCSI

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Patients will be helping us with this examination and it is vital that you are courteous and kind to them. Failure to introduce yourself and to respect the patients will be unacceptable. You must also be aware that many patients are nervous about participating in this examination and may be concerned that they may say something which will fail you. They also, therefore, are frequently anxious. They have taken time to come and help us and to help you, so please be courteous to them. Most patients ask afterwards how successful you have been and are genuinely concerned that you do well.

Good hand hygiene is vital. Aqueous gel or hand washing facilities will be available and must be used between all patients.

### **Withdrawal from the Examination**

Any candidate wishing to cancel his application either before or after the closing date will forfeit their fee in **FULL**.

Applications for consideration or a refund on medical grounds must be accompanied by a medical certificate. Applications for consideration of a refund on compassionate grounds should be supported by the consultant or surgical tutor responsible for training. All such applications must be submitted to the examinations department/section of the appropriate College within 14 days of the commencement of the examination.

The Colleges reserve the right, regardless of eligibility to take the examination, to review applications on an individual basis in exceptional circumstances.

Candidates with special needs should advise the appropriate College at the time of application of the nature of their needs and any assistance that they require. Requests should be supported by medical evidence (an educational psychologist's report is required for requests for extra time because of dyslexia). If appropriate, details of extra time or other allowances made by other examining bodies should be given, although the Colleges are not bound to follow these

### **Results**

Results will be posted on the website, a result letter will be available to download from the candidates online profile. Candidates will receive a breakdown of their marks for all Parts of the examination.

### **Appeals Mechanism**

Candidates who wish to make an appeal about the conduct of their examination must address it to the examinations department/section of the appropriate College within 30 days of the publication of results. Appeals will be considered which allege maladministration or bias or impropriety of some kind, whether in the conduct or in the determination of the result of the examination. Appeals disputing the academic judgement of the examiners will not be allowed. Details of the appeals process and fees charged may be obtained from the Examinations' Office.

### **Improper Conduct by Examination Candidates**

In the case of improper conduct of an examination candidate as defined below, the College may impose a penalty relating to the candidate's eligibility for the relevant or future examinations. Improper conduct is defined as:



# RCSI

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- Dishonestly obtaining or attempting to obtain entry to the examination by making false claims about eligibility for the examination or falsifying any aspects of the entry documentation.
- Obtaining or seeking to obtain unfair advantage during an examination, or inciting other candidates to do the same. Examples of unfair advantage are: having on the person any material that would give advantage in an examination once the examination has commenced (this includes electronic communication devices), communicating or attempting to communicate with another candidate once the examination has commenced, refusing to follow the instructions given by examiners or examinations staff concerning the conduct of and procedure for the examination. This list is not exhaustive.
- Removing or attempting to remove from the examination any confidential material relating to the conduct of the examination.
- Obtaining or attempting to obtain confidential information concerning the examination from an examiner or examination official.
- Passing confidential information on the content of the examination to a third party.

The list given above is not exhaustive.

The College may also on an individual basis decide that a candidate should not be allowed to proceed further with the examination or, having passed the examination, may not be admitted to Membership, according to their own statutes and regulations, in cases where serious misconduct not related to the examination is judged to make the person unfit to become a Member of the College.

### **Notification of Pregnancy and Deferral**

A deferral may be permitted to candidates supplying an appropriate medical report which satisfies the relevant College indicating that:

- the candidate has any pregnancy related problems or illness; and/or
- the candidate's confinement is due shortly before or around the date of the examination; and/or
- the candidate has sufficient discomfort for her to consider that it will have a detrimental affect on her performance.
- In such circumstances, a deferral will be permitted and no further fee will be required.

Any candidate who does not inform the College of her pregnancy and is consequently unable to sit for that examination will not normally be allowed to defer this examination without submission of another fee.

**NOTE: These Regulations are under continual review. It is recommended that candidates review the RCSI website to ensure that they have the most up-to-date information. Any changes will be announced on the website.**



# RCSI

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## Syllabus

The examination syllabus is designed to complement the curriculum of Basic Specialist Training (BST) of the Irish College of Ophthalmologists. Further details of this curriculum can be found at <http://www.eyedoctors.ie/trainees/bst.asp>. It is recommended that candidates familiarise themselves with the requirements for completion of BST as described on the ICO website.

### Main subjects:

- Generic competencies and professionalism
- Clinical history taking and examination in ophthalmology
- Investigations in ophthalmology
- Principles of ophthalmic surgery
- Clinical optics
- Clinical ophthalmology
  - Cornea & external diseases
  - Cataract & Refractive surgery
  - Oculoplastics, lacrimal and orbital disease
  - Glaucoma
  - Medical Retinal disease
  - Vitreoretinal surgery
  - Uveitis
  - Ocular oncology
  - Neurophthalmology
  - Paediatric Ophthalmology & Strabismus
  - General medicine relevant to ophthalmology
- Ophthalmic pathology

### Generic competencies and professionalism

- Professional standards, ethics and good medical practice
- Principles of clinical governance
- Clinical audit and patient safety
- Communication skills:
  - Breaking bad news
  - Dealing with distressed patients and/or relatives
  - Dealing with complaints
  - Communicating with colleagues
- Visual impairment
  - International definitions
  - Psychological and social implications for the patient
  - Available support resources
- Driving and occupational regulations related to visual impairment in Ireland/ United Kingdom
- Principles of evidence based medicine
- Basic epidemiology and clinical research techniques

### Clinical history taking and examination in ophthalmology

Candidates must demonstrate competence in clinical assessment in all areas of ophthalmology and relevant medical specialties.





# RCSI

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## **Investigations in ophthalmology**

Keratometry

Corneal topography

Pachymetry

Optical coherence tomography of anterior segment

Specular microscopy

Confocal microscopy

Wavefront analysis

Microbiological investigations

    Diagnostic corneal scrape

    Conjunctival swabs

    Intra-ocular samples; vitreous biopsy, anterior chamber tap

Schirmer's test

Retinal photography

Optical coherence tomography of posterior segment

Fluorescein angiography

Indocyanine green angiography

Scanning laser ophthalmoscopy

Scanning laser polarimetry

A and B scans

Ultrasound biomicroscopy

Doppler ultrasound

Dacryocystography

Plain skull and chest X ray

CT thorax

Orbital and neuro-CT scans

Orbital and neuro-MRI scans

Neuro-angiography

Electroretinography

Electrooculography

Visually evoked potentials

Humphrey and other automated perimeters

Goldmann perimetry

Hess charts

DEXA scans

Urinalysis

Serum biochemistry, haematology, immunology, relevant endocrine blood tests

Investigation of patients with suspected TB, syphilis and other relevant infectious diseases

## **Principles of ophthalmic surgery**

Sterilisation

Surgical instrumentation

Sutures and their uses

Common ophthalmic surgical procedures

Management of trauma to the eye and adnexae



# RCSI

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## **Clinical optics**

Notation of lenses: spectacle prescribing, simple transposition, toric transposition

Identification of unknown lenses: neutralisation, focimeter, Geneva lens measure

Aberrations of lenses: correction of aberrations relevant to the eye, Duochrome test

Optics of the eye: transmittance of light by the optic media, schematic and reduced eye, Stiles-Crawford effect, visual acuity, contrast sensitivity, catoptric images, emmetropia, accommodation, Purkinje shift, pinhole

Ametropia: myopia, hypermetropia, astigmatism, anisometropia, aniseikonia, aphakia

Accommodative problems: insufficiency, excess, AC/A ratio

Refractive errors: prevalence, inheritance, changes with age, surgically induced

Correction of ametropia: spectacle lenses, contact lenses, intraocular lenses, principles of refractive surgery

Problems of spectacles in aphakia: effect of spectacles and contact lens correction on accommodation and convergence, effective power of lenses, back vertex distance, spectacle magnification, calculation of intraocular lens power, presbyopia

Low visual aids: high reading addition, magnifying lenses, telescopic aids - Galilean telescope

Clinical refraction; near and distance vision correction, tests of binocularity

Prescribing prisms

Direct and indirect ophthalmoscopes

Retinoscope

Focimeter

Simple magnifying glass (Loupe)

Lensmeter

Automated refractor

Slit-lamp microscope

Applanation tonometry

Keratometer

Specular microscope

Operating microscope

Zoom lens principle

Corneal pachymeter

Lenses used for slit lamp biomicroscopy (panfunduscope, gonioscope Goldmann lens, 90D lens, etc.)

Fundus camera

Lasers

Retinal and optic nerve imaging devices (OCT, SLO, GDx)

## **Clinical ophthalmology**

### **Cornea and external eye disease**

Clinical anatomy

Infections of the conjunctiva

Cicatricial conjunctival disease: Stevens-Johnson syndrome, mucous membrane pemphigoid; other causes

Allergic conjunctival disease; vernal keratoconjunctivitis, atopic keratoconjunctivitis, seasonal allergic conjunctivitis, giant papillary conjunctivitis

Conjunctival malignancies: ocular surface squamous neoplasia, melanocytic neoplasms

Pterygium



# RCSI

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Benign lesions of the conjunctiva

Blepharitis and acne rosacea

Scleritis and episcleritis

Corneal infections: bacterial keratitis, herpes simplex keratitis, varicella zoster keratitis, fungal keratitis, acanthamoeba keratitis

Recurrent corneal erosion syndrome

Dry eye syndrome

Autoimmune corneal disease: peripheral ulcerative keratitis and corneal melting disorders, Mooren's ulcer

Keratoconus and other ectasias

Pseudophakic/aphakic bullous keratopathy; other causes of corneal oedema

Corneal dystrophies, degenerations and deposits

Neurotrophic keratopathy

Trauma: penetrating, chemical injury

Congenital corneal abnormalities

Contact lenses

Corneal Transplantation, limbal stem cell transplantation

Eye banking

## **Cataract and refractive surgery**

Clinical anatomy of the lens

Acquired cataract:

Aetiology

Management

- Biometry and planning of refractive outcome

- Intraocular lenses

Pre-operative evaluation

Predicting surgical challenges

Surgical methods, equipment and instrument

Anaesthetic techniques

Complications of cataract surgery and local anaesthesia

Managing coexisting cataract and glaucoma

Cataract surgery combined with penetrating keratoplasty

Lens-induced glaucoma

Phacolytic inflammation

Viscoelastics

Intraocular lenses

Cataract surgery post corneal refractive surgery

Managing refractive surprise after cataract surgery

Ectopia lentis

Nd:YAG laser capsulotomy

Congenital cataract including surgical management options



# RCSI

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Optical treatment and prevention of amblyopia

Corneal refractive surgery: arcuate keratotomy, laser (LASIK, LASEK, PRK)

Refractive lens surgery; clear lens extraction, phakic IOLs

## **Oculoplastics, lacrimal and orbital disease**

Clinical anatomy

Eyelid malpositions including ectropion, entropion, ptosis, lagophthalmos, lid retraction

Lash abnormalities; trichiasis, distichiasis

Congenital abnormalities of the lids

Abnormal lid swellings and benign and malignant lid lesions

Blepharospasm

Dermatochalasis

Lid trauma

Facial nerve palsy

Principles of oculoplastic surgical technique

The watering eye

Congenital and acquired abnormalities of the lacrimal system

Lacrimal surgery

Orbital cellulitis

Orbital inflammation including thyroid eye disease

Orbital tumours

Orbital trauma

Congenital abnormalities of the orbit

Vascular lesions of the orbit

Evisceration, enucleation and exenteration

## **Glaucoma**

Relevant clinical anatomy and physiology

Epidemiology and screening

Mechanisms of glaucoma

Optic nerve head assessment

Visual field analysis in glaucoma

Tonometry

Gonioscopy

Paediatric glaucoma

Open angle glaucomas

Ocular hypertension

Angle closure glaucomas

Medical management

Laser therapies

Surgical management including complications



# RCSI

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## **Medical Retinal disease**

### Clinical anatomy

#### Vascular retinal disorders:

- Diabetic retinopathy
- Arterial and venous occlusive disease
- Ocular ischaemic syndrome
- Hypertensive retinopathy
- Retinal arterial macroaneurysm
- Retinal Vasculitis
- Coat's disease
- Sickle cell retinopathy
- Eales' disease
- Retinal features of blood disorders, e.g. anaemia, leukaemia, and myeloma
- Retinal vascular anomalies

#### Age-related macular degeneration

- Epidemiology, risk factors, and pathophysiology
- Management

#### Retinal dystrophies

- Retinitis Pigmentosa
- Flecked retina syndromes
- Macular dystrophies
- Congenital stationary night blindness
- Choroidal dystrophies and degenerations
- Hereditary vitreoretinopathies

#### Angioid streaks

#### Central serous retinopathy

#### Cystoid macular oedema

#### Degenerative myopia

#### Drug-induced retinal disease

#### Phototoxicity

#### Radiation retinopathy

## **Vitreoretinal surgery**

### Clinical anatomy

#### Peripheral retinal lesions

#### Retinal breaks

#### Retinal detachment

- Rhegmatogenous
- Serous retinal
- Tractional
- Proliferative vitreoretinopathy

#### Macular hole

#### Epiretinal membrane

#### Vitreous haemorrhage



# RCSI

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Endophthalmitis  
Trauma and IOFB  
Retinoschisis

## **Uveitis**

Clinical anatomy of the uveal tract

Congenital abnormalities  
Infectious uveitis  
Non-infectious immune-mediated uveitis  
Uveitis masquerade syndromes  
Systemic disease associated uveitis  
Investigation of the patient with uveitis  
Principles of uveitis management  
Management of cataract and glaucoma in uveitis

## **Ocular oncology**

Malignant intraocular tumours  
    Retinoblastoma  
    Uveal melanoma  
    Uveal metastases  
    Lymphoma and leukaemia  
Benign intraocular tumours  
Choroidal naevus  
Choroidal haemangioma  
Choroidal osteoma  
Retinal hamartomas  
Retinal vascular tumours  
Investigation and management of intraocular tumours

## **Neurophthalmology**

Clinical anatomy  
Clinical assessment of ocular motility, diplopia, nystagmus, abnormal eyelid and facial movements, pupils, ptosis, proptosis, cranial nerve function and visual fields  
Ocular motility disorders  
Cranial nerve palsies  
Visual field abnormalities  
Pupil abnormalities  
Nystagmus  
Optic disc abnormalities  
Optic neuropathies  
Visually evoked cortical potentials  
Pituitary and chiasmal disorders  
Intracranial tumours  
Headache and facial pain



# RCSI

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Migraine  
Benign intracranial hypertension  
Cerebrovascular disease  
Optic neuritis and multiple sclerosis  
Myasthenia gravis  
Parkinson's disease  
Psychosomatic disorders and visual function  
Blepharospasm and hemifacial spasm  
Periocular Botulinum toxin injection technique

## **Paediatric Ophthalmology & Strabismus**

Clinical anatomy of the extraocular muscles  
Physiology of eye movement control  
Binocular function  
Accommodation anomalies  
Assessment of strabismus  
    Cover, cover-uncover test and alternate cover test  
    Assessment of ocular movements  
    Measurement of deviation  
    Assessment of fusion, suppression and stereo-acuity.  
    Knowledge of Hess Chart/Lees Screen, field of BSV and uniocular fields of fixation

### Paediatric strabismus

    Infantile esotropia  
    Acquired esotropia  
    Intermittent exotropia  
    Congenital superior oblique weakness  
    Duane's syndrome  
    Brown's syndrome

### Adult

    Forced duction test technique  
    Tests to predict postoperative diplopia  
    Concomitant strabismus in adults  
    Third, fourth and sixth cranial nerve palsy  
    Supranuclear causes of eye movement deficits  
    Strabismus due to Myasthenia, thyroid eye disease and orbital trauma

### Principles of strabismus surgery

Principles of adjustable surgery techniques  
Botulinum toxin, role in the management of strabismus

### Paediatric refractive errors

Vision testing in children  
Amblyopia  
Retinopathy of prematurity  
Visual loss secondary to neurological disease in infants and children  
Leukocoria  
Leber's congenital amaurosis  
Albinism



# RCSI

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Phakomatoses  
Aniridia

## **General medicine relevant to ophthalmology**

Systemic diseases with manifestations relevant to ophthalmology in the following specialities:

- Rheumatological disease
- Dermatology
- Respiratory medicine
- Neurology
- Endocrinology
- Cardiology
- Chromosomal disorders

Medical management of the perioperative patient

Medical emergencies:

Candidates are expected to be able to assess patients with the following life threatening emergencies and initiate appropriate treatment prior to the arrival of specialised assistance:

- Cardiorespiratory arrest
- Shock
- Anaphylaxis
- Hypoglycaemia
- The breathless patient

## **Ophthalmic Pathology**

Benign and malignant lesions of the eyelids

Cornea endothelial dysfunction and corneal dystrophies

Glaucoma

Cataract

Diabetes

Age Related Macular Degeneration

Retinal vascular occlusion

Retinal detachment and proliferative vitreo-retinopathy

Ocular tumours

Tissue sampling for pathological investigation; types of biopsy, fine needle aspiration, transport of specimens





# RCSI

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## Sample MCQs for Part 2 MRCSI

A 34 year old man presents with a severely painful red right eye of two weeks duration. He has a 3 month history of sinusitis, rhinitis and intermittent epistaxis but has no other past medical history. On examination, the right eye shows severe peripheral ulcerative keratitis, intense episcleral injection and marked tenderness to gentle palpation. Which one of the following investigations is most likely to confirm the aetiology?

- A. Serum rheumatoid factor
- B. Mantoux test
- C. Chest x-ray
- D. VDRL/TPHA
- E. Serum ANCA

ANSWER: E

A 65 year old myopic male with Type II diabetes mellitus suffers a right isolated sixth nerve palsy with diplopia of 8 pd in the primary position. Which of the following distance glasses would you prescribe?

- A. R: -3.00 DS 4 pd BO, L: -2.75 DS 4 pd BO
- B. R -3.00 DS 4 pd BI, L: -2.75 DS 4 pd BI
- C. R: -3.00 DS 8 pd BO, L: -2.75 DS
- D. R: -3.00 DS, L -2.75 DS 8 pd BO
- E. R: -3.00 DS 8 pd BI, L: -2.75 DS

ANSWER: A

With regard to macular holes, which one of the following statements is true?

- A. They are equally common in men and women
- B. Stage 1 macular holes are managed by observation as they commonly resolve spontaneously
- C. The risk of developing a macular hole increases after posterior vitreous detachment
- D. They are complicated by rhegmatogenous retinal detachment in approximately 5% of idiopathic cases
- E. Progression from stage 2 to stage 3 macular hole is characterised by the appearance of a Weiss ring

ANSWER: B