



International Examinations

INTERNATIONAL CLINICAL SCIENCES
EXAMINATION FOR OPHTHALMOLOGISTS

Instructions for Candidates

Clinical Sciences



Introduction

The International Council of Ophthalmology is the executive body of the International Federation of Ophthalmic Societies. One of the objectives of the Council is to promote the excellence of eye care worldwide by encouraging individuals to acquire and maintain the highest standard of knowledge for the practice of Ophthalmology. The International Basic Science Examination and the Clinical Sciences Examination are part of that initiative.

Objectives of the International Clinical Sciences Examination

The Clinical Sciences Examination is designed to discover whether candidates have acquired the breadth and depth of knowledge of the clinical sciences related to ophthalmology, to enable them to recognise and treat the diseases of the eye with which they will come in contact in day to day practice. *This Examination will be of theoretical knowledge only and cannot be used as an assessment of competence or technical ability. The Examination does not verify training, test practical competence or reflect the needs and variation of diseases found in different countries. Therefore it is not intended for individual certification and does not by itself constitute a licence to practise.*

The work of an ophthalmologist varies so much in different regions and countries that it is necessary for each country or institution concerned to conduct a further test of competence according to the local needs and requirements before accreditation. Many countries have well developed examination systems to assess the competence of their trainees and to fulfil the requirements of the regulating bodies of that country in relation to the practice of medicine. However, many smaller countries and institutions do not have the structure, facilities or staff to establish such a system. These countries and institutions have welcomed the opportunity for their trainees to be tested in the theoretical aspects of ophthalmology to a recognised high standard so that they can concentrate their resources on assessing the practical competence of the candidate.

Effect on Training Programme

The existence of an international examination provides the possibility for eye departments with residents in training, or individual doctors, to assess their performance in relation to a uniform standard.

Effect on Promotion

Heads of eye departments throughout the world have great difficulty in deciding on the level of competence and knowledge of a particular candidate applying for training in ophthalmology, or in promotion from one post to another. The

acquisition of this qualification will indicate the level of theoretical knowledge of the candidate in relation to a uniform standard. This can be of particular importance if a candidate is moving from one country to another to undertake further training.

Structure of the Examination

The Clinical Sciences Examination is offered to medical practitioners who have passed the Basic Science Examination and the Theoretical Optics and Refraction examination or an examination of a similar standard recognised by the International Council of Ophthalmology.

By prior agreement with the Examination Committee, the Clinical Sciences Examination may also be used on its own by Departments wishing to assess the progress of their residents in training. Under these circumstances no certificate is issued to the candidates, unless they have satisfied the Basic Science regulations.

The Examination will be directed by the Examiners, appointed by the Examination Committee of the International Council of Ophthalmology. At present the offices of this Committee are in London, England.

- a) The Examination will be held annually in April. The Examination, which is in English, will normally be held in the candidate's own country.
- b) The Examination will consist of 200 multiple-choice questions (MCQ) over a 4 hour period. Examples of the method used for these questions and instructions can be found on page 10 and 11.
- c) The candidates will enter their answers on the "*Answer Paper*" which will be computer marked. A positive mark will be awarded for each correct answer. No mark is given to those questions marked incorrectly or left blank. The computerised results will then be analysed by the Examiners.
- d) It is recognised that some candidates who have not taken or who have failed the Theoretical Optics and Refraction will have reached a stage in their training where it is appropriate to take the Clinical Sciences Examination. These candidates may take the Theoretical Optics and Refraction on the same day as the Clinical Sciences Examination. However, if they fail the Theoretical Optics and Refraction, but pass the Clinical Sciences Examination, their certificate will be held until they do obtain a pass in the Theoretical Optics and Refraction.
- e) The questions will be in 11 sections:

Clinical Sciences

1. General Medicine related to Ophthalmology
2. Community and Public Health
3. Ophthalmic pathology and ocular tumours

4. Neuro-ophthalmology
5. Paediatric Ophthalmology and Strabismus
6. Orbit, eyelids and lacrimal disease
7. Trauma, external disease and cornea
8. Ocular inflammation and uveitis
9. Glaucoma
10. Lens and cataract
11. Retina and vitreous

A syllabus will be found on pages 6–9 of this booklet.

The MCQ papers are not available to candidates after the Examination.

- f) The candidates will be informed if they have failed, passed, passed with merit or, exceptionally, passed with distinction. The marks for each section will be given to each candidate to enable them to assess their strengths and weaknesses.
- g) To aid the Examiners and to ensure the quality of the questions, the answers to each part of each question are also analysed. This information is used to identify the core knowledge questions and those which can compare different groups of candidates in different years. This information is used to determine the pass mark which ensures that the results of the Examination are comparable from year to year.

The use of new MCQ questions each year results in slight variations in the standard of the papers. This may result in higher or lower marks being achieved because of the difficulty of the questions. Also it may be that the standard of the candidates will vary from year to year but the analysis of the results will identify this. This may also mean that a candidate may have scored higher than the average score of all the candidates, but may still not have passed the Examination.

For all these reasons it is not appropriate to have a fixed pass mark for each Examination. This will be determined by the Examiners after full analysis of the results.

- h) Visual Acuities will be given in LogMAR with, in brackets, the metric Snellen, the imperial Snellen and the decimal notations. For example, “Visual acuity was LogMAR 0.48 (6/6, 20/60, 0.33)”.
- i) Answering all the questions accurately is the best way of obtaining a pass grade but because accuracy of answers is very important and takes time **it is still possible to pass the examination without completing all the questions.**
- j) The question bank is large and questions are not repeated from year to year. Candidates are warned that, although good for practice, using books of questions and answers may be misleading.

Certificates

Provided a candidate has satisfied the regulations with regard to the Basic Science Examination and the Theoretical Optics and Refraction Examination, she/he will be given a signed certificate indicating whether she/he has passed, passed with merit or passed with distinction. This certificate can be presented as evidence of achievement of a high standard of knowledge of the Clinical Sciences related to Ophthalmology. Verification of the certificate is embossed on each certificate.

Examination Regulations

1. The structure of the examination is described on pages 2 and 3.
2. The certificate will be presented to those who have achieved the appropriate level in the Examination and who have complied with the regulations.
3. The fees and dates of the Examination are obtainable from the:
Examination Office,
International Council of Ophthalmology,
11–43 Bath Street, London EC1V 9EL
E-mail: assess@icoph.org
Tel: +44 (0)20 7608 6949 or +44 (0)20 7608 6959
Fax: +44 (0)20 7608 6947
to whom all enquiries should be addressed.
4. Application forms must reach the Examination Office before the closing date 24.01.2012.
Applications received after the closing date will not be processed.
5. The appropriate fee must be paid and cleared before the closing date.
6. Applications for admission to the Examination must be accompanied by a photocopy of the candidate's Basic Science Examination, Theoretical Optics and Refraction Examination, or an equivalent recognised certificate, and the medical qualification certificate if the Basic Sciences Examination has not been taken.
7. Candidates wishing to withdraw their applications must do so *in writing*. For withdrawals received before 24th January a refund will be given, but there will be a 30% deduction to cover administrative charges. No fee refund will be given to candidates wishing to withdraw after the closing date for applications 24th January.
8. A candidate withdrawing an application on or after the closing date for applications - as shown in the Examination Calendar - or who fails to appear for the Examination for which his entry fee has been accepted, *will not be entitled to any refund or transfer of the fee.*

9. A candidate who may desire to make representations with regard to the conduct of their examination, must address them to the Examination Executive and not, in any circumstance, to an Examiner.
10. The Examination Committee may refuse to admit to an Examination, or to proceed with the Examination of any candidate who infringes any of the regulations, or who is considered by the Examiners to be guilty of behaviour prejudicial to the proper management and conduct of the Examination.
11. The above conditions may be modified at the discretion of the Examination Committee.
12. If a candidate is determined by the Examinations Committee to have cheated in the examination, he or she will not have their answer sheet marked and they will be determined as having failed the examination. She/he will not be allowed to re-sit the examination for a period of 1 to 5 years and they may be reported to their local Ophthalmological Society and/or Ministry of Health.

*On the day of the Examinations candidates must provide their own HB pencils, a sharpener and erasers. The answer papers cannot be marked with a pen or biro. **Only HB pencils may be used.***

Guide to Candidates

CURRICULUM

The ICO Curriculum is published in *Klinische Monatsblätter für Augenheilkunde* November 2006, pages S1–S48. It was drawn up by a task force under the leadership of Professors M.F.Goldberg, A.G.Lee and M.O.M.Tso

SYLLABUS

for the Clinical Sciences Examination

A syllabus is a guide to the range of topics likely to be tested in the Examination, however, it cannot be complete because of the rapid advances in knowledge and the nature of the practice of medicine. It is expected that candidates continue to make themselves aware of recent advances in ophthalmology and related subjects as these will always be an important part of the Examination.

A comprehensive knowledge is required of community medicine and public health, the methods of examination, the symptoms and physical signs, pathology (including histopathology) and the medical and surgical treatment of ophthalmic conditions including the following conditions:-

1 Diseases of the eye

External eye diseases including:-

The ocular surface disorders

Infections

Deficiency disorders

Conjunctival disease and disease of the lid margins

Immunologically induced disorders

Scleral and episcleral disease

Corneal disease

Age changes

Trauma and toxic injuries

Surgical procedures

Intraocular inflammation

Infection

Immunologically induced

Glaucoma

Congenital

Primary

Secondary

Lens and Cataract

Congenital and developmental

Traumatic

Toxic
Metabolic
Secondary
Ageing

Choroidal, Retina and Vitreous

Diseases of the macular
Diseases of the vitreous
Diseases of the choroid
Diseases of the retina and peripheral retinal abnormalities
Vitreous interface disorders
Retinal vascular disease
Retinal choroidal disorders associated with systematic disease
Retinopathy of prematurity
Hamartomas and tumours
Congenital and stationary retinal disease
Retinal, vitreoretinal and choroidal dystrophies
Retinal and choroidal degeneration
Retinal detachment
Trauma and toxic injury

2 Diseases of the Orbit, Eyelids and Lacrimal System

Congenital abnormalities
Infection
Inflammation
Tumours
Trauma

3 Diseases of Childhood and Strabismus

Congenital anomalies and genetics of the disorders of the eye,
eyelids, face and orbit
Strabismus
Amblyopia
Nystagmus
Peripheral and central neurological disorders
Infectious disease
Ocular disease commonly found in children
infection
inflammatory
glaucoma
cataract
vitreo-retinal disease
tumours
phakomatoses

Trauma

Other difficulties of vision in infants and children

4 **Neuro-ophthalmology**

The disorders of the neurological systems which have associated ocular or ocular motility problems.

Disorders of the sensory pathways, and those affecting the pupil, optic nerve, the ocular motor system, together with the autonomic nervous system and those involving the seventh cranial nerve. Inherited, immunological, endocrine and other systemic diseases which have neuro-ophthalmological signs.

5 **General Medical Conditions**

Diseases commonly associated with eye disease and conditions which relate to surgical management of the patient.

- Systemic infectious diseases
 - bacterial
 - chlamydial
 - fungal
 - viral
 - parasitic
- Immunodeficiency
- Cardiovascular disease including
 - hypertension
 - heart disease
 - cardiac arrhythmias
- Pulmonary disease
- Haematological disorders including
 - the anaemias
 - sickle cell disease
 - disorders of haemostasis
- Connective tissue disease including the systemic vasculitides
- Endocrine disorders including diabetes and thyroid disease
- Neoplasia
- Management of medical emergencies
- Pre and post operative management of patients with eye disease

- Principles of preventive medicine
 - epidemiology
 - screening procedures
 - statistical methods
 - immunisation

6 Community Medicine and Public Health in relation to Ophthalmology

7 Ophthalmic Pathology and Ocular tumours

Guidance on Multiple Choice Questions

1 Documents

On your desk you will find the following:

- (a) an ANSWER PAPER (response sheet)
- (b) a QUESTION BOOK

2 DO NOT USE PEN OR BIRO - USE ONLY AN HB PENCIL

Use a *high quality* eraser which *does not smudge* and bring 2 HB pencils, and a pencil sharpener to the examination.

Do not fold or crease the Answer Paper.

3 Identification

Please check that the *Name* and *Centre* on your Answer Paper are correct before answering the questions.

Please fill in the stage of training on the Answer Paper.

Please check your name and number on the front cover of the question book.

4 Method of answering

There are 200 Multiple Choice Questions some of which will be in the form of visual fields, x-rays, clinical and microscopic images, Hess charts etc. The Answer Paper is numbered 1–200. All 200 questions are of the four option multiple-choice type with only one correct answer. Each question has four statements: stems (a), (b), (c) and (d). On the ANSWER PAPER there are corresponding boxes for each statement.

Place a horizontal line in the box which, in your opinion, contains the correct answer. Only one box must be marked within each question, otherwise the answer will be marked as wrong. IT IS ESSENTIAL THAT YOU MARK EACH ANSWER CLEARLY.

Specimen Question

A face turn and head tilt to the right would most likely result from which of the following types of palsy?

- (a) Left inferior rectus ()
- (b) Left superior oblique (→)
- (c) left superior rectus ()
- (d) Right inferior oblique ()

IMPORTANT

It is vital to use only a horizontal, clear line. If any line is other than horizontal, the whole question will not be marked and will not score.

You are advised *initially* to mark your answers in the QUESTION BOOK. When you are satisfied with your answers, you **MUST** transfer them to the Answer Paper. The transfer of the answers **MUST** be made within the period allotted for the examination. Disqualification will occur if the candidate does not stop writing when instructed by the invigilator.

If you decide to change a response, careful rubbing out is essential before entering the new mark as smudge marks may be misread as a response. Should your ANSWER PAPER be spoilt a spare paper can be obtained from the invigilator.

- 5 **Marking** *each item* is as follows:
- | | |
|-------------------------------|---------|
| CORRECT: | +1 mark |
| NO ANSWER / INCORRECT ANSWER: | 0 mark |

- 6 **Confidentiality**
THE QUESTION BOOK MUST NOT BE REMOVED NOR MAY ANY PARTS OF IT BE COPIED. IT WILL BE COLLECTED FROM YOU BY THE INVIGILATORS, TOGETHER WITH THE ANSWER PAPER.



Clinical Sciences