

**THE ROYAL COLLEGE
OF SURGEONS
OF EDINBURGH**

**REGULATIONS RELATING TO THE
DIPLOMA OF MEMBERSHIP IN
ORTHODONTICS
(M ORTH RCSED)**

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All parts of the examination are conducted in English

INTRODUCTION

1. The Diploma of Membership in Orthodontics of The Royal College of Surgeons of Edinburgh may be granted to those who possess a dental qualification which is acceptable to the Council of the Royal College of Surgeons of Edinburgh and who comply with the Regulations.

THE EXAMINATION

2. The Examination for the Diploma of Membership in Orthodontics will comprise two Parts, namely; Part I (a) applied basic dental sciences, (b) applied sciences relevant to Orthodontics; Part II Principles and Practice of Orthodontics.
 - (i) Part I of the examination will consist of:
 - (a) applied basic dental sciences. One combined Multiple Choice Question (MCQ) paper and Multiple Short Answer (MSA) question paper of three hours duration, and a simulated clinical examination on typical basic dental problems, not exceeding 60 minutes duration. Human disease in relation to dentistry may be included;
 - (b) applied sciences. One MSA question paper of three hours duration on Orthodontics and an oral examination of 30 minutes duration on the applied sciences relevant to the clinical practice of Orthodontics.
 - (ii) Part II of the examination will consist of:
 - (a) a three hour written paper in Orthodontics;
 - (b) a two hour diagnostic examination (in two sections) related to treatment planning and patient care with four sets of patient records;
 - (c) a 15 minute oral examination on aspects of communication relating to orthodontic treatment;
 - (d) a 30 minute oral examination on any aspect of orthodontics;

- (e) an oral examination of 30 minutes duration based on five fully documented clinical case histories each describing a patient personally treated by the candidate.

GENERAL REGULATIONS

3. Eligibility

PART I Candidates for Part I of the examination will be expected to provide certified evidence of having gained broad experience of clinical dentistry for a minimum of two years after obtaining a primary dental qualification. Within the two years, experience must be obtained in more than one clinical dental discipline, with a minimum experience of at least three months duration in each selected discipline. Equivalent part-time experience will normally be accepted if gained within a period of four years.

PART II Candidates for Part II of the examination must have passed, or have exemption from, Part I of the examination. Award of the Membership in Orthodontics RCSEd is dependent on evidence that the candidate will have completed a period of three years full-time (or part-time equivalent) in appropriate approved posts, courses and programmes of training. Candidates may, however, enter themselves for examination after two and a half years (or part-time equivalent). The training should preferably be continuous but in some cases breaks in training may be permitted. The total training period should not normally exceed six years. Part-time posts, courses and programmes will not normally be approved if they are less than half-time.

The Joint Committee for Specialist Training in Dentistry (JCSTD), on the advice of the Specialist Advisory Committee (SAC) in Orthodontics, will be responsible for the recognition and approval of training programmes in the United Kingdom, and bodies seeking approval should apply to the SAC.

The Royal College of Surgeons of Edinburgh will, in recognising posts and training overseas, apply similar criteria to that approved by the SAC in Orthodontics.

Candidates who do not exactly fulfil the above requirements may apply for special consideration of their experience provided they submit the full details to the Registrar, Training and Evaluation Section of the College.

4. Exemptions

Exemption from Part I of the M Orth RCSEd Examination will normally be limited to candidates:

- (i) who present evidence of having been successful in the Part I/Primary Examination for Fellowship in Dental Surgery/Dentistry of one of the Royal Colleges of the United Kingdom and Ireland;
- (ii) who present evidence of having been successful in the Diploma of Member of the Faculty of Dental Surgery/Dentistry of one of the Royal Colleges of the United Kingdom and Ireland
or
- (iii) who hold a degree or diploma of equivalent standard which is acceptable to The Royal College of Surgeons of Edinburgh
or
- (iv) whose experience and training is adjudged equivalent by The Royal College of Surgeons of Edinburgh;

- (v) exemption from the written component of Part II of the M Orth RCSEd Examination will be granted to candidates who present evidence of successful completion of the written component of the Bi-Collegiate Membership in Orthodontics Examination of the Royal College of Surgeons of England and Royal College of Physicians and Surgeons of Glasgow. Exemption from this component may also be granted to candidates who present evidence of successful completion of written examination papers for an approved university qualification in Orthodontics at a centre recognised by The Royal College of Surgeons of Edinburgh;
- (vi) exemption from that part of the examination which relates to the five fully documented case histories will only be granted to candidates who fail the Membership in Orthodontics Examination of The Royal College of Surgeons of Edinburgh if their presented material and subsequent performance in the related oral examination has satisfied the examiners. This exemption will be restricted to the following two diets only.

5. Examination dates and fees payable

PARTS I AND II

The dates of the examination and fees payable for admission are set out in the Examinations Calendar and can be obtained from:

The Royal College of Surgeons of Edinburgh
Information Section
Adamson Centre
3 Hill Place
Edinburgh EH8 9DS
Tel: 0131 668 9222
Fax: 0131 668 9218
E.mail: information@rcsed.ac.uk
Web: www.rcsed.ac.uk

Every candidate shall give notice of his/her intention to present himself/herself for examination no later than the closing date as indicated on the Examinations Calendar.

Applications for admission to the Part I examination must normally be accompanied by certified evidence of broad based experience gained in dentistry for a minimum of two years and the fee payable for admission to the examination.

Applications for admission to the Part II examination must be accompanied by the certified evidence of training, and the fee payable for admission to the examination.

6. Withdrawal from the Examination

Candidates withdrawing from either part of the examination must do so in writing. The entrance fee may be returned, less 20% administrative charges, or transferred to the next diet of the examination where written notice is received by the College prior to the closing date for receipt of applications. Half of the entrance fee may be returned or transferred to the next diet of the examination where written notice is received not less than 21 days prior to the commencement of the examination. After that date no refund of entrance fees will normally be made to candidates who withdraw from the examination or fail to attend for any reason whatsoever. No allowance will be made for postal or other delays. Candidates who submit an application form but are subsequently found to be ineligible to enter for the examination will have their fee returned less 20% administrative charges. Candidates, who are entitled to a refund, will have their monies returned on the completion of the examination for which they have entered.

7. **Conduct of the Examination**

The Council of the College 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.

Candidates who desire to make representation with regard to the conduct of their examination must address them to the Examinations Team Leader (Dental Examinations) of the College and not in any circumstances to an examiner.

8. **Designation and registration**

A candidate who passes the Part II examination shall be entitled to the designation of Member in Orthodontics of The Royal College of Surgeons of Edinburgh (M Orth RCSEd) and shall receive a diploma bearing the seal of the College signed by the President, the Dean of the Faculty of Dental Surgery and the Secretary to the College. The form of the diploma shall be as follows:

"The President and Fellows of The Royal College of Surgeons of Edinburgh hereby grant the Diploma of Membership in Orthodontics to who has completed the required form of study and passed the necessary Examination."

Successful candidates will be granted Membership of the Faculty of Dental Surgery of the College on payment of such election fee and annual subscription as may be determined from time to time by the Council of the College. Members of the Faculty of Dental Surgery may participate in Faculty and College educational and social activities.

The Diploma is registrable in the British Dentists Register provided that the name of the holder already appears in that Register. Particulars of registration may be obtained from the Chief Executive and Registrar, General Dental Council, 37 Wimpole Street, London W1M 8DQ.

SCOPE OF THE EXAMINATION

Candidates should have a thorough knowledge of anatomy, physiology and biochemistry and the pathological sciences including immunology and microbiology fundamental to an understanding of all aspects of Orthodontics. They should be familiar with the principles of the aetiology, pathogenesis and prevention of oral diseases, especially as they are applied to Orthodontics. They should also be familiar with current developments in dental and bio-materials science relevant to the practice of Orthodontics.

Familiarity with the published literature pertinent to all aspects of Orthodontics is essential.

Candidates should also have a knowledge of the following:

PART Ia

- (i) applied anatomy of the head and neck including dental anatomy, and radiographic anatomy;
- (ii) principles of applied physiology and biochemistry with specific reference to bone growth and development, respiration, circulation, mastication, deglutition and speech;
- (iii) human disease in relation to dentistry including relevant microbiology, pathology and immunology;
- (iv) a working knowledge of the properties of dental materials.

PART Ib

- (i) a detailed knowledge of oral and dental anatomy relevant to the practice of Orthodontics, including the development of the dentition;
- (ii) a working knowledge of growth and development in general and a detailed knowledge of oral and craniofacial development including the development of occlusion;
- (iii) a working knowledge of human genetics and a detailed knowledge of genetic abnormalities of the jaw and teeth;
- (iv) role of nutrition in the development of the child and especially of the dentition;
- (v) principles of pathology, immunology and microbiology;
- (vi) the tissue changes associated with tooth movement.

PART II

- (i) normal growth and development with particular reference to the craniofacial complex, the dentition and soft tissue morphology;
- (ii) disorders of growth and development as they affect the above regions in relation to Orthodontics; the aetiology of malocclusion and dentofacial deformity;
- (iii) psychological development and behaviour relevant to Orthodontics;
- (iv) genetics relevant to Orthodontics;
- (v) variations in the development of occlusion; the recognition of abnormal variation and of the need to take interceptive measures;
- (vi) the diagnosis and treatment of oral disease in children and the relationship between Orthodontics and Paediatric Dentistry; the principles of medical and surgical practice related to the treatment of facial deformity; minor oral surgery in children;
- (vii) the principles of radiography and radiology relevant to Orthodontics;
- (viii) assessment of malocclusion and treatment planning in relation to general and dental health;
- (ix) the construction, use and management of removable, functional and fixed appliances and their underlying mechanical principles;
- (x) epidemiology, biometry, medical statistics, and computer based technology applicable to Orthodontics;
- (xi) materials used in Orthodontics;
- (xii) adult Orthodontics;
- (xiii) oral health and health education;
- (xiv) health and safety;
- (xv) legislation and ethics;

(xvi) surgery and personnel management;

(xvii) finance.

CANDIDATES SHOULD NOTE THAT THIS SYLLABUS IS INDICATIVE OF THE AREAS OF KNOWLEDGE EXPECTED OF CANDIDATES. IT IS NOT INTENDED TO BE EXHAUSTIVE OR TO EXCLUDE OTHER ITEMS OF KNOWLEDGE WHICH ARE OF SIMILAR RELEVANCE.

APPENDIX

Guide to Candidates
The structure of the Examination

All parts of the examination are conducted in English.

THE EXAMINATION

The examination of the Diploma of Membership in Orthodontics is comprised of two Parts, namely;

- Part I :** (a) applied basic dental sciences,
(b) applied sciences relevant to Orthodontics
- Part II :** Principles and Practice of Orthodontics.

Part I of the examination will consist of:

- (a) Applied Basic Dental Sciences. One combined Multiple Choice Question (MCQ) paper and Multiple Short Answer (MSA) question paper of three hours duration **and** a simulated clinical examination on typical basic dental problems, not exceeding 60 minutes duration. Human disease in relation to dentistry may be included;

The candidates may be presented with illustrations or specimens. The candidate will examine the material provided and answer a series of relevant questions in relation to typical basic dental problems and human disease in relation to dentistry.

- (b) Applied Sciences. One MSA question paper of three hours duration on Orthodontics **and** an oral examination of 30 minutes duration on the applied sciences relevant to the clinical practice of Orthodontics.

For this examination candidates may be presented with case histories and all relevant material including study casts, radiographs and photographs as appropriate.

*Candidates will **not** be presented with patients for examination or treatment and practical tests will **not** be undertaken.*

Oral Examination - 30 minutes duration

Candidates will be asked questions on the applied sciences relevant to the clinical practice of Orthodontics.

Part II - Principles and Practice of Orthodontics

This consists of a written paper of three hours duration, presentation of clinical case histories and a related oral examination, a diagnostic examination, an oral examination in communication and an oral examination.

Written Examination

Candidates should prepare for a written examination consisting of three questions related to any parts of the syllabus. The questions may be either in the form of short notes or an essay.

Clinical Case Histories

Candidates will be examined on the specified clinical case history records, and the related oral examination will be an assessment of their understanding of all aspects of the cases to which the submitted records refer. The duration of the oral examination will be 30 minutes.

Two-thirds of the possible marks attainable for the material submitted will be allocated to multiband treatments and one-third of the marks to the three condensed case histories. The mark awarded will also relate to the variety of techniques demonstrated by the candidate. However, candidates should note that brevity is required in the condensed case histories and that the text relating to each of these should not be excessive. The typescript relating to each condensed clinical history must not exceed five pages (Arial font, size 11, double spaced and single sided). Candidates will be penalised if their condensed clinical case histories do not comply with these guidelines.

Diagnostic Examination

This will comprise a two-hour examination (in two sections) on four patient histories and related diagnostic records. Candidates will be given 15 minutes to study each patient history, followed by a 15-minute oral examination on each history. Candidates are expected to demonstrate an understanding of the principal features of the case and discuss an appropriate treatment plan.

Oral Examination in Communication

There will be a 15-minute test of a candidate's ability to communicate aspects of orthodontic treatment and care to examiners.

Oral Examination

The oral examination will be of 30 minutes duration and questions may be asked on any aspect of Orthodontics within the syllabus of the examination. Reference may be made to illustrations, radiographs, study models, appliances and instruments relating to various aspects of clinical Orthodontics.

THE PRESENTATION OF CLINICAL CASE HISTORIES

The candidate's examination number and the patient's initials should be clearly shown on all the relevant material submitted which should be colour coded using adhesive labels as shown below. Each case history should be presented in a separate semi-stiff binder approximately 30x21cm (A4 size), ie large enough to accommodate cephalometric radiographs and tracings but not unnecessarily robust or unduly bulky. The cover should indicate the patient's initials and the type of case presented as follows:

Case	Code on binder cover	Colour
Fixed appliance case history 1	(A) Fixed appliance case history	green
Fixed appliance case history 2 (or multidisciplinary case history)	(B) Fixed appliance case history	blue
Condensed case history 1	(C) Condensed case history	red
Condensed case history 2	(D) Condensed case history	yellow
Condensed case history 3	(E) Condensed case history	white

The texts relating to each case must be neatly presented with adequate margins and spacing, and checked before submission for spelling and typographical errors.

The candidate's name and training centre must not be stated on any part of the material submitted, and the patient's address should not be referred to in the personal details.

The requirements for the individual clinical case histories are as follows:

(A) Fully documented fixed appliance cases

- (i) the clinical case histories should take the form of comprehensive orthodontic assessments based on the clinical examination of the patients, analysis of study models, radiographs and the general standard of oral and dental health. Original radiographs, or duplicated radiographs, relevant to the cases must be included in a separate soft plastic pocket from which they may be removed for mounting and presentation on an x-ray viewing screen. A clear understanding of the cephalometric analysis used should be evident from the text and the radiographs should be so arranged that they illustrate progress from one stage of treatment to the next;
- (ii) the aims and objectives of treatment should be clearly stated together with the reasons for adopting the methods used;
- (iii) candidates must fully describe the features of the appliance components and give details relating to archwires used;
- (iv) the progress of the cases during treatment should be evident from the records presented, and the text should adequately explain the reasons for appliance adjustments together with the method of adjustment and the sequence of treatment changes;
- (v) problems encountered during treatment must be discussed and an objective commentary given on the results, including, if necessary, how these results might have differed by adopting alternative treatment plans;

- (vi) the cases should be adequately illustrated with colour prints, showing intra-oral (preferably anterior, lateral and occlusal), full face and profile views of the patients, before and after treatment and also by additional intra-oral illustrations during interim stages of treatment;
- (vii) pre and post treatment study models must also be submitted.

(B) If a multidisciplinary case history is used

The presentation of the clinical case history should broadly follow that described for the fully documented fixed appliance case, but this will depend on the nature of the clinical problem and whether or not the patient is being treated or kept under observation. Nonetheless, the candidate must clearly demonstrate his close involvement with the clinical management of the patient as well as a satisfactory understanding of the aetiology, diagnosis and possible methods of treatment. The text must incorporate a commentary relevant to all aspects of the patient's problems, including difficulties encountered in earlier management and those anticipated in the future. The candidate should also report on any of the original clinical records and/or specific investigations referred to in the case history. It should also be evident that the candidate has actively monitored the patient's oral and dental health during treatment and prescribed appropriate remedial action where necessary.

(C,D & E) Condensed clinical case histories

The condensed clinical case histories offer an opportunity for candidates to demonstrate the range of both the types of malocclusion which they have treated and the techniques at their disposal. Each condensed clinical case history should be brief and concise and in the form of a condensed summary of the case notes. The material presented should relate to different types of malocclusion in order to demonstrate types of orthodontic treatment which the candidate has provided, other than those described in (A) and (B) above. Radiographs may be included when appropriate. A comprehensive radiological report should be given, together with tracings of the start and later cephalometric radiographs illustrating changes associated with treatment and further craniofacial growth and development.

The typescript relating to each condensed clinical history must not exceed five pages (Arial font, size 11, double spaced, single sided) and should incorporate details of the cephalometric analysis as well as giving the reasons for adopting the method of treatment described. An objective assessment of the prognosis and progress should also be included in the case history.

Each condensed clinical case history should also contain intra-oral (anterior, lateral and occlusal views where possible), full face and profile illustrations (colour prints) of the patient, before treatment, together with subsequent relevant photographs. Radiographs and study models are required, demonstrating the original malocclusion and the progress achieved whilst under the care of the candidate. The candidate should also demonstrate responsibility for monitoring the general oral and dental health of each patient whilst undergoing orthodontic treatment.

Candidates must note that they will be penalised if their condensed clinical case histories do not comply with these guidelines.

GENERAL INFORMATION

In each part of the examination candidates are examined by two examiners and the whole examination is normally conducted in The Royal College of Surgeons of Edinburgh, Nicolson Street, Edinburgh, EH8 9DW.

Candidates should note that no practical work will be required during the examinations.

Any candidate failing the examination may request confidential advice concerning any additional training which may be beneficial before attempting the examination again.