

**THE ROYAL COLLEGE OF SURGEONS  
IN IRELAND**

**Regulations relating to the  
Diploma of Member of the Faculty of Dentistry  
Royal College of Surgeons in Ireland  
(MFDRCSI)**

**April 2011**

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## **1. INTRODUCTION**

This booklet contains the Regulations for the Diploma of Member of the Faculty of Dentistry of the Royal College of Surgeons in Ireland.

Further information can be obtained from the Examinations Department at the Royal College of Surgeons in Ireland.

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The Diploma of Member of the Faculty of Dentistry of the Royal College of Surgeons in Ireland is registrable in the Dental Register of Ireland as an additional qualification provided that the name of the holder already appears in that Register. Details regarding the registration of the Diploma may be obtained from the Registrar of the Dental Council, 57 Merrion Square, Dublin 2, Ireland

## **2. Purpose of the examination**

The MFD examination is intended to provide evidence of knowledge, experience and clinical competence of general professional training beyond that recognised by the primary dental qualification.

Award of the Diploma will indicate that the candidate has enhanced his/her knowledge and understanding well beyond the primary qualification level to the standard required to proceed into specialist training.

## **3. THE EXAMINATION**

The MFD Diploma Examination has 2 sections, Part 1 and Part 2.

There is full reciprocity between both parts of the MFD examination and both parts of the MFDS of the Royal College of Surgeons of Edinburgh and the Royal College of Physicians & Surgeons of Glasgow.

Details of other reciprocal qualifications will be posted on the College website when available.

Part 1 of the examination will be held at least twice a year **in Ireland and at least once a year in approved Overseas Centres. The examination will be conducted in English.**

**(a) Part 1**

This examination consists of:

- A Multiple Choice Question (MCQ) paper of 75 questions each consisting of a stem and five branches, with each branch being independently **TRUE** or **FALSE**, of two and a half hours duration.
- An Objective Short Answer (OSA) paper of twenty questions, of two hours duration.

**From October 2011 Part 1 will examine Sections 1, 2, 3 and 4 of the syllabus with candidates being awarded either a pass or a fail. Normally approximately 20% of the questions will be taken from Sections 1 and 2, 10% in Section 3 and 50% from Section 4.**

Candidates must pass Part 1 and have completed the required training (or be entitled to an exemption as noted in these regulations) before they may sit Part 2.

**(b) Part 2**

**Part 2 will be conducted at least twice a year in Ireland and normally once a year in approved Overseas Centres. All four Sections of the syllabus will be examined in Part 2.**

This examination consists of:

- **An Objective Structured Clinical Examination (OSCE). There will be a minimum of 17 stations (including 2 rest stations), each of five minutes duration. A number of these stations may be observed and may contain simulated clinical events. The examination will last a minimum of 90 minutes. Skills in patient examination, communication, diagnosis and treatment planning may be tested. No specialist knowledge is required.**
- **Two, fifteen minute oral examinations. The orals will be structured to assess both applied basic sciences and clinical skills appropriate to twenty-four months postgraduate experience.**

**Candidates must pass the mandatory CPR station in the OSCE part of the examination. Any candidate who fails this OSCE station will fail the Part 2 MFD entered for, regardless of the marks awarded in any other section of the examination.**

**Candidates will be awarded a pass or fail.**

#### 4. ENTRANCE REQUIREMENTS

To be eligible to enter for the Diploma examination, all candidates **must** provide evidence of:

##### Part 1

- (a) Possession of a primary dental qualification that is acceptable to the Council of the Royal College of Surgeons in Ireland.

##### Part 2

- (a) Before the closing date for entry to Part 2, written confirmation of a pass in Part 1 in either the MFD (Ireland) or the MFDS (Edinburgh, Glasgow). Details of other acceptable qualifications will be posted on the College Website when available.
- (b) Before the date of the Part 2 examination, completion of a minimum of 12 months experience in clinical dentistry, at least six months of which have been gained in clinical posts in vocational training, hospital or institutions either in Ireland or overseas which have been approved for training by the Faculty of Dentistry of the Royal Colleges of Surgeons in Ireland,

\* see exemptions

#### 5. ELIGIBILITY FOR THE AWARD OF THE DIPLOMA

To be eligible for the award of the Diploma all candidates **must**:

- a) Possess a primary dental qualification that is acceptable to the Council of the Royal College of Surgeons in Ireland.
- b) Have completed 24 months satisfactory whole time equivalent postgraduate experience in dentistry at least 12 months of which have been gained in clinical posts in vocational training, hospitals or institutions either in Ireland or overseas which have been approved for training by the Faculty of Dentistry of the Royal Colleges of Surgeons in Ireland.\* Normally equivalent part-time training will be acceptable if gained within a period of four years;

\* see exemptions

- c) Have passed both parts of the MFD Diploma examination;
- d) Have complied with all the regulations.

- e) Normally hold a current certificate of successful hepatitis B immunisation from an Irish or UK source, if the examination is being held in Ireland.

**NB. The Diploma will not be granted until the 24 months experience and approved training has been completed.**

## **6. LIMITATIONS ON THE NUMBER OF ATTEMPTS**

Candidates will normally be allowed a maximum of 5 years from the first successful attempt at Part 1, to complete all parts of the examination.

## **7. MEDICALLY AND DENTALLY QUALIFIED CANDIDATES**

Candidates who possess both primary medical and dental qualifications, which are acceptable to the Royal College of Surgeons in Ireland, may apply for all parts of the examination once they have completed twelve months of their general professional training in dentistry.

## **8. INFRINGEMENT OF THE REGULATIONS**

The College may refuse to admit to the 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.

## **9. REPRESENTATIONS AND APPEALS**

Candidates who wish to make representations with regard to their eligibility for the examination must address them to the Examinations Officer of the College within two months of the initial decision.

Candidates who wish to make representations with regard to the conduct of the examination must address them to the Examinations Officer of the College within two months of the examination and not in any circumstances to an examiner. Representations will then be dealt with according to the policy agreed by the College.

## **10. WITHDRAWAL FROM THE EXAMINATION**

Candidates withdrawing from an examination before the closing date must do so in writing. The entrance fee will be returned less a 20% administrative charge.

Candidates who withdraw from the examination after the closing date or who fail to attend the examination for which he/she has been accepted will not normally be entitled to any refund of fee. No transfer of an examination fee will be permitted.

A refund on medical grounds even if there is a medical certificate is not normally allowed.

Applications for refunds on medical or compassionate grounds must be supported by the Consultant, Postgraduate Dean or person responsible for training, and must be submitted to the College with any accompanying evidence within twenty-eight days of commencement of the examination.

If hospital commitments prevent attendance, the College is not responsible for the refund of any part of the examination fee.

## 11. SPECIAL NEEDS

A Candidate with special needs should advise the Examinations Section/Unit at the time of application of the nature of the needs and any assistance that they require. Each request should be supported by medical evidence (an educational psychologist's report is required for requests for extra time because of dyslexia).

## 12. EXEMPTIONS

1. Candidates who have gained a pass in Part 1 of the MFGDP examination by examination (since October 1998) are exempt Part 1 of the MFD.

2. Candidates who hold MRCS/AFRCS are exempt from Part 1 and the requirement to complete a year in an approved training post.

3. Candidates, who have been engaged in the full time practice of dentistry for a minimum of 5 years, or part time equivalent, are exempt from the requirement to complete one year in approved posts but must enter the examination at Part 1.

4. Candidates who have been engaged in the full time practice of dentistry for a minimum of 5 years or part time equivalent, who hold the MGDS or MCCD Diploma are exempt from Part 1 MFD and the requirement to complete one year in approved posts.

5. Candidates who have been engaged in the full time practice of dentistry for a minimum of 2 years, and who have passed Part 1 MFD, are eligible to sit Part 2 MFD without the requirement to complete 12 months in approved posts, **provided** they can demonstrate 100 hours of verifiable CPD gained through programmes recognised by the Faculty of Dentistry, RCSI. Details of programmes, acceptable for verifiable CPD, are available on the Faculty of Dentistry website.

## 13. APPENDIX I - MFD SYLLABUS

## **Introduction**

The Diploma of Membership of the Faculty of Dentistry is awarded by the Royal College of Surgeons in Ireland following success in the above examination. This examination is designed to be an assessment of the basic knowledge, understanding and experience of dentistry, which is expected of individuals completing a period of General Professional Training. When associated with a suitable broad clinical training, the MFD will be a marker that can identify those dentists with a knowledge, understanding and experience of the clinical practice and science of dentistry sufficient to enter formal training in one of the dental specialties.

Candidates will be expected to have a sound basic knowledge and understanding of applied anatomy, physiology, and biochemistry sufficient to interpret the effects of common dental diseases and injuries on the systems of the body especially, but not exclusively, in the head and neck. They are expected to have a good understanding of cell biology and applied histology which enables them to understand the normal and disordered function of dentally important tissues and organs. A detailed knowledge of embryology is not required but the pathogenesis of common developmental abnormalities important in dentistry will be examined. A working knowledge of the therapeutic actions and toxic effects of drugs commonly used, in particular in the treatment of dental conditions, will also be required. Candidates must have an understanding of applied general pathology including the principles of immunology and microbiology that are relevant to dental practice.

No syllabus can be comprehensive. The list which follows is not intended to be proscriptive but to give candidates a guide to the topics which may be included in the examination. It is important to remember that the MFD is not a specialist examination and that the level of knowledge expected in any area of the syllabus will be that which could be reasonably expected from a dentist in training who has recently completed an appropriate period of general professional training.

## **Syllabus:**

### **SECTION 1. THE BIOLOGICAL BASIS OF CLINICAL DENTAL PRACTICE**

### **1.1. CRANIOFACIAL BIOLOGY**

The notochord, neural tube and neural crest.

Branchial (pharyngeal) arches and grooves, pharyngeal pouches, and their derivatives.

Development and growth of the skull, mandible, palate, tongue and thyroid gland.

Craniofacial malformations including developmental cysts, clefts and relevant syndromes.

The histology of epithelium, general connective tissue, cartilage and bone.

The histology of skin.

Wound healing in bone and soft tissues.

### **1.2. APPLIED PHYSIOLOGY**

General principles of cardiovascular physiology.

Fainting.

CPR.

Constituents of blood.

Haemopoiesis.

Clotting and bleeding.

General principles of respiratory physiology.

Oxygen carriage.

Cyanosis and its significance.

Calcium and phosphorus metabolism; fluoride; mineralization.

Hormones in control of growth, metabolism and the major body systems; metabolism of glucose.

Structure and function of the salivary glands.

Composition of saliva and gingival crevicular fluid, and their role in oral health and disease.

Mechanism of nerve conduction, neuromuscular transmission and the action of anaesthetic agents.

Neurotransmitters and psychotropic medication.

The autonomic nervous system.

Nerve damage and repair.

Mechanisms of pain perception and pain control.

Oral sensory perception: the nature and distribution of sensory receptors in the mouth.

The control of jaw posture and movement.

Mastication and swallowing. Vomiting and coughing.

### **1.3. APPLIED ANATOMY**

Blood supply, venous and lymphatic drainage of the head and neck.

The facial and masticatory muscles, and those of the tongue, the floor of mouth and the soft palate.

The cranial nerves, especially V, VII, IX, X, XI and XII.

Local and regional anaesthesia: techniques and their anatomical basis

The anatomy of the larynx and trachea, and of the thorax in relation to resuscitation.

The paranasal air sinuses.

The salivary glands.

Principal tissue spaces and the spread of infection from the teeth, tonsils and skin in the head and neck.

Radiological anatomy of the head and neck, and especially of the jaws and teeth.

#### **1.4. DENTAL ANATOMY**

The development of the teeth and supporting tissues.

Dental and oral histology and their clinical applications, including tooth movement and age changes.

Developmental disorders of the teeth and the dental hard tissues.

Tooth morphology.

Chronology of dental development and tooth eruption.

The mechanism of non-carious tooth surface loss: attrition, abrasion and erosion.

Forensic aspects including age estimation and identification from dental records.

Functional occlusion in the natural dentition.

The border movements of the mandible.

The temporomandibular joint: its structure, function and common disorders.

## **SECTION 2. FEATURES AND MANAGEMENT OF LOCAL AND SYSTEMIC DISEASES OF DENTAL RELEVANCE**

### **2.1. PRINCIPLES OF PATHOLOGY**

Anaphylactic shock and acute allergic reactions.

Immune system and autoimmunity.

Inflammation, protein synthesis and the development of oedema.

Aetiology and clinical features of benign and malignant tumours.

Oral micro-organisms: principles of identification and their role in oral health and disease.

### **2.2. CLINICAL PHARMACOLOGY**

Antimicrobial agents: mode of action, toxicity, resistance.

Mediators of pain and inflammation, peripherally and centrally acting analgesics, anti-inflammatory agents.

Local anaesthetic agents and vasoconstrictors.

Intravenous and inhalation sedation.

Coagulants and anticoagulants.

Basic principles of drug dosage and the administration, distribution, metabolism and excretion of drugs.

Side effects of drugs, drug interactions especially in dentistry.

Prescribing and legal implications; misuse of drugs: abuse and addiction.

Drug addiction: acute withdrawal symptoms.

Therapeutic use of hormones.

The dental management of medically compromised patients, including those with basic neurological and psychological conditions and organ transplant patients.

The impact of radiotherapy +/- chemotherapy on the dental health of "head & neck" cancer and general oncology patients.

Medical emergencies in dental practice and their management.

### **2.3. PATHOLOGY OF THE OROFACIAL REGION**

Diseases of the oral mucosa: infections (bacterial, viral and fungal), swellings, pigmentation, ulceration, dermatoses, precancerous lesions, neoplasms.  
Diseases of salivary glands: functional, infective, autoimmune and neoplastic.  
Squamous and basal cell carcinomas.  
Diseases of bone, especially of the jaws, including infections, cysts, neoplasms, fibro-osseous lesions, endocrine and metabolic disorders.  
Diseases of paranasal air sinuses.  
Orofacial manifestations of systemic diseases.

## **2.4. SYSTEMIC PATHOLOGY**

Acute respiratory distress, asthma and laryngeal obstruction.  
Respiratory disease: chronic, obstructive and infective.  
Respiratory failure.  
Diseases of red and white blood cells.  
Anaemia  
Thrombosis, ischaemia and infarction.  
Haemorrhage and shock including causes and management.  
Cerebrovascular haemorrhage and stroke.  
Angina, myocardial infarction, cardiac arrest.  
Infective endocarditis and bacteraemia, including prophylaxis.  
Heart failure.  
Viral hepatitis, cirrhosis and liver failure.  
Neurological conditions including neuralgia, palsies, epilepsy, migraine, Parkinson's disease, dementia.  
HIV and related infections.  
The diabetic patient, acute hypoglycaemia and diabetic coma; the control of blood sugar.

## **SECTION 3. THE SCIENTIFIC BASIS OF DENTAL PRACTICE**

### **3.1. BEHAVIOURAL SCIENCE**

Psychological principles of behaviour management.  
Pharmacological and non-pharmacological management of behavioural problems.  
Basic concepts of personality, psychological and psychiatric disorders, especially as they present as dental problems *e.g.* facial pain, disturbances of sensation and altered self-image.

### **3.2. THE DENTAL PRACTICE**

Dental materials: their physical properties, biocompatibility and applications.  
Disinfection and sterilisation; control of cross infection.  
Conventional radiographic systems, indications for use and the interpretation of images.  
Basic principles of alternative imaging systems (CT, MRI and ultrasound).  
Radiation protection: principles of protection, monitoring and basic radiation science.

### **3.3. AUDIT, EPIDEMIOLOGY AND PREVENTIVE DENTISTRY**

Basic statistics.  
Principles of audit and the importance of evidence-based dentistry  
Clinical trial design and analysis.

Epidemiology of dental and oral diseases.  
Basic principles of prevention of oral diseases including diet, oral hygiene and fluoridation.

## **SECTION 4. GENERAL CLINICAL DENTISTRY**

### **4.1. ENDODONTICS**

Endodontic diagnosis  
Pulpal and periapical pathology  
Root canal anatomy  
Indications for Endodontic treatment  
Access to the root canal system  
Endodontic treatment procedures  
Endodontic preparation techniques  
Endodontic obturation techniques  
Endodontic re-treatment  
Management of traumatised teeth  
Endodontic Periodontal interface  
Endodontic Implant interface  
Surgical Endodontics

### **4.2. PERIODONTOLOGY**

Dental plaque: its formation, composition and metabolism.  
Mechanical and chemical plaque control.  
Periodontal examination and diagnosis.  
The pathogenesis of periodontal disease.  
Therapeutic agents in the control of periodontal disease.  
Basic periodontal surgery.  
Crown lengthening surgery  
Regenerative periodontal surgery  
Periodontal disease in children and young adults  
Periodontal endodontic interface  
Periodontal Systemic disease interface  
Systemic disease and the periodontium  
Dental Implant placement (surgical aspects)  
Soft and hard tissue grafting

### **4.3. PROSTHODONTICS (including operative Dentistry)**

Dental caries: causes, diagnosis and the influence of diet, fluoride and restorative care.  
Therapeutic agents in the control of caries.  
The management of non-carious tooth surface loss: attrition, abrasion and erosion.  
Tooth discoloration and bleaching.  
Principles of restorative treatment planning.  
Principles of intra- and extra-coronal restoration of teeth.  
Functional occlusion in fixed and in removable prostheses.  
Complete and partial dentures: their design, construction and maintenance.

Implant based restorations.

#### **4.4. ORTHODONTICS**

Management of the developing dentition

Aetiology of malocclusion.

Diagnosis and treatment planning

Common appliances and techniques used in the management of malocclusion.

The role of the general dental practitioner in the management of malocclusion.

The Orthodontic/Restorative/Surgical interface.

#### **4.5. ORAL SURGERY**

Oro-facial fractures and head injuries: their anatomical basis and basic management.

Principles of management of orthognathic deformity.

Surgical tooth extractions and important complications.

Metabolic consequences of trauma and surgery.

Minor soft tissue surgery

Principals of management of salivary gland disease.

Biopsy techniques

Cysts and their management.

Differential diagnosis of oro-facial pain including pain of non-dental origin.

Implant surgery

#### **4.6 PAEDIATRIC DENTISTRY**

Infant oral healthcare prevention.

Paediatric periodontal problems.

Optimum fluoride therapy.

Behaviour management of children in the dental setting.

Guidelines for the use of sedation and general anaesthesia in children.

Diagnosis and treatment planning for the paediatric dental patient.

Paediatric restorative dentistry.

Pulp therapy in the primary dentition

Management of the developing dentition in paediatric patients.

Space maintenance.

#### **4.7. THE PRINCIPLES OF PROFESSIONAL AND ETHICAL PRACTICE**

The law in relation to the practice of dentistry

The law in relation to consent for dental treatment.

Medical and dental records: their content, the legal aspects of disclosure, data protection and freedom of information.

Medico-legal reports.

Clinical negligence and professional indemnity for the dental profession.

Managing patient's complaints.

The dentist as employer.

Dental practice management.

Communication with patients, relatives and health care colleagues.

Clinical Governance.

**The syllabus is provided to indicate the areas of knowledge which are expected of candidates.** It is not intended to be exhaustive or to exclude other topics which are of similar relevance.

#### **14. Procedure for successful candidates applying for Membership of the Royal College of Surgeons in Ireland**



1. The candidate, after having passed all parts of the examinations for the Diploma of Member of the Faculty of Dentistry, shall be given a Notice subscribing his/her name to the Bye-Laws and the required declaration; that it rests with the Board of Faculty to confer upon them the Diploma of Member; and that until the granting of such a Diploma by the Board, they are not in any circumstances, entitled to make use of the letters MFDRCS Irel. after their name, or to exercise any other rights conferred by the membership.
2. The successful candidate's name will be added to a list referred to the Dental Register of Ireland for registration of the candidate's diploma as an additional registrable qualification.
3. When conferred by the Board of Faculty, the successful candidate shall receive a Diploma bearing the seal of the College and the Diploma shall state that such Member has been successful in the examination.
4. Every Member shall pay each year such annual subscription as may be determined from time to time by the Board of Faculty with the concurrence of the College Council.