

# Diploma in Dental and Maxillofacial Radiology (Part A) Examination

## Guidance Notes for Candidates

### 1 Examination Structure

The Diploma in Dental and Maxillofacial Radiology (DDMFR) Part A examination covers anatomy, radiological sciences including radiation protection appropriate to dental radiography and imaging techniques. It comprises of two modules: The Anatomy module consists of a written question paper and an image viewing component and the Radiological Sciences and Techniques module consists of a written paper only.

### 2 Anatomy Module

#### 2a Written Question Paper

The written question paper comprises four short notes questions on Anatomy. Candidates should answer all four questions in one hour.

For each question, candidates are provided with a separate answer book in which to record their answer - answers recorded on the question paper will not be marked. Candidates must write legibly and, when providing diagrams as part of an answer, ensure these are large and carefully labelled.

#### 2b Image Viewing Component

The image viewing examination is 60 minutes in duration and an oral briefing will be provided prior to this part of the examination. The session comprises 100 images and candidates will be asked to identify anatomy on a variety of imaging modalities. Where appropriate, candidates should include side, levels and specific anatomical notations in their answers. Image faults for identification will be included in the images.

#### 2c Equipment and Software

Candidates are required to bring a HB pencil, pen, pencil sharpener, eraser and ruler to the written examination.

The image viewing examination platform allows the provision of image-based exams, and capture of candidate responses, electronically. The platform provides a simple image viewing window and the ability to move through images. Candidates will record their responses directly via a keyboard and mouse onto the platform.

A demonstration site is available via the College website which enables candidates and trainers to familiarise themselves with the platform in advance of the examination.

During the examination, keystrokes and screen activity are monitored and recorded centrally. If a candidate continues to type after the examination, this information will be recorded, and the College will investigate further to determine whether the candidate should be disqualified. In the unlikely event of computer hardware or software failure during the examination, candidates should alert an invigilator by raising their hand – spare workstations are available if necessary.

## 2d Marking

The written examination papers are marked by each of the participating examiners for QA purposes. The system below details numerical scores awarded for differing levels of performance:

| Candidate Response   | Mark |
|--|------|
| No answer offered  | 3    |
| <b>Fail:</b> Weak, incomplete, or inadequate answer. Significant errors / omissions made   | 4    |
| <b>Borderline:</b> Demonstrates some understanding/knowledge, but answer incomplete with some errors/omissions or of insufficient detail | 5    |
| <b>Pass:</b> Demonstrates satisfactory understanding/knowledge with adequate coverage and detail.  | 6    |
| <b>Good Pass:</b> Good answer that includes additional points to the 'pass grade' answer.  | 7    |
| <b>Excellent:</b> A perfect answer, clear and accurate   | 8    |

To pass the written paper of the Anatomy module, the candidate must score an average mark of 6 across all questions.

The Anatomy image viewing examination is automatically marked by the platform, which is programmed with acceptable anatomy answers. The answers will be matched with candidate responses and marks awarded by the system accordingly. Any answers that do not exactly match those within the platform will be reviewed by the examiners and awarded an appropriate mark. Anatomy examiners will review all responses prior to results awarding. The marking system is shown below:

|  |          |
|--|----------|
| For each item answered with complete accuracy                | +2 marks |
| For each item answered with less accuracy, but still correct | +1 mark  |
| For each item answered incorrectly                           | 0 mark   |

The standard for success for the Anatomy image viewing component is determined at each sitting based on the difficulty of the questions (using a criterion-referenced standard setting technique) and so may vary between sittings and sets of images.

## 3 Radiological Sciences and Techniques Module

This module consists of a written paper of six short notes/structured essay questions. Candidates should answer all six questions in 2 hours. Questions will cover radiological sciences related to dental radiography, current UK legislation, radiation physics and radiation protection relating to dentistry, quality assurance and selection criteria. The radiological techniques part of the examination includes techniques for all aspects of dental and maxillofacial radiology (intraoral radiography, panoramic/cephalometric

radiography/ facial bone/skull radiography) and specialised imaging modalities (Cone Beam CT, sialography, interventional sialography, MRI, conventional CT, ultrasound and nuclear medicine including PET)

For each question candidates are provided with a separate booklet in which to record their answer - answers recorded on the question paper will not be marked. Candidates must write legibly and, when providing a diagram as part of an answer, ensure that this is large and carefully labelled.

### 3a Equipment required for the examination

Candidates are required to bring a HB pencil, pen, pencil sharpener, eraser and ruler to the written examination.

### 3b Marking

The written examination papers are marked by each of the participating examiners for QA purposes. The system below details numerical scores awarded for differing levels of performance:

| Candidate Response   | Mark |
|--|------|
| No answer offered  | 3    |
| <b>Fail:</b> Weak, incomplete, or inadequate answer. Significant errors / omissions made   | 4    |
| <b>Borderline:</b> Demonstrates some understanding/knowledge, but answer incomplete with some errors/omissions or of insufficient detail | 5    |
| <b>Pass:</b> Demonstrates satisfactory understanding/knowledge with adequate coverage and detail.  | 6    |
| <b>Good Pass:</b> Good answer that includes additional points to the 'pass grade' answer.  | 7    |
| <b>Excellent:</b> A perfect answer, clear and accurate   | 8    |

To pass the written paper of the Radiological Sciences and Techniques module the candidate must score an average mark of 6 across all questions.

## 4 Overall Result

To pass DDMFR Part A candidates must pass both modules and their component sections:

- Anatomy module - written paper and image viewing component.
- Radiological Sciences and Techniques module - written paper component only.

Failure in one module CANNOT be offset by good performance in the other. If a candidate passes one module but not the other, they need only resit the failed module.

## 5 Personal Belongings and Items on Desks

Candidates must follow the invigilators' instructions at examination venues regarding where to leave personal belongings. Neither the Royal College of Radiologists nor the

examination venue is able to accept responsibility for the safety of any items of personal belongings.

Candidates must not bring any electronic equipment, e.g., laptop or palmtop computers, to the examination. All mobile telephones must be turned off for the duration of the examination and left in bags or coats. Candidates must turn off any alarm set on mobile telephones as these can operate even when the device is turned off; any timing device that emits an audible "beep/ buzz" must have this facility disabled for the duration of the examination.

Candidates are permitted a still (non-carbonated) drink on their desks during the written components of the examination. Candidates with special needs requiring them to eat during the written examinations should advise the college of this when submitting their application via a covering note.

Candidates are not permitted to bring drinks, or other refreshments or food items, into the Anatomy image viewing examination to safeguard the electronic equipment from accidental damage. Candidates with special needs requiring them to eat during this examination should advise the college of this when submitting their application via a covering note.

## **6 Further Information**

Queries arising from this document should be addressed to the College's Examinations Office, either by email to [examinations@rcr.ac.uk](mailto:examinations@rcr.ac.uk) or by telephone on 020 7406 5905.

Queries at the time of the examination should be raised with the invigilators or College staff present. Comments, feedback or complaints following the examination should be brought to the attention of the Examinations Manager, either by email to [examinations@rcr.ac.uk](mailto:examinations@rcr.ac.uk) or by telephone on 020 7406 5947.