The Royal Australian and New Zealand College of Radiologists®

Anatomy - Examination Format and Advice to Candidates

Since September 2013, the Part 1 Anatomy Examination has successfully been delivered in electronic format twice a year.

The general format of the exams has preserved between the handwritten and electronic exam platforms, with only minor changes required. The college engages an Anatomy Examiners group, comprising radiologist college members and professional anatomists, to set and mark the exams under the direction of the Chief Anatomy Examiner.

The purpose of the scope and breadth of the exams is to provide the greatest possible opportunity for candidates to fully demonstrate their anatomical knowledge.

There are two anatomy exams with different formats: both papers need to be passed individually (ie marks are not transferred between the exams).

Paper 1
- 120 minutes (2 hours) in duration with 5 minutes perusal
- 15 questions of 30 marks each (total of 450 marks)
- there is a mix of new and repeated questions and a balanced distribution of questions across all body systems and anatomical regions
- answers should be typed, and point form is encouraged
- each question is marked against a marking rubric
- since Series 2 2019, suggested headings that align with the marking rubric have been provided.eg:
  - Write short notes on the anatomy of the xxx nerve (under the following headings: Origin and termination, Branches and supply, Course, Relations and Variants)
- there is no punitive marking
- tips for the candidate:
  - attempt all questions
  - keep to time - allocate 8 minutes per question
  - include anatomical variants when appropriate
  - standard abbreviations can be used if well known (eg IVC, MCA)
  - histology is not assessed
  - embryology is not specifically assessed but knowledge of the development of anatomic structures is required to understand anatomy and in particular normal variants
  - prepare by replicating the exam environment during your practice – ie practice typed answers under similar time constraints
  - past papers for Paper 1 are available on the College website
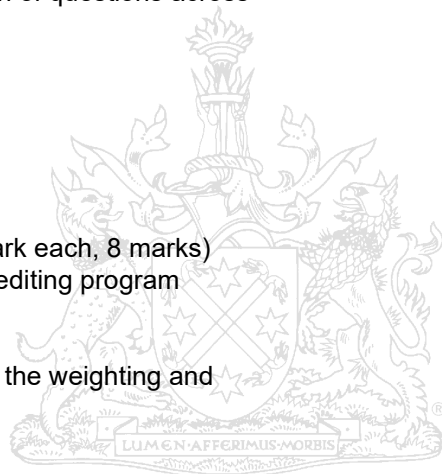
Paper 2
- 120 minutes (2 hours) in duration with 5 minutes perusal
- eight questions (called cases) of 25 marks each (total of 200 marks)
- there is a mix of new and repeated questions and a balanced distribution of questions across all body systems, imaging modalities and anatomical regions.
- answers should be typed in single word, short answer or point form
- logical headings are encouraged if required
- each case is marked against a marking rubric
- there is no punitive marking
- each case has 3 components

A. Identification
- radiological images with 16 arrows identifying structures to label (1/2 mark each, 8 marks)
- radiological images are obtained from a PACS and arrows added in an editing program

B. Image and expansion
- 2 marks
- the breakdown of marks in each question within this component reflects the weighting and should act as a guide of the depth of the answer expected
- an image serves as a stem for more in-depth anatomical questioning

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- only a small number of marks are allocated to the identification of structures on the image with the majority of marks allocated to more detailed assessment of anatomical knowledge
- the image may take the form of:
  - radiological images,
  - computer graphics,
  - computer or hand drawn diagrams or a
  - cadaveric specimen photograph
- in the case of cadaveric specimen photographs, the photographs are scrutinized by the radiologist's examiners for suitability as examination material given the limited expertise of radiology exam candidates in gross cadaveric surgical anatomy.

C. **Normal variants**
- questions about normal variants of anatomical structures that may or may not be related to any of the images or concepts covered in components A or B.
- 5 marks
- tips for the candidate:
  - attempt all cases and questions
  - keep to time - allocate 15 minutes per case
  - adapt your headings and structure to the question being asked
  - standard abbreviations can be used if well known (eg IVC, MCA)
  - be specific when labelling structures particularly in Part A identification
  - prepare by replicating the exam environment during your practice – ie practice typed answers under similar time constraints using past papers available on the College website

Syllabus

The Anatomy Syllabus is a part of the Clinical Radiology Curriculum (V2 dated 2014). The Syllabus describes the anatomical tasks of a radiologist; the three categories of anatomical structures; and the level of familiarity expected of a radiologist and a trainee with each category.

The anatomical tasks of a radiologist are: identification of anatomical structures; decision of whether a structure is normal or abnormal (requiring knowledge of normal variants); and coherent communication with colleagues in anatomical language.

Understanding and recognizing normal variants is a crucial part of a radiologist's competence, to avoid damaging confusion with serious pathology. It is important for trainees to become very familiar with variants early in their training, particularly common variants and those that mimic disease.

There are three categories of anatomical structures.

- Category 1 structures are critical structures ('must recognize and interpret, must know and explain').
- Category 2 structures are important anatomical structures ('must recognize, must know').
- Category 3 structures are useful radiologic anatomical structures ('good to recognize, good to know').

The Syllabus details the expected level of competence for each category of structure in each anatomical task of the radiologist, and the required knowledge base.

The Syllabus then names the anatomical structures it expects the trainees to know, explicitly categorises them into one of the three categories and groups them into body systems. The body systems are: Head and Face (excluding CNS); the Central Nervous System; Neck (non-spinal); Upper Limb; Lower Limb; Spine and Back; Thorax; Abdomen and Pelvis. This part of the syllabus comprises a list of structures, terse in places, more expanded in others. The degree of terseness reflects the postgraduate nature of the Syllabus, with undergraduate level of anatomical knowledge already expected. Thus, a terse list subsumes component parts of a larger anatomical structure into the knowledge base of the parent structure, with the candidate expected to know these component parts exist.

The syllabus can be found here: Anatomy Syllabus (hyperlink)

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