



The **COMPLETE** Revision Guide for the
MRC EM EXAM



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Introduction

The MRCEM examination is a notoriously difficult examination that is an essential step along the path to a career in Emergency Medicine in the United Kingdom. It is also increasingly being used as a benchmark of excellence in Emergency Medicine in many other countries, and there are now international centres in India, Egypt and Singapore.

We hope that this revision guide will help candidates with their revision and facilitate their goal of passing this challenging examination.



Good luck with your exam preparation!

Background and history

The RCEM examinations have recently been restructured, and the format altered. The first sittings of the new MRCEM Intermediate and MRCEM Primary examinations will have taken place in the Autumn and winter of 2021, respectively. Before this, the examination was known as the FRCCEM examination, with the awarding of the Intermediate Certificate being equivalent to completing the new MRCEM examination. The FRCCEM examination now serves as an exit exam for emergency physicians completing their training to become consultants in the speciality.

Prior to 2003, entry into higher specialist training for Emergency Medicine required the passing of one of the relevant membership examinations from complementary specialities, including the MRCS, MRCP(UK), FRCA or the specific A&E membership examination, the MRCSEd(A&E).

In 2003 the then Faculty of Accident and Emergency Medicine (FAEM) introduced a new 3-part examination specific to the speciality. This examination, the MFAEM, formed the basis for what later became the MCEM examination. Over the years that have followed, FAEM grew and became the College of Emergency Medicine (CEM).

In January 2015, the College announced that it had been granted the title 'Royal' and is now known as the 'Royal College of Emergency Medicine'. In August 2016, the exam changed its structure to become the FRCCEM examination. The most recent round of changes in the exam format has split this exam into two parts, with the MRCEM examination

being acting as a benchmark for applicants into higher speciality training and the FRCER as an exit exam sat before the awarding of a CCT or CESR in Emergency Medicine.

What is the MRCEM exam?

The structure of new MRCEM examination structure from August 2021 is as follows:

- MRCEM Primary Single Best Answer (SBA)
- MRCEM Intermediate Single Best Answer (SBA)
- MRCEM Objective Structured Clinical Examination (OSCE)

Information on the dates and fees and how to apply for these exams can be found on the RCEM website.

Single Best Answer Question Format

The questions in both the MRCEM Primary and Intermediate exams are now single best answer question (SBAs). The SBA format has now replaced the short answer question style previously used in the old FRCEM Intermediate examination. SBAs are an excellent means of testing direct factual recall and can also be used to test for recall of more esoteric knowledge.

Single best answer questions are probably the most commonly encountered question style currently encountered in medical exams. They require convergent thinking and the ability to come up with a single answer to a set problem. It is easier for the examiner to test higher-order thinking, such as application and evaluation of knowledge, in an SBA than in the true/false style questions that were previously used in the MRCEM Part A exam.

Standard format SBA questions usually have three parts:

1. A statement or a clinical scenario that the question will be asked about
2. The question itself
3. The answer options, which will include one single correct answer.

An example of a standard SBA question that you might encounter is shown below:

The sensory function of the radial nerve:

You examine the peripheral nervous system of a patient that has suffered an injury to the posterior cutaneous nerve of the arm.

Which of the following best describes the sensory area supplied by the inferior posterior cutaneous nerve of the forearm? Select ONE answer only.

- A. The medial half of the palm
- B. A tapered strip of the middle portion of the posterior forearm
- C. Part of the posterior aspect of the upper arm
- D. The posterior surface of the lateral three and a half digits and the associated areas of the palm
- E. The lateral aspect of the palm

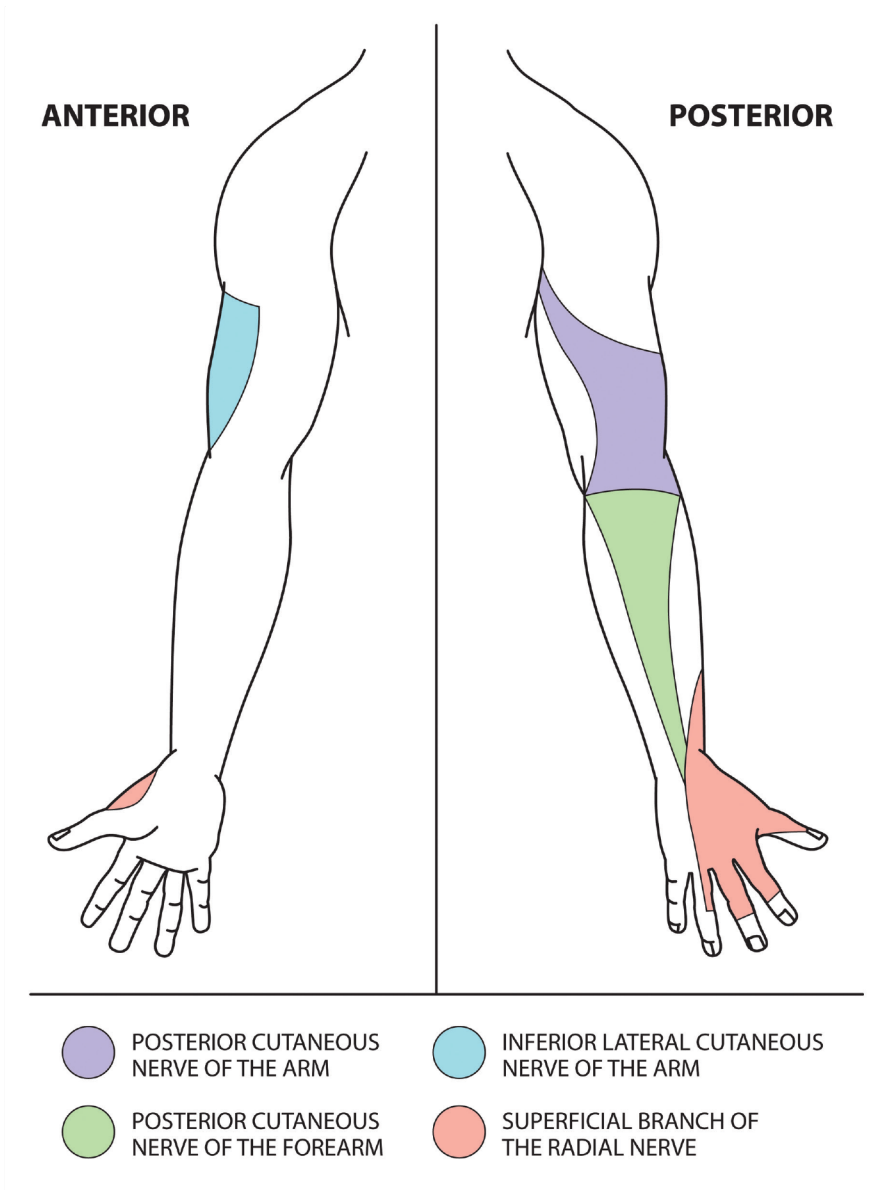
Answer: B. A tapered strip of the middle portion of the posterior forearm

Explanation:

In this question, an intimate understanding of the anatomy of the radial nerve is required. The sensory function of the radial nerve is provided by its four main sensory branches:

1. Inferior lateral cutaneous nerve of the arm – supplies the lateral aspect of the anterior upper arm between the deltoid and the elbow
2. Posterior cutaneous nerve of the arm – supplies part of the posterior aspect of the upper arm

3. The posterior cutaneous nerve of the forearm – supplies a tapered strip of the middle portion of the posterior forearm
4. The superficial branch of the radial nerve – supplies the posterior surface of the lateral 3 ½ digits and the associated areas of the palm



General approach to answering single best answer questions

The answer options will contain one single correct answer and several other distracting options. The question commonly asks for the 'single most likely' answer or 'which single statement is true'. In many SBA questions, several answer options are correct, but only one will be the 'best' answer.

It is generally a good idea to read the question first, which will allow you to see what the main emphasis of the question is. Then scan the answers so that you know what particular kind of answer is required. Finally, read the statement or scenario at the start of the question.

Within the statement or scenario, there will be many valuable clues to point you towards the correct answer. It is worthwhile highlighting or underlining these clues whilst reading the scenario. Some scenarios will include clues such as examination findings and/or results of investigations. Try to highlight anything that is abnormal. Sometimes there are also images of investigations to interpret, such as X-ray or CT scans. Each of these will have been included for a reason so pay careful attention to what they show.

In addition to the correct answer, each SBA question will usually contain at least one or two answers that are highly unlikely or obviously wrong. There are then often one or two answers that are plausible, and these serve as the main distracters within the question. Cross out and eliminate the answers that are obviously incorrect so that you have narrowed your choices.

A good way of practising SBA questions in the run-up to an exam is to cover up the list of answers and attempt to formulate an answer without the answers to guide you. By attempting to remember key facts from your

memory in this way, you can augment your ability to recall the information later.

This strategy is not recommended in the exam, though, as on the day itself, you will need every advantage that you can get!

Some SBAs require multiple cognitive steps to reach the correct answer. These sorts of questions are used to discriminate the best candidates. Typically, you will be required to make a diagnosis and choose an answer based upon this diagnosis.

If time allows, review the questions and answers again after finishing the exam, as it is possible that you may have misread some questions on the first attempt. When you are unsure of the answer, it is usually best to stick to your first instinct and not be tempted to change the answer on re-reading.

The MRCEM Primary Examination

The MRCEM Primary exam breakdown

The MRCEM primary paper is **three hours long** and comprises **180 single best answer questions**. The examination is conducted in English, and candidates are advised that IELTS Level 7 is the expected standard for completion of the MRCEM examinations.

The exam concentrates on basic sciences and is based on the Royal College of Emergency Medicine basic sciences curriculum.

The following areas are tested in the following proportions:

- Anatomy (60 questions)
- Physiology (60 questions)
- Pharmacology (27 questions)
- Microbiology (18 questions)
- Pathology (9 questions)
- Evidence-Based Medicine (6 questions)

The MRCEM Primary examination is standard set using the Angoff Method.

Preparing for the MRCEM Primary

Getting a good grip of the basic sciences takes a great deal of time, and candidates should start preparing at least six months before the

examination. A robust textbook covering each of the areas should be used, and this should form the basis of your initial revision.

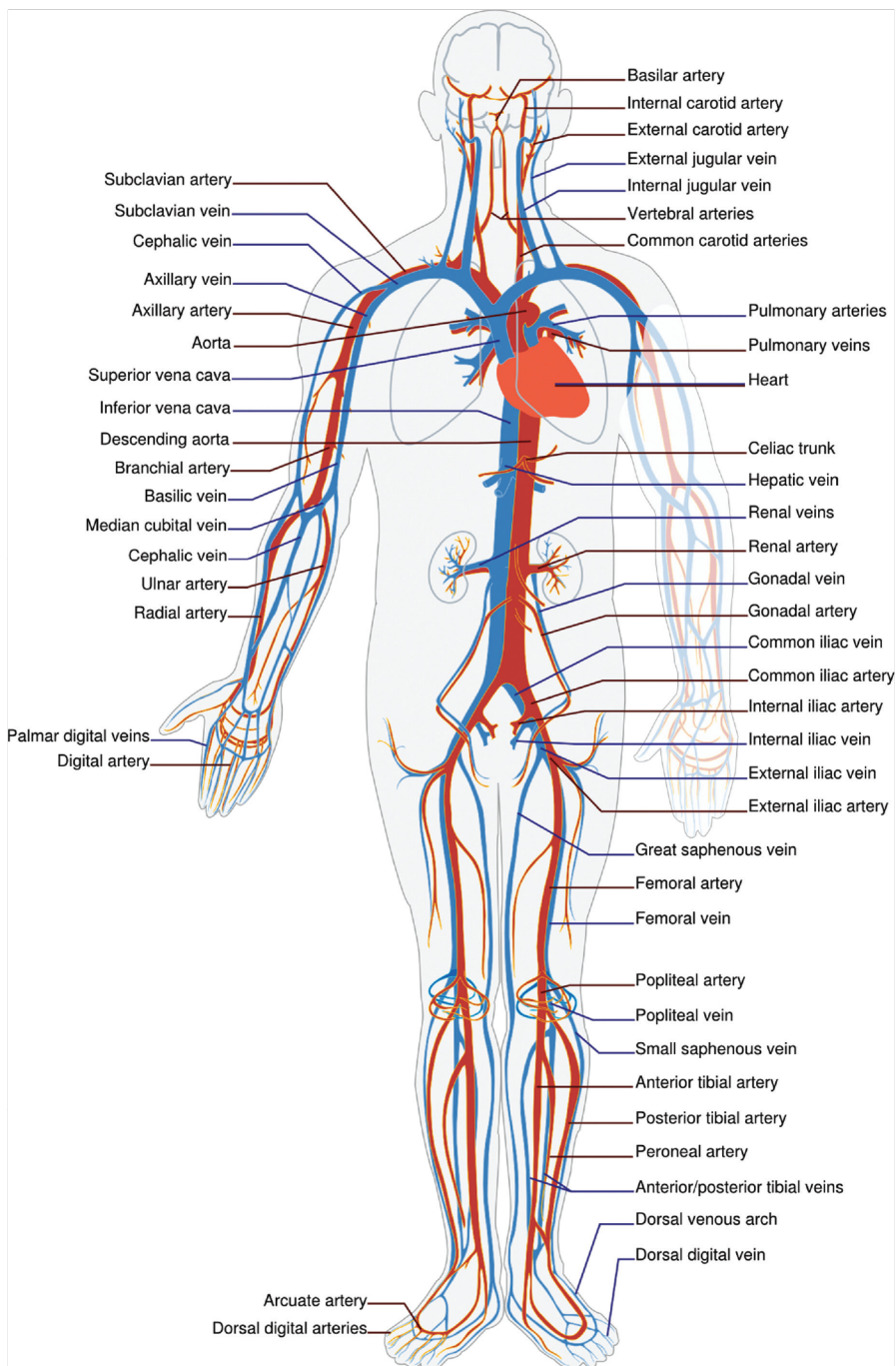
Some suggested texts and a thorough summary of the Basic Sciences Curriculum can be found on the Royal College of Emergency Medicine website.



Candidates often underestimate the amount of revision required to prepare for the MRCEM Primary examination, and it is a good idea to start at least 6 months before the exam.

Once you have started to get to grip with the basics of each topic, it is a good idea to begin to supplement your learning with regular SBA practice using resources such as our website and any of the various question books available.

Try to isolate areas of weakness and concentrate on these areas and spend less time on your areas of strength. Many candidates struggle with the vast size of the anatomy syllabus and often need to spend longer on that. It is a good idea to use your performance in SBAs as a benchmark of your knowledge base in each area of the curriculum and use this as a means to support your revision planning. By the time each of you has qualified as a doctor, you will already have sat numerous exams and developed your own methods for preparing. It is a good idea to keep using the revision methods that you are used to when preparing for this exam. It is imperative not to under-estimate the amount of work that is required and to spend plenty of time preparing!



Many candidates struggle with the vast size of the anatomy syllabus in the MRCEM Primary examination.

Essential revision topic checklist for the MRCEM Primary exam

This is not designed to be an exhaustive list but rather a list of high-yield topics that have appeared in previous exams and should form an essential part of your revision:

ANATOMY

- ☐ Surface anatomy
- ☐ Vertebral levels
- ☐ Myotomes and dermatomes
- ☐ Brachial plexus
- ☐ Rotator cuff muscles
- ☐ Shoulder joint
- ☐ Upper limb arteries
- ☐ Median, ulnar and radial nerves
- ☐ Upper limb nerve palsies
- ☐ Anatomical snuffbox
- ☐ Muscles of the hand
- ☐ Great saphenous vein
- ☐ Sciatic nerve
- ☐ Tibial nerve
- ☐ Femoral artery, vein and nerve
- ☐ Hip joint
- ☐ Popliteal fossa and knee
- ☐ Ankle and tarsal joints
- ☐ Lower limb nerve palsies
- ☐ Lumbar and sacral plexuses
- ☐ Diaphragm
- ☐ Thoracic inlet
- ☐ Heart and pericardium
- ☐ Pleura and lungs
- ☐ Gastrointestinal tract

- Liver and biliary tract
- Pancreas and spleen
- Kidneys, ureters and bladder
- The inguinal region
- Testis, epididymis and spermatic cord
- Genitourinary tract
- Triangles of the neck
- Root of the neck
- Facial nerve and facial region
- Scalp
- Orbit and the eye
- Vertebral column
- Cerebral hemispheres
- Cerebral blood supply
- Brainstem and cerebellum
- Cranial nerve lesions
- Spinal cord anatomy

PHYSIOLOGY

- Basic cellular pathology
- Cell structure and function
- Neurological action potential
- Muscle physiology
- Lung volumes and pressures
- Gas transport
- Control of respiration
- Ventilation-perfusion relationship
- Cardiac cycle and cardiac output
- Peripheral vascular physiology
- Gastrointestinal physiology
- Glomerular filtration and renal physiology
- Adrenal glands
- Exocrine pancreas

- ☐ Thyroid physiology
- ☐ Acid-base balance
- ☐ Anion gap
- ☐ Renin-angiotensin system
- ☐ Potassium balance
- ☐ Calcium balance
- ☐ Glycolysis and gluconeogenesis
- ☐ Lactate and lactic acidosis
- ☐ Cortisol and Cushing's disease
- ☐ Addison's disease
- ☐ Conn's syndrome

MICROBIOLOGY

- ☐ Natural and innate immunity
- ☐ Infection control
- ☐ Vaccines and vaccination schedule
- ☐ Streptococci and Staphylococci
- ☐ Tuberculosis
- ☐ Neisseria
- ☐ Gram-negative gastrointestinal disease
- ☐ Legionella
- ☐ Pseudomonas
- ☐ Chlamydia
- ☐ Herpes simplex and zoster
- ☐ Hepatitis
- ☐ HIV
- ☐ Measles, mumps and rubella
- ☐ Respiratory viruses
- ☐ Gastrointestinal viruses
- ☐ Yeasts and fungi
- ☐ Worms
- ☐ Malaria

PHARMACOLOGY

- ☐ Ulcer-healing drugs
- ☐ Diuretics
- ☐ Anti-arrhythmics
- ☐ Anti-hypertensives
- ☐ Sympathomimetics
- ☐ Drugs used in cardiac arrest
- ☐ Antiplatelets and anticoagulants
- ☐ Myocardial infarction and thrombolysis
- ☐ Bronchodilators
- ☐ Antipsychotics and antidepressants
- ☐ Anti-emetics
- ☐ Analgesics
- ☐ Antibiotics
- ☐ Insulin and anti-diabetic drugs
- ☐ Corticosteroids
- ☐ Fluids and electrolytes
- ☐ Anaesthesia and sedation
- ☐ Immunological products
- ☐ Vaccines
- ☐

HAEMATOLOGY

- ☐ Inflammatory response
- ☐ Inflammatory markers
- ☐ Anaphylaxis and allergy
- ☐ The immune response
- ☐ Wound healing
- ☐ Autoimmune disease and autoantibodies
- ☐ Iron studies and iron-deficiency anaemia
- ☐ Vitamin B12 and folate
- ☐ Pernicious anaemia
- ☐ Sickle cell disease
- ☐ Thalassaemias

- Coagulation tests
- Thrombophilias
- Haemophilia
- Leukaemia and lymphoma
- Multiple myeloma
- Disseminated intravascular coagulation

EVIDENCE-BASED MEDICINE

- Types of study
- Study methodology
- Principles of critical appraisal
- Epidemiological measures
- Sample distribution
- Variance and standard deviation
- Confidence intervals
- Parametric and non-parametric tests
- P values and null hypothesis
- Type I and type II errors
- Risk and odds
- Screening tests

The MRCEM Intermediate Exam

The MRCEM Intermediate exam breakdown

The MRCEM Intermediate exam consists of two separate papers sat on the same day. Each of these papers is **two hours long** and comprises **90 single best answer questions**.

The exam is mapped to the RCEM curriculum, which can be found here: <https://rcemcurriculum.co.uk>

All applicants for the MRCEM Intermediate examination are strongly advised to familiarise themselves with the curriculum. It defines the scope of presentations or clinical conditions that an EM clinician may encounter in the workplace, and therefore need to know about.

The clinical areas covered by the curriculum are:

- Allergy
- Cardiology
- Dermatology
- Ear, nose & throat
- Elderly care / frailty
- Endocrinology
- Environmental emergencies
- Gastroenterology & hepatology
- Haematology
- Infectious diseases
- Maxillofacial & dental
- Mental health

- Musculoskeletal (non-traumatic)
- Neonatal emergencies
- Nephrology
- Neurology
- Obstetrics & gynaecology
- Oncological emergencies
- Ophthalmology
- Pain & sedation
- Palliative & end of life care
- Pharmacology & poisoning
- Respiratory
- Resus
- Sexual health
- Surgical emergencies
- Trauma
- Urology
- Vascular
- Safeguarding & psychosocial emergencies
- Major incident management & PHEM

Preparing for the MRCEM Intermediate exam

Although the MRCEM Intermediate exam does not have the daunting volume of knowledge required for the MRCEM Primary, it is still a difficult and challenging examination. Many of the questions take on the form of data interpretation, with questions based around blood tests, an X-ray or an ECG. Candidates should start preparing at least six months before the examination.



Many questions in the MRCEM Intermediate examination take the form of data interpretation questions, such as X-rays

The Oxford Handbook of Emergency Medicine is an excellent resource for the MRCEM Intermediate examination and, once purchased, will probably remain at your side for much of the years that follow during your Emergency Medicine training.

Other frequently tested aspects of the MRCEM Intermediate examination are scoring systems and clinical guidelines. It is an excellent idea to familiarise yourself with the various scoring systems

used in the Emergency Department setting, such as CURB-65 for pneumonia. You should also attempt to read relevant NICE and SIGN guidelines.

The MRCEM Intermediate examination is very closely matched to your everyday work in the Emergency Department, so it is a good idea to read around interesting and relevant cases that you come across in day-to-day practice as this will help you to achieve a better understanding of current practice and guidelines.

Essential revision topic checklist for the MRCEM Intermediate exam

As with the list provided for the MRCEM Primary exam, this is not designed to be exhaustive but rather a list of high-yield topics that have appeared in previous exams and should form an essential part of your revision.

GENERAL MEDICINE

- ☐ ALS scenarios
- ☐ Anaphylaxis and angioedema
- ☐ Severe sepsis and septic shock
- ☐ Acute coronary syndromes and MI
- ☐ Pericarditis and cardiac tamponade
- ☐ Bradyarrhythmias
- ☐ Tachyarrhythmias
- ☐ Hypertensive crisis
- ☐ Arterial blood gas interpretation
- ☐ Acute cardiogenic pulmonary oedema
- ☐ Acute asthma
- ☐ Exacerbation of COPD
- ☐ Pneumonia and CURB-65 score
- ☐ Spontaneous pneumothorax

- DVT and pulmonary embolus
- Upper GI bleeding
- Traveller's diarrhoea
- Alcoholic hepatitis and decompensation
- Headache
- Subarachnoid haemorrhage
- Meningococcal septicaemia
- Transient loss of consciousness
- TIA and stroke
- Status epilepticus
- Hypoglycaemia
- Hyperglycaemic crisis
- Thyrotoxic crisis
- Addisonian crisis
- Hyperkalaemia
- Acute renal failure and dialysis
- Coagulation disorders
- Sickle cell crises
- Erythema multiforme and associations
- Erythema nodosum and associations
- UTI in the elderly
- Parkinson's disease
- Blood transfusion and transfusion reactions
- Viral hepatitis
- HIV
- Hypothermia
- Pyrexia of unknown origin
- Malaria and tropical diseases
- Cellulitis

TOXICOLOGY

- Indications for the use of activated charcoal
- Specific antidotes for poisons

- Decontamination of patients and chemical incidents
- Carbon monoxide poisoning
- Paracetamol poisoning
- Opioid poisoning
- Salicylate poisoning
- TCA and SSRI poisoning
- Benzodiazepine poisoning
- Beta-blocker poisoning
- Calcium-channel blocker
- Digoxin toxicity
- Methanol poisoning
- Ethylene glycol poisoning
- Organophosphate poisoning
- Cyanide poisoning
- Cocaine use and associated MI
- Ecstasy use and complications

TRAUMA & ORTHOPAEDICS

- ATLS scenarios
- Chest injury
- Tension pneumothorax
- Blunt abdominal trauma
- Pelvic injuries
- FAST scanning
- Head injury and indications for CT head
- Basal skull fracture
- Spinal cord injury
- Burns management
- Electrocution
- Wound management
- Bite injuries, including 'punch bites'
- Tetanus prophylaxis
- Needlestick injuries

- Shoulder dislocation
- Distal radius fractures
- Hip dislocation
- Femoral shaft fractures
- Knee injuries
- Ankle sprains and fractures
- Low back pain
- Eponymous fractures
- Acute arthritis
- Osteomyelitis and gas gangrene
- Major incident planning
- Blast injuries
- Traumatic amputation

PAEDIATRICS

- APLS scenarios
- Paediatric trauma
- Venous and intraosseous access in children
- BRUE and ALTE
- Purpuric rashes in children
- Bronchiolitis
- Croup and epiglottitis
- Asthma in children
- Febrile convulsions
- Kawasaki disease
- Paediatric exanthems
- UTI in children
- Paediatric diarrhoea and fluid balance
- Irritable hip
- Slipped upper femoral epiphysis
- Perthes disease
- Osteochondritis in children
- Non-accidental injury

- The Victoria Climbié report
- Salter-Harris fracture classification
- Radial head subluxation ('Pulled elbow')
- Elbow ossification times

SURGERY

- Acute abdominal pain
- Abdominal aortic aneurysm
- Acute appendicitis
- Acute pancreatitis
- Intestinal obstruction
- Mesenteric infarction
- Renal colic
- Urinary obstruction
- Testicular and penile problems
- Abscesses
- Acute limb ischaemia

ANAESTHESIA

- Local anaesthesia
- Regional nerve blocks
- Intravenous regional anaesthesia (Bier's block)
- Local anaesthetic toxicity
- ED sedation policies
- Anaesthetic drugs
- Rapid sequence induction
- Basic airway management
- Airway assessment and Mallampati scores
- Difficult intubation

OPHTHALMOLOGY

- The red eye
- Eye infections

- Sudden loss of vision
- Eye trauma
- Orbital 'blow-out' fracture
- Ophthalmology foreign bodies
- Acid and alkali injury to eyes
- Corneal abrasions
- Acute glaucoma
- Neonatal conjunctivitis
- Ophthalmic shingles

ENT & MAXILLOFACIAL SURGERY

- ENT foreign bodies
- Epistaxis
- Otitis media
- Otitis externa
- Tonsillitis and quinsy
- Bell's palsy
- Salivary gland problems
- Facial trauma
- Middle third facial fractures (Le Fort classification)
- Mandibular fractures
- Penetrating neck trauma
- Dental emergencies
- Tooth avulsion

OBSTETRICS & GYNAECOLOGY

- Vaginal discharge
- Vaginal bleeding
- Emergency contraception
- Pregnancy and emergency delivery
- Bleeding in early pregnancy
- Abdominal pain in pregnancy
- Ectopic pregnancy

- Hyperemesis gravidarum
- Chickenpox and pregnancy
- Cardiac arrest in pregnancy
- Trauma in pregnancy
- Rhesus disease
- Post-partum problems
- Sexual assault
- Sexually transmitted diseases

PSYCHIATRY

- Suicide and parasuicide
- Depression
- Acute psychosis
- Schizophrenia
- Mania and bipolar affective disorder
- Violent and abusive patients
- Mental health act and sections
- Complications of psychiatric drugs
- Alcohol abuse

The MRCEM OSCE

The MRCEM OSCE is the final part of the MRCEM examination. It is designed to test both the theoretical knowledge and clinical skills of emergency medicine doctors. The OSCE stations test a wide variety of skills, including history taking, physical examination, communication skills and the ability to perform practical procedures.

The MRCEM OSCE usually consists of a circuit of 18 stations, each of which is 7 minutes long. There are usually two 'double stations', which are 14 minutes long and involve ALS, APLS or ATLS style scenarios. Each station will test a different skill or competence and is usually invigilated and marked by a different examiner. Candidates rotate around all of the stations sequentially so that each candidate will have had a standardised experience.

Broadly speaking, apart from the 'double stations', there are five types of station that are commonly encountered in the MRCEM OSCE:

1. History taking stations
2. Clinical examination stations
3. Communication skills stations
4. Practical skills stations
5. Data interpretation stations
6. Teaching stations

Example OSCE station:

CLINICAL EXAMINATION STATION – Cardiovascular examination

Information for the candidate:

Ethel Jones is a 70-year-old woman that has been experiencing increasing shortness of breath over the past few weeks. Please perform an examination of her cardiovascular system and then present your findings to the examiner.

Information for the patient:

During this station, the candidate will perform an examination of your heart and chest. You will be positioned lying flat on the couch, but the candidate may ask you to sit up or re-position you.

You should not answer any questions from the candidate about your history or diagnosis. If the candidate requires any further information during this station, it will be provided by the examiner.

Information for the examiner:

In this station, you should assess whether the candidate is competent to perform a thorough and logical cardiovascular examination, generate a differential diagnosis and answer a few brief questions about their differential diagnosis.

At the start of the station, you should instruct the candidate to ‘perform a cardiovascular examination on the patient, establish a differential diagnosis and outline a brief management plan to include any further examination or investigations.’

The patient in this particular station has an ejection systolic murmur that radiates to the carotids and is consistent with a diagnosis of aortic stenosis. Please examine the patient before the exam starts to ensure that you are familiar with the clinical signs present in this patient.

An appropriate differential diagnosis would be:

- Aortic stenosis
- Aortic sclerosis

Further investigations and management should include:

- ECG (looking for signs of LVH)
- Chest X-ray (looking for post-stenotic aortic dilatation)
- Echocardiography (to confirm the diagnosis)
- Patient should be referred for a specialist cardiological opinion

Marking sheet:

	Achieved	Not achieved
Washes hands / hygiene measures		
Appropriate introduction to patient		
Obtains consent to perform examination		
Sits patient up to 45-degree angle		
Appropriately exposes chest		
Inspects from the end of the bed		
Examines both hands		
Feels radial pulse for rate and character		
Asks to check blood pressure		
Feels brachial and carotid pulse		
Inspects neck and assesses JVP		
Inspects chest, looking for scars etc		
Palpates apex beat		
Checks for heaves and thrills		
Auscultates all 4 cardiac areas		
Auscultates apex in left lateral position		
Auscultates aortic area sitting forwards		
Auscultates axilla for MR radiation		
Auscultates neck for AS radiation (present)		
Auscultates lung bases for crepitations		
Palpates liver for pulsation		
Feels lower limb pulses		
Checks for peripheral oedema		
Presents a clear summary		
Correct diagnosis of aortic stenosis		
Discusses clear management plan		
TOTAL SCORE:		/ 26

Preparing for the MRCEM OSCE

Preparing for the MRCEM OSCE is a very different process from preparing for the MRCEM Primary and Intermediate examinations. There are a wide variety of resources available explaining the ideal way to take histories, undertake systems examinations and perform the specific technical skills that are commonly encountered in OSCEs. Some books and revision courses also contain model marking schemes, and these are especially helpful. Marks will be awarded for each step in the particular task that you have been asked to perform, and knowing what the marks are awarded for makes it far easier to pass the station. It is essential to learn the correct methodology for each of these and practice each of them repetitively until they are second nature to you. The importance of this type of repetitive practice cannot be emphasised enough.



Repetitive practice should form an essential part of your MRCEM OSCE preparation.

Practice in small groups with your friends and colleagues, and take it in turns to role-play the candidate, patient and examiner. It is beneficial to get used to being the examiner as you can gain a valuable insight into the sorts of mistakes that can easily be avoided and see where easy marks can be picked up by monitoring and marking the performance of your colleagues. When practising in this manner, try to simulate the feel of the examination as closely as possible. Pay careful attention to timekeeping as it is very common for candidates to run out of time, particularly in history taking and communication skills type stations. If possible, also try to get experienced senior clinicians, preferably with some experience of marking or invigilating OSCEs, to watch you. Many useful tips can be picked up in this way.



Practicing in small groups is an excellent method of preparing for the MCEM Part C examination.

Some OSCEs will have life support or resuscitation type stations that will require the demonstration of advance life support, advanced pediatric life support or advance trauma life support skills. Try to get hold of the hospital resuscitation officer or a senior Emergency Room doctor to help

you practise these types of scenarios. Some hospitals have dedicated simulation labs where these skills can be practised in circumstances that closely resemble real life. These provide an excellent environment in which to practice and hone these types of skills.

When practising with your friends and colleagues, ask them not to be overly friendly and even ask them if they can harass you a little and ask difficult or awkward questions. Also, be very critical and analytical of each other's performance. By practising all of the skills that you require for your OSCE in this manner, you will develop a familiarity with the kind of stress that these examinations generate, and this familiarity will help you enormously on the day of the exam when your nerves are at their peak.

Essential revision topic checklist for the MRCEM OSCE

The following is a list of the sort of stations that you might expect to encounter in the MRCEM OSCE. This list is not exhaustive, but contains a selection of the most commonly encountered stations:

HISTORY TAKING STATIONS

- ☐ Chest pain
- ☐ Shortness of breath
- ☐ Abdominal pain
- ☐ Headache
- ☐ Transient ischaemic attack
- ☐ Haematuria
- ☐ Hyperthyroidism
- ☐ Unexplained bruising
- ☐ 'Tired all the time'
- ☐ Leg swelling and DVT
- ☐ Depression
- ☐ Mania
- ☐ Suicidal ideation

- Vaginal discharge
- Bleeding in early pregnancy
- Fever or diarrhoea in a returning traveler
- Back pain and 'red-flags'
- Limping child

CLINICAL EXAMINATION STATIONS

- Cardiovascular examination
- Respiratory examination
- Abdominal examination
- Shoulder examination
- Elbow examination
- Hand examination
- Hip examination
- Knee examination
- Foot and ankle examination
- Lumbar spine examination
- Cranial nerve examination
- Upper limb neurological examination
- Lower limb neurological examination
- Facial and scalp examination (post assault)
- Eye examination and use of slit lamp
- Examination of a rash
- Mental state examination

COMMUNICATION SKILLS STATIONS

- Breaking bad news
- Making a difficult referral
- Angry patients and relatives
- Conflict resolution
- Dealing with complaints
- Explaining febrile convulsions to parent
- Needlestick injuries

- Managing missed fractures
- Obtaining consent
- Competence in children
- Management of clinical decision unit
- Emergency contraception
- Managing drug seeking behaviour
- Major incident preparation

PRACTICAL SKILLS STATIONS

- Hand washing
- Basic airway management
- Endotracheal intubation
- Intraosseous needle insertion
- Insertion of central line
- Insertion of arterial line
- Insertion of chest drain
- Pleural aspiration
- External pacing
- Application of plaster cast
- Application of Thomas splint
- Digital nerve block
- Femoral nerve block
- Wound closure (suturing)
- Urethral catheterisation
- Cervical spine clearance
- Speculum examination and vaginal foreign body removal
- Recording an ECG

DATA INTERPRETATION STATIONS

- Interpreting fluid balance chart
- Interpreting a chest X-ray
- Interpreting an abdominal X-ray
- Interpreting a CT scan of the head

- Interpreting an ECG
- Interpreting blood results
- Interpreting arterial blood gas results

TEACHING STATIONS

- Teaching ECG interpretation to medical student
- Teaching chest X-ray interpretation to medical student
- Teaching ABG interpretation to medical student
- Teaching basic airway management
- Teaching how to set up non-invasive ventilation
- Teaching how to use a slit lamp

‘DOUBLE-STATIONS’

- ALS scenarios
- APLS scenarios
- ATLS scenarios

