



EUROPEAN DIPLOMA IN INTENSIVE CARE MEDICINE

EXAMINATION GUIDELINES

The examination is organized and conducted by the European Society of Intensive Care Medicine (ESICM).

The ESICM will award successful candidates the European Diploma in Intensive Care Medicine (EDIC).

The aim of the examination for the European Diploma in Intensive Care Medicine is to promote quality standards in education and training for intensive care medicine in Europe and elsewhere. The exam is intended to be complementary to specialist postgraduate medical training and the taking of the two components of the exam should normally correspond with stages of experience/training in intensive care medicine (see eligibility criteria below).

2009

ELIGIBILITY/QUALIFICATIONS

EDIC PART I: WRITTEN EXAMINATION

Criteria for entry	Required documentation
<p>1. Fully registered Medical Doctor (i.e. internship completed). Candidates must be in good standing with their national medical registration authorities.</p>	<p>Copy of University-awarded medical degree</p>
<p>2. Entry into a national training programme in a primary specialty. This may include Anaesthesiology, General/Internal Medicine (and other medical specialties), General Surgery (and other surgical specialties), Accident & Emergency Medicine, Paediatrics, or Intensive Care Medicine if a primary specialty.</p>	<p>Letter of confirmation from national or regional primary specialty Training Authority (e.g. College or Society)</p>
<p>3. Entry into a national training programme in intensive care medicine or satisfactory completion of 12 months training/experience in ICM**, of which not more than six months may include complementary training. Complementary training entails training in the acute and emergency medical care of patients other than in the trainee's primary specialty.</p> <p><small>** Intensive Care Medicine training/experience should be undertaken in modules of dedicated, full-time, supervised training / experience in Intensive Care Medicine</small></p>	<p>Documents/letter confirming your training in ICM or completion of ICM training programme</p> <p>Contact details for:</p> <ul style="list-style-type: none"> ◆ If you are in ICM training: Training Authority, supervisor or Head of training ◆ If you have completed your ICM training: Head of Department or Head of Training Programme or other representative who can attest to your having completed ICM training
<p>Specialists (Consultants/Attending) may take the EDIC if they have a regular, substantive day-time and emergency call commitment to intensive/critical care medicine.</p> <p>You must provide evidence of your specialty and support for your application</p>	<p>Copy of university-awarded medical degree and current certificate of full medical registration</p>

EDIC PART 2: ORAL/CLINICAL EXAMINATION

Criteria for entry	Required documentation
<p>1. Successful completion of EDIC Part I</p> <p>2. 24 months of training/experience in ICM**, of which not more than 6 months may include 'complementary training' (see above).</p> <p>To minimise the failure rate and to accommodate requests for candidates from outside Europe, it is recommended that candidates should acquire a thorough understanding of European ICM practice. It is recommended that this is best facilitated by working in an academic European ICU for a period of at least six months. If your application form does not specify training within a European ICU, you may be requested to provide documentation confirming such training / experience.</p> <p>ESICM is presently working to develop alternatives for non-European candidates to sit part II outside Europe, but at present this is limited to Kuala Lumpur in Malaysia.</p> <p><small>** Intensive Care Medicine training/experience should be undertaken in modules of dedicated, full-time, supervised training / experience in Intensive Care Medicine</small></p>	<p>Documents/letter confirming your training in ICM or completion of ICM training programme (to complement what you submitted for EDIC Part I)</p> <p>Copy of primary specialty certification, if completed</p> <p>Contact details for:</p> <ul style="list-style-type: none"> ◆ If you are in ICM training: Training Authority, supervisor or Head of training ◆ If you have completed your ICM training: Head of Department or Head of Training Programme or other representative who can attest to your having completed ICM training

AWARDING OF EDIC DIPLOMA

<p>The diploma is awarded to those who have successfully:</p> <ul style="list-style-type: none"> ◆ passed EDIC Parts I and 2 ◆ completed their primary base specialty *** <p><small>*** If you have passed parts I and 2 but not yet completed your primary specialty, please send proof of completion of this specialty. Only upon reception of this document will you be awarded EDIC.</small></p>
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The EDIC is a two part examination: Part 1 is a multiple choice questionnaire written examination and Part 2 is a clinical / oral examination.

PART I WRITTEN EXAMINATION

EDIC part I examination is a multiple choice written examination in English. There are 100 multiple choice questions (MCQs) and each question trunk will have either four or five stems.

The paper contains two types of MCQ questions:

- ◆ 50 type A questions: of the five options (A to E) available, only one answer is correct
- ◆ 50 type K questions. The questions requires an individual answer T (true) or F (false), to each of the four statements A to D in the question.

EXAMPLE OF TYPE A QUESTIONS

Which ONE of the following statements about vasoactive drugs is FALSE:		
A	Adrenaline (epinephrine) has alpha and beta receptor agonist activity	
B	Noradrenaline (norepinephrine) is a vasoconstrictor	
C	Dopamine acts on renal dopamine receptors	
D	Isoprenaline (isoproterenol) is a systemic and pulmonary vasodilator	
E	Dopamine has a specific renal protective action in critical care patients at risk of renal failure	X

The required (correct) answer is marked here with an X.

During the exam, you will be required to mark your answer in the question booklet AND indicating the correct answer on your answer sheet.

On the answer sheet, you will need to designate the correct answer with a stroke in the box corresponding with the correct answer: The boxes corresponding with the incorrect options should be left blank as shown below.

A	
B	
C	
D	
E	

EXAMPLE OF TYPE K QUESTIONS

Appropriate, immediate, initial antimicrobial therapy (after cultures have been taken) for the following acute infections, in adult patients, is:		
A	Cefotaxime 2G 4hrly (or equivalent) IV for meningitis	T
B	Linezolid 600mg bd IV for suspected pseudomonas pneumonia	F
C	Vancomycin 1G bd IV for peritonitis	F
D	Metronidazole 400mg 8hrly NG for suspected CI. Difficile enterocolitis	T

For these questions you must also note your answers in the question booklet AND on the answer sheet.

In the question booklet note your answers with a T (True) or F (False) next to the question.

On the answer sheet a T (True) response is indicated by a + (plus) sign and a F (False) is indicated by a - (minus) sign. On the answer sheet, you are asked to indicate your chosen answer by over-writing with a stroke on the (+ = true) and (- = false) as follows (See column B).

A		
+		-
+		-
+		-
+		-

B		
		-
+		
+		
		-

There are no negative markings.

Questions are drawn from the entire spectrum of intensive care medicine, including basic medical sciences, pathophysiology of relevant diseases, interpretation of diagnostic data, therapeutics/toxicology, ethics and all aspects of clinical ICM practice.

As of 2009, the ESICM will be offering registered candidates (who have paid their exam fee) to access a series of sample MCQ questions used in previous EDIC-1 exams. Candidates will get an individual time-limited password and be able to answer questions online, with instant feedback on their own performance. In addition to the training experience this will give a very good impression about the difficulty to expect during the exam, and how different kind of questions (A and K) can look like.

EVALUATION OF THE EXAM AND INDIVIDUAL ANSWERS

All answer sheets are handled by IML (institute of Medical Education: www.iml.unibe.ch) in Bern, who partner with the ESICM in the production and evaluation of exam and MCQs. Correct answers are given 1 point, the wrong or a blank answer will be given 0 points. The pass mark is fixed each year based on a calculation using the mean value and SD. (mean value of the cohort, - 0.6 SD). For the 2007 Berlin examination 73% of the candidates passed the EDIC 1.

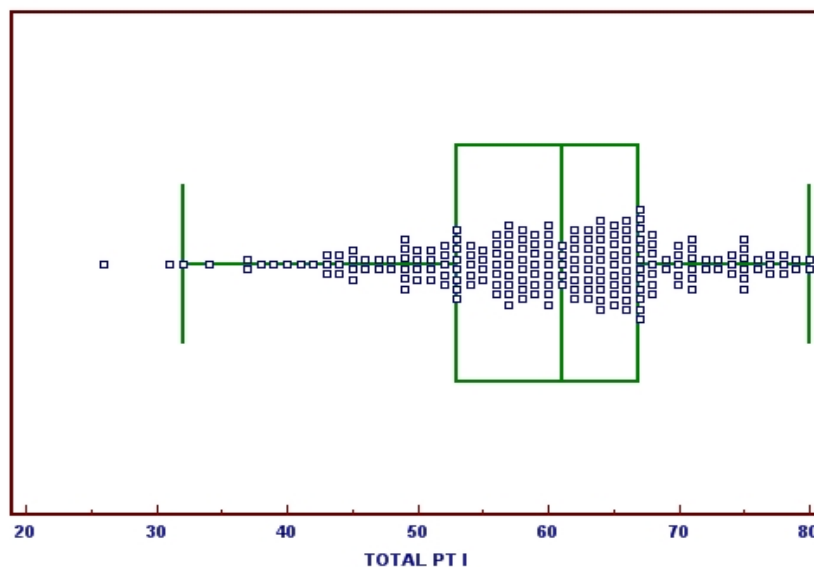


Figure 1: Box-plot showing the the spread of total points from 2007 EDIC 1 examination in Berlin. (the box-plot indicates median and 25-75% percentiles in the group). Median value was 61 points and means 60 points. The pass mark was set at > 56 points in order to pass the examination.

Each year the ESICM EDIC committee along with SGI (the Swiss society of Intensive Care Medicine) and IML evaluates the exam, and generates statistics on each question. Doubtful and poorly performed questions are usually removed before the final evaluation of the exam. For example in 2007 we removed three questions before final evaluation.

EXAM QUESTIONS – PATTERN & CONTENT

The content blueprint which the exam questions follow is currently is broadly as follows:

Blueprint N°.	Blueprint Topic	Combined number of Type A & K questions
1	Cardiovascular	12
2	Respiratory	16
3	Neuro-critical care	10
4	Gastro Intestinal / nutritional	8
5.1	Renal	4
5.2	Urology, Obstetrics & Gynaecology	4
6.1	Endocrine & metabolic	4
6.2	Bleeding & Coagulation disorders	4
6.3	Oncology	4
7	Environmental Hazards, Poisoning & acute pharmacology	8
8	Severe Infection & Sepsis	10
9	Surgery & trauma	6
10.1	Ethics, Law & Quality Assurance	4
10.3	Intensive Care management	4
10.4	Transplantation	2
Total		100

The content blueprint is subject to changes each year.

The questions are drawn from the entire spectrum of intensive care medicine and within each section of the blueprint, components of the question relate to basic medical sciences, patho-physiology of relevant diseases, interpretation of diagnostic data, therapeutics/toxicology, complications and any other aspect relevant to the clinical practice of Intensive Care Medicine.

The exam is under continuous review and the format may be changed without notice. Similarly, the requirements for the exam, its conduct, and the standards required, are all kept under review, and are subject to change.

EXAM REGULATIONS

- ◆ Three hours are allowed for the examination. This is strictly applied.
- ◆ Please check your candidate information on the question paper and answer sheet. Please complete the additional candidate information requested at the end of the question paper, and correct any incorrect information.
- ◆ The question paper and answer sheets are the only paper materials allowed on your desk.
- ◆ No examination aids are permitted e.g. calculator or dictionary.
- ◆ All bags and belongings must be placed at the designated location.
- ◆ Copying or cheating of any description will entail immediate disqualification. The decision will be at the discretion of the examination supervisor.
- ◆ Toilet breaks are only allowed if accompanied by an examiner, and if the exam room is equipped with the facilities.
- ◆ Mobile phones must be switched off.
- ◆ The exam booklet and answer sheet must be filled in with a pencil (no pens)
- ◆ The question paper and answer sheet must be signed and returned to the examination supervisor at the end of the examination.

PART I EXAM RESULTS

All candidates who have successfully passed the Part I exam will be notified of their results by the ESICM administrative office.

Candidates, who have failed the Part I exam, will be allowed to sit the exam again after 12 months, no earlier. A total of three attempts are allowed.

PART 2: THE CLINICAL AND ORAL EXAMINATION

The standard expected for Part 2 is that of a senior trainee nearing completion of specialist training in ICM, and capable of safe, independent practice. Candidates should be able to communicate effectively and be capable of consulting and drawing appropriately on the fullness of multi-disciplinary patient support. Some subspecialty knowledge is expected, including for example, some general aspects of paediatric, cardiac and transplant critical care.

To minimise the failure rate and to accommodate requests for candidates from outside Europe, it is recommended that candidates should acquire a thorough understanding of European ICM practice. It is recommended that this is best facilitated by working in an academic European ICU for a period of at least six months. If your application form does not specify training within a European ICU, you may be requested to provide documentation confirming such training / experience.

ESICM is presently working to develop alternatives for non-European candidates to sit part II outside Europe, but at present this is limited to Kuala Lumpur in Malaysia.

Only those candidates who have successfully passed Part 1 may take the Part 2 clinical/oral examination. It is anticipated that it will usually be taken within 24 months of passing Part 1, and no later than 4 years after passing Part 1 unless otherwise approved by the Examinations Subcommittee.

The Part 2 should be conducted in English or in the language of the candidate or in another European language chosen by the candidate, subject to the availability of approved centre and examiners.

ORGANISATION

Location

In European countries, a group of suitable, major hospital general Intensive Care Units are identified in conjunction with relevant Council members and the ESICM EDIC Examinations subcommittee. The ESICM Education Secretariat will announce locations, the language and number of places available via the website (www.esicm.org)

Exam frequency

The Part 2 exam is held at least once annually in each European country if there are enough eligible candidates who have applied. Sessions are held either in May/June or September/October each year.

EDIC panel of examiners

In European countries, a panel of ESICM approved examiners is agreed upon with the advice of the relevant ESICM Council member(s) and the panel is held by the ESICM Education Secretariat. The ESICM Council member for the country, whether or not he/she is an examiner, takes an active role in the organization of the exam. At least one of the faculty of examiners at the exam should be board certified (or equivalent) in the primary specialty of the candidate.

Extern examiner

Where possible and suitable, an extern examiner may be invited usually from another European country with the prior agreement of the ESICM Examinations subcommittee. Externs provide reports to the ESICM (and local examiners) on the conduct of the examination, with a view to the facilitation of Europe-wide harmonization of quality standards.

CONDUCT OF THE (PART 2) EXAMINATION

The exam will consist of **clinical** and **oral** (viva voce) components. It is anticipated that each candidate will have around two hours for the clinical and oral parts, including patient examination and discussion with the examiners.

The candidate will be observed by the examiners in the clinical environment while examining more than one patient.

The clinical component: This should take between 60-90 minutes. It is recommended that the candidate should see one major case (approximately half an hour of examining) and two to three minor cases (10 to 15 minutes of examining each, depending on whether two or three cases are chosen).

Major case: This should preferably be a patient with a range of clinical problems, for example pneumonia, severe asthma, multiple trauma, post-surgical complications, sepsis, severe pancreatitis, multiple organ dysfunction or failure, acute lung injury, ventilator dependence and weaning difficulties, etc.

Minor cases: Two or three cases may be appropriate. These may be ICU or non-ICU cases. They might for example focus on a clinical sign e.g. new cardiac bruit / other signs of endocarditis, equipment such as chest drains or an intra-aortic balloon pump, or a specific clinical examination e.g. brain stem testing. The candidate does not undertake practical procedures.

The oral component: This should take approximately 30-40 minutes and may be divided into two separate sessions or performed as a single session.

CANDIDATE ASSESSMENT

Clinical component

The assessment, particularly in the major case should take account of:

- ◆ How well a candidate is able to elicit clinical information which is accurate, relevant and comprehensive – within the constraints of the circumstances. This is primarily physical-examination based, but includes information to be gained from around the bedside, for example from the nurse, the case records, the ICU charts or information system, drainage and other tubes, sputum collection containers, machines and monitors.
- ◆ The approach of the candidate to the patient in terms of professionalism, politeness, compassion, patient dignity and ethical probity.
- ◆ The capacity of the candidate to complete a structured clinical examination with due consideration for the staff and environment, e.g. showing compliance with isolation and hand-washing procedures where applicable.
- ◆ How well a candidate can integrate information, present it coherently, construct relevant differential diagnoses, make management evaluations and then suggest and discuss therapeutic options at a level of expertise appropriate for a specialist in Intensive/Critical Care Medicine.

Oral component

This component should test knowledge of practical scenarios that cannot easily be provided or tested in the clinical environment. This will include radiology images, electrocardiograms, biochemical results and blood gas estimations and patient equipment. Abstracted case histories may also be used to test, for example, approaches to ethical dilemmas.

MARKING PROCESS

The candidate will be assessed by the examiners for both the clinical and the oral components of the exam, and graded for each component using a numeric scale from 0 to 5 as indicated below:

Scale	Grade
0	Severe failure
1	Failure
2	Bare Fail
3	Pass
4	Good pass
5	Excellent

EXAM RESULTS

All candidates who have successfully passed the Part 2 exam will be notified of their results by the ESICM administrative office. Upon completion of Part 2 of the exam, as well as completion of their base specialty prior, will candidates be awarded EDIC.

Candidates who have failed the Part 2 exam are allowed two initial attempts. If a candidate has failed on each of these 2 occasions, (s)he will be required to allow 12 month break for further training and preparation before taking the Part 2 exam again – when two final attempts are allowed.

EXAMINATION PREPARATION

The following educational resources are recommended for candidates preparing for the examination

- ◆ Local or national critical care medicine education and training opportunities especially those associated with training programmes.
- ◆ Guidelines for training in intensive care medicine. Intensive Care Medicine 1994; 20: 80-81.
- ◆ PACT (Patient-centred Acute Care Training): the ESICM distance-learning multi-media programme for intensive care
- ◆ Up-to-date clinical textbooks on intensive/critical care.
- ◆ Current research and review literature in journals such as Intensive Care Medicine, Critical Care Medicine and other major journals.
- ◆ ESICM annual congresses of the ESICM and its postgraduate courses (www.esicm.org)
- ◆ CoBaTrICE program of intensive care competencies (www.cobatrance.org)
- ◆ Further documentation is also found on the ESICM website (www.esicm.org)

ADMINISTRATION

Applications must be made prior the deadline using the appropriate application forms. Late or incomplete applications will not be accepted. Application forms, exam dates and application deadlines can be obtained via the ESICM website (www.esicm.org).

Candidates attending either Part 1 or Part 2 of the examination may be asked to provide identification (passport or any other form including photograph and signature of the candidate) [see regulations]. Admission to an examination will be at the discretion of the examiner or ESICM.

FEES

Examination fees will be determined annually, and will be published on the ESICM website (www.esicm.org).

WITHDRAWAL FROM THE EXAMINATION

Notice of withdrawal must be sent in writing to the ESICM Education Secretariat. Any requests for modifications of dates for the part 2 exam must be made in writing to the ESICM education secretariat.

The examination fee, less a 10% administrative charge, will be refunded when notice of withdrawal is received four weeks before the published closing date for Part 1, and four weeks before the Part 2 exam date. Refunds will not be given thereafter. Fees cannot be transferred to the next examination.

ESICM EDUCATION SECRETARIAT

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