EUROPEAN DIPLOMA IN INTENSIVE CARE MEDICINE

EDIC PART I EXAM REGULATIONS & GUIDELINES

The examination is organised 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 standards in education and training in intensive care medicine in Europe and across the world. 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 training in intensive care medicine. Both parts (EDIC I and II) of the exam must be passed for award of the EDIC diploma.

The aim of written exam (EDIC part I) is to test the specific theoretical intensive care medicine knowledge, whereas as the oral part (EDIC part II) aims to test the competencies, expertise and professional behaviours at the end of specific training (2-3 years) in intensive care medicine.

EDIC is a two-part examination: Part I is a multiple choice questionnaire written examination and Part II is an Objectively Structured Clinical Examination (OSCE) with several skill stations. These include 3 to 4 short clinical scenarios with patient charts and at least 3 to 4 computer based stations where reading and interpretation of images, ECGs, biochemical scenarios and other topics are assessed.

Revised version - October 2014
# EDIC Part I - Written Examination

## Eligibility/Qualifications

<table>
<thead>
<tr>
<th>Criteria for entry</th>
<th>Required documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fully registered Medical Doctor (i.e. internship completed). Candidates must be in good standing with their national medical registration authorities.</td>
<td>Copy of University.awarded medical degree</td>
</tr>
<tr>
<td>2. Entry into a national training programme in a primary specialty. This may include Anaesthesiology, General/Internal Medicine (and other medical specialities), General Surgery (and other surgical specialities), Accident &amp; Emergency Medicine, Paediatrics, or Intensive Care Medicine if a primary speciality.</td>
<td>Letter of confirmation from national or regional primary specialty Training Authority (e.g. College or Society)</td>
</tr>
<tr>
<td>3. Entry into a national training programme in intensive care medicine or satisfactory completion of 18 months training 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 speciality.</td>
<td>Documents/letter confirming your training in ICM or completion of ICM training program signed by ♦ The Training Authority, supervisor or Head of training if you are in ICM training ♦ The Head of Department or Head of Training Program or other representative who certify your completion of ICM training, if you have completed your ICM training</td>
</tr>
</tbody>
</table>

** Intensive Care Medicine training should be undertaken in modules of dedicated, full-time, supervised training in Intensive Care Medicine.
EXAM ORGANISATION

EDIC Part I 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 MCQs:

- Type A questions: of the five options (A to E) available, only one answer is correct
- Type K questions (max 50). The questions require 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

1. Which of the following statements is true concerning the sun?
   A) It turns around planet earth
   B) Planet earth turns around the sun
   C) It is closer than the Moon
   D) It is smaller than Moon
   E) It is closer than Mars

On the answer sheet, you will need to designate the correct answer with a cross in the circle corresponding with the correct answer. For a better identification, the edges of the cross should touch the circle.

   1. O A ☒ B O C O D O E

EXAMPLE OF TYPE K QUESTIONS

62. The following statements concerning the sun are true
   A) The sun is a hot planet
   B) The sun turns around planet earth
   C) Planet earth turns around the sun
   D) The sun rises in the east

62. A B C D
   yes ☒ O ☒ ☒
   no O ☒ O O

To correct / change an answer, you have to perform two steps:
1. Revoke the old answer. To revoke it, you can
   - rubber the cross (be careful not to erase the circle and there should be no remaining traces of the erased cross) or
   - fill out the circle completely, so that the cross cannot be seen, as shown in the figure.
2. Cross the new answer in the circle normally.

PLEASE NOTICE: During the exam, for both type of questions you will be required to mark your answers in the question booklet AND indicating the correct answer on your answer sheet. No extra time is allowed to answer remaining unanswered questions and/or transfer your answers from the question to the answer booklet.
EXAM QUESTIONS – PATTERN & CONTENT

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

<table>
<thead>
<tr>
<th>Blueprint No</th>
<th>Blueprint Topic</th>
<th>Combined number of Type A &amp; K questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cardiovascular</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Respiratory</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Neuro-critical care</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Gastro Intestinal / nutritional</td>
<td>8</td>
</tr>
<tr>
<td>5.1</td>
<td>Renal</td>
<td>4</td>
</tr>
<tr>
<td>5.2</td>
<td>Urology, Obstetrics &amp; Gynaecology</td>
<td>4</td>
</tr>
<tr>
<td>6.1</td>
<td>Endocrine &amp; metabolic</td>
<td>4</td>
</tr>
<tr>
<td>6.2</td>
<td>Bleeding &amp; Coagulation disorders</td>
<td>4</td>
</tr>
<tr>
<td>6.3</td>
<td>Oncology</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Environmental Hazards, Poisoning &amp; Acute Pharmacology</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Severe Infection &amp; Sepsis</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>Surgery &amp; Trauma</td>
<td>6</td>
</tr>
<tr>
<td>10.1</td>
<td>Ethics, Law &amp; Quality Assurance</td>
<td>4</td>
</tr>
<tr>
<td>10.2</td>
<td>Intensive Care Management</td>
<td>4</td>
</tr>
<tr>
<td>10.3</td>
<td>Transplantation</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

The content blueprint is subject to changes each year.

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.

EVALUATION OF THE EXAM AND INDIVIDUAL ANSWERS

Each year the ESICM Examinations Committee along with SGI (the Swiss Society of Intensive Care Medicine) evaluates the exam, and generates statistics on each question. Doubtful and poorly performed questions are usually removed before the final evaluation of the exam. This process called “key validation” of the exam takes approximately 15 days at the end of which the final pass mark is calculated.

The exam pass mark is based on the content of the exam. The ESICM Examinations Committee used the Angoff method to compute it (see description below)

The Angoff method procedure

The Modified Angoff procedure is used to determine the initial passing score for an examination used to certify or license practitioners. It is one of the most popular procedures for setting a criterion-referenced passing point. It is not a norm-referenced method, when a candidate’s pass or fail status is determined by his or her performance in relation to other candidates. Using the Angoff procedure, once the passing point is determined, a candidate’s pass/fail performance is established independently of the group who sat for the exam. Candidates are judged by comparing their performance to an absolute standard, not to other candidates. Theoretically, all candidates can pass or all can fail.

The Angoff method relies on subject-matter experts, in our case the EDIC subcommittee, who examine the content of each test-question (item) and then predict how many of 100 “minimally competent practitioner” are likely to answer the item correctly. The average of the judges’ predictions for a test question becomes its predicted difficulty. The sum of the predicted difficulty values for each item averaged across the judges and items on a test is the recommended Angoff cut off score.

Here is how the EDIC subcommittee members (EDIC-panel), 9 experienced intensivists of 6 different European countries, assessed the absolute standard for EDIC part 1: All members of the EDIC-panel were properly trained in how to use the Angoff Method and informed about the test's purpose. Then each EDIC-panel member individually rated each of the 2010 and 2011 exam MCQs based on how many of 100 “minimally competent practitioners” would answer the item correctly or incorrectly. A “minimally competent practitioner” has been defined as a person with sufficient knowledge to work in the ICU safely and independently without posing any risks to the patient. Once this first round of ratings had been conducted, EDIC-panelists met and got access to the ratings of the other panelists so that they could compare what they determined about a particular item. Then, EDIC-panelists were asked to rate the items again for a second round. The second round of rating gives EDIC-panelists the opportunity to review their initial rating of an item and decide whether or not they might like to change their decision based on the expert judgments of the other panelists. This second round of ratings was then averaged across the EDIC-panelists to determine the final cut score (absolute standard) for the EDIC Part I exam. Each year exam difficulty will be compared with the previous ones. If similar, then the same standard is applied. The absolute standard will be re-evaluated in 3-5 years time.

EXAM REGULATIONS

- Three hours are allowed for the examination. This is strictly applied. No extra time is allowed to transfer the answers to the answer sheets. Candidates are advised to allow sufficient time to transfer the answers to the answer sheets.
- Please check your personal details both on the examination booklet and answer sheet(s); and correct any incorrect information.
- The examination booklet, the answer sheet(s), pencil, rubber and a bottle of water are the only material allowed on your desk.
- No examination aids are permitted e.g. calculator, dictionary or smart phones.
- All bags and belongings including switched-off smart phone must be placed at the designated location.
- Copying or cheating during the examination will result in immediate disqualification. The decision will be at the discretion of the examination supervisor, and his decision will be final.
- Toilet breaks are only permitted for one candidate at a time who will be accompanied by a supervisor.
- The exam booklets and answer sheets are confidential documents, which will remain in the examination archive.
- The question paper and answer sheet must be signed and returned to the examination supervisor at the end of the examination.

Candidates attending Part I exam may be asked to provide identification (passport or any other form including photograph and signature of the candidate). Admission to an examination will be at the discretion of the examiner or ESICM.

PART I EXAM RESULTS

All candidates who have passed the Part I exam will be notified of their results by the ESICM administrative office approximately four weeks after the exam. This time is necessary for the validation process. Candidates who fail the Part I exam will only be allowed to re-sit the exam after 12 months, no earlier.
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.
- 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 and its postgraduate courses ([www.esicm.org](http://www.esicm.org)).
- CoBaTriCE programme of intensive care competencies ([www.cobatrice.org](http://www.cobatrice.org)).
- Further documentation is also found on the ESICM website ([www.esicm.org](http://www.esicm.org)).

ADMINISTRATION

All candidates must have a fully complete and updated application, successfully register during the registration period and have their registration validated before they are fully registered for the EDIC I exam. 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](http://www.esicm.org)).

1. **Application Process** (creation of your personal EDIC profile)
   New Candidates have to fill in a new application form.
   For Candidates who have already completed an application form, the personal details should be checked and updated if needed prior to register for an exam.

2. **Registration Process** (booking of exam centre and level of exam)
   Candidates will be informed on the ESICM website when registration opens. Places are on a first come first served basis. Only one centre per candidate can be selected. Once processed, payment will be requested (credit cards only) using a secured method.

3. **Validation Process**
   Each application is processed individually by the EDIC Secretariat and can take up to four weeks. All candidates will be contacted whether they have a place or not, by email.

FEES

Examination fees will be determined annually, and will be published on the ESICM website ([www.esicm.org/education/european-diploma/examination-fees](http://www.esicm.org/education/european-diploma/examination-fees)).

Candidates who have not paid their ESICM membership of the year of the examination when they are registering for the EDIC exam will automatically be billed the non-members’ price. ESICM will not reimburse the difference if you become an ESICM member after you have applied for the EDIC exam. Candidates who have not paid their fees in full on time will not have access to the exam room.
WITHDRAWAL FROM THE EXAMINATION

Notice of withdrawal must be sent in writing to edic@esicm.org. The examination fee, less administrative charges, will be refunded further to the following calendar:

1. When notice of withdrawal is received 12 weeks prior to the exam date, 75% of the fees will be reimbursed.
2. When notice of withdrawal is received 8 weeks prior to the exam date, 50% of the fees will be reimbursed.
3. When notice of withdrawal is received 4 weeks prior to the exam date, 25% of the fees will be reimbursed.

Refunds will not be given thereafter. Fees and registration cannot be transferred to the next examination.

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