

**Report of Primary (Part 1) Examination in Critical Care Medicine  
Of the College of Critical Care Medicine  
(Under auspices of the Critical Care Education Foundation)**

**2-4 March 2012**

*This report is prepared to provide candidates, teachers and their Supervisors of training with information about the way in which the Examiners assessed the performance of candidates in the Examination. Answers provided are not model answers but guides to what was expected... Candidates should discuss the report with their teachers so that they may prepare appropriately for the future examinations.*

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The examination was conducted between 2-4 March 2012 at Max Balaji Superspeciality Hospital-PPG, New delhi Mumbai. Forty-nine candidates passed their Logbook and were eligible to appear in the examination. Three (3) candidates were absent. Total of forty-six (46) candidates presented for this examination. Twenty-six candidates (26) (56.52%) passed the examination.

## **ORAL SECTIONS**

### **Objectives Structured Clinical Examination (OSCE) Section**

There were six (6) stations with rest stations in between. A systematic approach to the types of investigations examined was more likely to maximise the candidate's score. Candidates should ensure that they take note of the clinical information provided when considering their answer. It is imperative that candidates answer the specific question asked (eg. differential diagnosis, "the most likely" = give one, or "list five" means list up to five but **not** more). Candidates were given 12 minutes per station (2 minutes to read and 10 minutes to write). **Overall 24/46 candidates passed this section (52.17%). Highest Mark scored was 475/600.**

#### **Station:**

1. **Arterial Blood Gas Interpretation:** Examples included single and mixed metabolic and respiratory disorders, Calculation of alveolar-arterial oxygen gradient, HAGMA with hypoglycaemia, case of carboxyhemoglobinemia and scenario of apnea testing for brain death. Total of 4 ABG reports were presented. **Overall 22/46 candidates passed this section (47.83%). Highest Mark scored was 87.5/100.**
2. **Biochemistry:** Examples included pattern of low serum sodium with high urinary sodium, low sodium with high serum potassium, low urea/creatinine ratio due to DKA, diabetes insipidus. **Overall 13/46 candidates passed this section (28.26%). Highest Mark scored was 99/100.**
3. **Hematology and Coagulation:** Examples included coagulation abnormalities, TTP, Von Willibrand's disease, lymphocytosis. **Overall 32/46 candidates passed this section (69.57%). Highest Mark scored was 100/100.**
4. **ECG:** Examples complete heart block with RBBB, Infero-posterior MI, tall 'R' in V1, atrial Flutter with varying conduction. **Overall 14/46 candidates passed this section (30.43%). Highest Mark scored was 76/100.**
5. **X-Rays.** Examples included identification of abnormalities in 4- X-rays. Important findings were gas under diaphragm, pneumothorax with femorally inserted pacing wire, bilateral extensive alveolar shadows and post CABG with multiple lines and tubes with a very high IABP catheter

tip. **Overall 31/46 candidates passed this section (67.39%). Highest Mark scored was 80/100.**

6. **CT Scans:** Material presented included CT with bronchiectasis and endobronchial foreign body, subdural hematoma with intraparenchymal bleed, SAH with intraventricular extension, acute pancreatitis. **Overall 34/46 candidates passed this section (73.91%). Highest Mark scored was 96/100.**

## Cross Table Viva Section

There were 4 structured Vivas of ten minutes each. There were two minutes provided to read a scenario outside each viva room and 8 minutes of cross table viva with change to next viva station. Candidates should be able to provide a systematic approach for assessment and management of commonly encountered clinical scenarios. Candidates should also be prepared to provide a reasonable strategy for management of conditions that they might not be familiar with. **Overall 38/46 (82.61%) candidates passed this section**

The topics covered, including introductory scenarios and initial questions were:

**VIVA 1:** *57 yr diabetic, hypertensive man is shifted to ICU, post CABG (bypass) with intra aortic balloon in situ. He is on Inj. Dopamine and inj. Nitroglycerine. Two hrs after shifting BP drops to 80/60 mmHg*

**Introductory question:** What are the possible causes for this hypotension?

**Overall 31/46 candidates passed this section (67.39%). Highest marks scored was 85/100.**

**VIVA 2:** *30 yr male, chronic smoker, is admitted with massive hemoptysis since 1 day. He was well till 5 days back when he developed cough and breathlessness. No treatment taken so far.*

**Introductory question:** What is your initial management of this case at this moment?

**Overall 32/46 candidates passed this section (69.57%). Highest mark scored was 94/100.**

**VIVA 3:** *31 year old involved in a high-speed motor vehicle accident is brought in unconscious, he has not been seen to move any limbs and has a distended abdomen. His BP is 70/30, HR 60 /min. sinus rhythm, chest is clear; pupils are equal and reacting with no obvious skull fracture.*

**Introductory Question:** What will be your initial clinical assessment?

**Overall 38/46 candidates passed this section (82.61%). Highest mark scored was 94/100.**

**VIVA 4:** *A 25 yr old unbelted driver of a small vehicle had a head on collision with a truck, was brought unconscious with labored breathing. Pulse 130/min, BP 90/60, Spo2 90 % on 6 L O2, GCS is 8.*

**Introductory question:** What would be your immediate management?

**Overall 40/46 candidates passed this section (86.96%). Highest mark scored was 94/100.**

## The Clinical Section

The Clinical Section was conducted at the ICU of Max Balaji Super-speciality Hospital, PPG, New Delhi.

Clinical section consisted of one hot (ICU) case (15 minutes) per candidate. **Overall 27/46 candidates passed this section (58.70%). Highest Marks scored was 88/100.**

Candidates should listen carefully to the introduction given by the examiners and direct their examination accordingly. Patients were presented as problem solving exercises. For maximal marks, candidates should demonstrate a systematic approach to examination, clinical signs should be demonstrated, and a reasonable discussion regarding their findings should follow. Exposing the patients should be limited to those areas that are necessary for that component of the examination, and in keeping with the modesty requirements of the patients.

Cases encountered as Hot Cases are patients with acute medical problems commonly faced by resident doctors in the ICU such as ventilated patients, hemodynamically unstable patients, acute strokes, trauma to spine, difficult to wean, hepatic encephalopathy, Pontine bleed, approach to Patient with fever in the ICU, Pneumothorax with kinked ICD and ARDS etc.

Comments documented at the time of the clinical examination suggested that common problems encountered related to examination technique, detection of clinical signs, interpretation of clinical signs, identification of clinically significant issues and factual knowledge.

## **WRITTEN SECTIONS**

One hundred Multiple Choice Questions (MCQ with only one correct answer) were presented and had to be answered in 120 minutes. Answers were written in a separate answer sheet. A quarter of the questions covered applied physiology, another quarter of the questions covered critical care pharmacology and remaining questions dealt with clinical medicine.

**Overall 35/46 candidates passed this section (76.09%). Highest Mark scored was 80/100.**

*All candidates were given a detailed orientation of the various sections and expected approach before the examination. In addition, there was an orientation conducted prior to each section by the section in charge.*

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**Dr P. K. Jain**  
Chief Examiner,  
College of Critical Care Medicine.  
Chairman, Examination Committee

- Circulation:
1. Trustee's of Critical Care Education Foundation
  2. President, College of Critical Care Medicine.
  3. Panel of Examiners
  4. Supervisors of Intensive Care Training/ Course Supervisors
  5. Registered Trainees

## **Examiners' Report**

### **Examiners**

<b>Chief Examiner:</b>	Dr. PK Jain
<b>Examination planning &amp; Design:</b>	Dr. Meeta Mehta
<b>Venue co-ordination:</b>	Dr. Y. P. Singh, Dr Hemant

### **Examiner Faculty**

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|------------------------|--------------------|
| 1. Praveen K Jain      | 2. Ajay Kantharia  |
| 3. Prachee Sathe       | 4. Hemant Tewari   |
| 5. Meeta Mehta         | 6. Arindam Kar     |
| 7. Yoginder P Singh    | 8. K. V. Kamesh    |
| 9. Pradip Bhattacharya | 10. Sanjay Dhanuka |
| 11. Sudhesh Rao        | 12. Rajiv Gupta    |

### **Observer examiners**

- Dr. Kapil (Delhi)  
Dr. Anurag (Delhi)

### **Clinical Cases:**

#### **HOT cases:**

1. Dr. Praveen K. Jain and Dr Arindam Kar
2. Dr. Prachee Sathe and Dr. K V Kamesh
3. Dr. Meeta Mehta and Dr. Rajeev Gupta
4. Dr. Ajay Kantharia and Dr.Sudhesh Rao
5. Dr. Sanjay Dhanuka and Dr. Y P Singho
6. Dr. Pradip Bhattacharya and Dr. Hemant Tewari

### **Vivas:**

	<b>Group A</b>	<b>Group B</b>	<b>Group C</b>
Viva 1	P K Jain	Meeta Mehta	Prachee Sathe
Viva 2	Kamesh KV	Hemant Tewari	Ajay Kantharia
Viva 3	Anurag	Sanjay Dhanuka	YP Singh
Viva 4	Rajeev Gupta	Arindam Kar	Pradip Bhattacharya