



**Part 1 Primary Examination in Critical Care Medicine 2018 -PAPER 2**  
**College of Critical Care Medicine**  
(under auspices of Critical Care Education Foundation)  
**Examination Endorsed by the International Board of Medicine & Surgery (IBMS), USA**

1. Read the questions carefully and thoroughly. Candidates are advised to include in their answer only information that is **relevant to the question and to write legibly.**
2. **Short Notes in Section A and B: Each question carries 5 marks only.**
  - a. You should not take more than 5 minutes per question in these sections.
  - b. Normally one side of a fool-scape paper is enough as long paragraphs are not expected.
3. **Questions in Section C: Each question carries 10 marks only.**
  - a. You should not take more than 10 minutes per question in these sections.
  - b. Normally 2 side of a fool-scape paper provided is enough as long paragraphs are not expected.
  - c. **Section C has 1 extra question. Choose ANY 4 out of 5 Choices below.**
4. **Section D: Each MCQ carries 1 mark only (total 10 Marks). Section D must be returned with the answersheet.**
5. **Start all questions on a NEW Page**
6. Do not rewrite the question in your answer book. **CLEARLY write the ANSWER NUMBER** before you answer.
7. The questions in each section are worth equal marks.
8. **Record your candidate ROLL number on top of each answer sheet paper.**
9. The candidate must demonstrate performance consistent with that of a competent senior registrar.

**GLOSSARY OF TERMS**

- **Critically evaluate:** Evaluate the evidence available to support the hypothesis.
- **Outline:** Provide a summary of the important points.
- **List:** Provide a list.
- **Compare and contrast:** Provide a description of similarities and differences (eg. Table form).
- **Management:** Generic term that implies overall plan. (includes diagnosis as well as treatment).
- **Discuss:** Explain the underlying key principles. (this may include controversies and/or pros and cons)

**CHECK LIST**

	Important instruction	Sign if understood
1	Write legibly. No marks if Examiner cannot understand. Avoid abbreviations not clearly explained in beginning of your answer. <i>eg. The patient may have raised intracranial pressure (ICP)...subsequent ICP use in answer OK</i>	
2	Section C has 1 extra question. <u>Choose ANY 4 out of 5 Questions.</u>	
3	Start all questions on a NEW Page	
4	Write the ANSWER NUMBER before you answer.	
5	The questions in each section are worth equal marks.	
6	Record your candidate ROLL number on top of each answer sheet	



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<b>SECTION A (5 marks each)</b>	
Q. 1.	A 68 year male was given chemotherapy for lymphoma and subsequently broad spectrum antibiotics including Clindamicin. He is now admitted after 1 week with pain in abdomen and loose watery motion that are foul smelling with little blood. A) What is the most likely diagnosis? B) List 2 drugs recommended for treating this condition? C) List possible complications that could develop if not treated promptly?
Q. 2.	A) Critique the usefulness of “Scoring systems” in the critically ill patient? B) <i>The Standardized mortality of an ICU is as follows:</i> 2015-2016 SMR = 1.6 2016-2017 SMR = 1.0 2017-2018 SMR = 0.7 <i>How will you interpret these reports for your administration?</i>
Q. 3.	A) Enumerate the clinical and biochemical features of HELLP syndrome? B) How will you manage such a case in 8 <sup>th</sup> month of her pregnancy?
Q. 4.	A) Enumerate the pathophysiology of feeding syndrome? B) List the major biochemical findings in a patient with refeeding syndrome?
Q. 5.	A) List the clinical and lab abnormalities in patient with severe leptospirosis (Weils Disease)? B) what is the antibiotic of choice in this infection?

<b>SECTION B (5 marks each)</b>	
Q. 6.	List clinical examination findings that would help you to distinguish between: myopathy or a neuropathy as being the cause of weakness in all limbs of a patient?
Q. 7.	List 4 clinical signs of intracranial hypertension?
Q. 8.	Discuss the Locked-in Syndrome (clinical features, site of pathology)?
Q. 9.	A previously healthy male is transferred to your ICU after abdominal surgery. After coming to ICU, the nurse reports random blood sugars to be 250-300 mg/dL! List possible explanations that could explain hyperglycemia in this patient?
Q.10.	A) Discuss Hepato-Renal syndrome? B) List 2 drug that improve outcome in these patients?

<b>SECTION C: ANSWER ANY 4 ONLY (10 marks each)</b>	
Q.11.	A 45 year male is brought with diffuse cyanosis. He is conscious. X-Ray Chest is clear. You start him on Nasal oxygen but cyanosis persists. SpO2 on monitor is 68% but his ABG shows a PaO2 of 120 mmHg! a) What is the diagnosis at this stage based on this data? b) List various possible causes for this presentation in THIS person? c) Outline your Management of this patient?
Q.12.	Outline the strategies to reduce the likelihood of secondary brain injury after head trauma. (Give the specific parameters/targets where appropriate).
Q.13.	A) Outline the features that differentiate between diabetic ketoacidosis (DKA) and hyperosmolar hyperglycaemic state (HHS). B) What are the complications to watch out for in a patient of HHS?
Q.14.	Enumerate/List the indications for dialysis in the ICU patient?
Q.15.	Critically evaluate the various “Protective Strategies” against Contrast-Induced Nephropathy?



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<b>SECTION D (10 marks)</b>																							
1		<p>Anion gap is NOT increased in?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Starvation</td></tr> <tr><td>B.</td><td>Renal tubular acidosis</td></tr> <tr><td>C.</td><td>Diabetic ketoacidosis</td></tr> <tr><td>D.</td><td>Salicylate poisoning</td></tr> </table>	A.	Starvation	B.	Renal tubular acidosis	C.	Diabetic ketoacidosis	D.	Salicylate poisoning	<p>6</p> <p>In Cushing's syndrome and Barter's syndrome, there is?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Metabolic acidosis</td></tr> <tr><td>B.</td><td>Metabolic alkalosis</td></tr> <tr><td>C.</td><td>Respiratory alkalosis</td></tr> <tr><td>D.</td><td>No acid base disturbance</td></tr> </table>	A.	Metabolic acidosis	B.	Metabolic alkalosis	C.	Respiratory alkalosis	D.	No acid base disturbance				
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2		<p>Spinothalamic tract transmits all the following sensations EXCEPT?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Touch</td></tr> <tr><td>B.</td><td>Temperature</td></tr> <tr><td>C.</td><td>Pain</td></tr> <tr><td>D.</td><td>Proprioception</td></tr> </table>	A.	Touch	B.	Temperature	C.	Pain	D.	Proprioception	<p>7</p> <p>Hyperphosphatemia is a danger in all the following except?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Alcohol intoxication</td></tr> <tr><td>B.</td><td>Rhabdomyolysis</td></tr> <tr><td>C.</td><td>Hemolysis</td></tr> <tr><td>D.</td><td>Renal failure</td></tr> </table>	A.	Alcohol intoxication	B.	Rhabdomyolysis	C.	Hemolysis	D.	Renal failure				
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3		<p>A pinpoint pupil with hyperpyrexia is characteristic of?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Pontine hemorrhage</td></tr> <tr><td>B.</td><td>Opium poisoning</td></tr> <tr><td>C.</td><td>Cerebral malaria</td></tr> <tr><td>D.</td><td>Meningitis</td></tr> </table>	A.	Pontine hemorrhage	B.	Opium poisoning	C.	Cerebral malaria	D.	Meningitis	<p>8</p> <p>The following antibiotic has good activity against anaerobic bacteria:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Vancomycin</td></tr> <tr><td>B.</td><td>Aztreonam</td></tr> <tr><td>C.</td><td>Imipenem</td></tr> <tr><td>D.</td><td>Trimethoprim</td></tr> </table>	A.	Vancomycin	B.	Aztreonam	C.	Imipenem	D.	Trimethoprim				
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4		<p>The maximum amount of Sodium that can be safely corrected in first 24 hrs in a patient with serum Na of 114 meq/L is:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>8 mEq/L</td></tr> <tr><td>B.</td><td>12 mEq/L</td></tr> <tr><td>C.</td><td>20 mEq/L</td></tr> <tr><td>D.</td><td>28 mEq/L</td></tr> </table>	A.	8 mEq/L	B.	12 mEq/L	C.	20 mEq/L	D.	28 mEq/L	<p>9</p> <p>Parathyroid hormone causes?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Increased deposition of bone</td></tr> <tr><td>B.</td><td>Decreased intestinal reabsorption of calcium</td></tr> <tr><td>C.</td><td>Increased activity of osteoclasts</td></tr> <tr><td>D.</td><td>Decreased plasma concentration of calcium</td></tr> </table>	A.	Increased deposition of bone	B.	Decreased intestinal reabsorption of calcium	C.	Increased activity of osteoclasts	D.	Decreased plasma concentration of calcium				
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5		<p>Patient presents with contralateral weakness and sensory loss that is worse in face and arm, homonymous hemianopia, aphasia or neglect syndrome. Select the site of lesion that best explains the symptom.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Internal carotid artery.</td></tr> <tr><td>B.</td><td>Middle cerebral artery (MCA)</td></tr> <tr><td>C.</td><td>Mid basilar artery</td></tr> <tr><td>D.</td><td>Anterior cerebral artery</td></tr> <tr><td>E.</td><td>Penetrating branch of MCA</td></tr> </table>	A.	Internal carotid artery.	B.	Middle cerebral artery (MCA)	C.	Mid basilar artery	D.	Anterior cerebral artery	E.	Penetrating branch of MCA	<p>10</p> <p>Which of the following ions has an intracellular concentration of 10 mm and an extracellular concentration of 110 mm?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">A.</td><td>Ca<sup>++</sup></td></tr> <tr><td>B.</td><td>Cl<sup>-</sup></td></tr> <tr><td>C.</td><td>K<sup>+</sup></td></tr> <tr><td>D.</td><td>Mg<sup>++</sup></td></tr> <tr><td>E.</td><td>Na<sup>+</sup></td></tr> </table>	A.	Ca <sup>++</sup>	B.	Cl <sup>-</sup>	C.	K <sup>+</sup>	D.	Mg <sup>++</sup>	E.	Na <sup>+</sup>
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**Recheck:**

**(1) You have put your Roll number on each answer sheet.**

**(2) Answers are Numbered correctly & written in appropriate section.**



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SECTION D Answers:

MCQ 1	
MCQ 2	
MCQ 3	
MCQ 4	
MCQ 5	
MCQ 6	
MCQ 7	
MCQ 8	
MCQ 9	
MCQ 10	