1. An 83-year-old, 70-kg man received anesthesia for an exploratory laparotomy and small bowel resection with minimal blood loss. Postoperatively, he is hemodynamically stable but his urine output has decreased to 15 mL/hr and his urine sodium is 16 mEq/L. Which of the following intravenous interventions is the **MOST** appropriate?

A. Lactated Ringer’s solution 20 mL/kg  
B. Dopamine 5 mcg/kg/min  
C. Furosemide 0.5 mg/kg  
D. Mannitol 0.5 g/kg

2. A 32-year-old man who is brain dead is being prepared for organ donation. Administration of which of the following medications is **MOST** appropriate for treatment of polyuria in this patient?

A. Desmopressin  
B. Demeclocycline  
C. Hypertonic saline  
D. Insulin

3. A healthy 30-year-old woman is undergoing cervical spine surgery utilizing motor evoked potentials (MEP) monitoring. Which of the following medications would be expected to have the **GREATEST** depressant effect on the MEP waveform?

A. Dexmedetomidine  
B. Isoflurane  
C. Fentanyl  
D. Nitrous oxide

4. A patient develops a seizure shortly after injection of 1 mL local anesthetic for a stellate ganglion block using the paratracheal technique. Which of the following arterial structures was **MOST** likely inadvertently punctured?

A. External carotid  
B. Internal carotid  
C. Subclavian  
D. Vertebral
5. A 62-year-old woman with acute respiratory failure is being ventilated with the following ventilator settings:

<table>
<thead>
<tr>
<th>Tidal volume</th>
<th>10 mL/kg actual body weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory rate</td>
<td>15 breaths/min</td>
</tr>
<tr>
<td>FiO₂</td>
<td>0.6</td>
</tr>
<tr>
<td>Peak inspiratory pressure</td>
<td>40 cmH₂O</td>
</tr>
<tr>
<td>Plateau pressure</td>
<td>30 cmH₂O</td>
</tr>
<tr>
<td>Positive end-expiratory pressure</td>
<td>10 cmH₂O</td>
</tr>
</tbody>
</table>

The results of her most recent arterial blood gas are as follows:

| pH  | 7.34 |
| PaO₂| 85 mmHg |
| PaCO₂| 46 mmHg|

Given this information, which of the following ventilator changes is most appropriate to minimize lung injury?

A. Change to pressure-controlled ventilation
B. Decrease positive end-expiratory pressure
C. Decrease ventilator rate
D. Decrease tidal volume
ANSWER KEY

1. A
2. A
3. B
4. D
5. D