

**POSTGRADUATE INSTITUTE OF MEDICINE**  
**UNIVERSITY OF COLOMBO**

**MD (ANAESTHESIOLOGY) PART IA EXAMINATION – APRIL 2017**

Date :- 3<sup>rd</sup> April 2017

Time :- 1.00 p.m. – 4.00 p.m.

**ESSAY PAPER**

Answer six (06) questions only.

Each question should be answered in a separate book.

1.

1.1. Draw and label a Mapleson D (Bain) breathing system. (30 marks)

1.2. How do you check the above breathing system? (40 marks)

1.3. A 40 year old ASA1 patient who is breathing spontaneously through a Bain breathing system is found to have a rising EtCO<sub>2</sub>.

List the possible causes. (30 marks)

2. Write short notes on:

2.1. Symptoms and signs of Bupivacaine toxicity. (30 marks)

2.2. Uses and side effects of Magnesium Sulphate. (40 marks)

2.3. Indications and side effects of Morphine. (30 marks)

Contd...../2-

3. A 27 year old, previously healthy primigravida is scheduled for emergency LSCS due to fetal distress.
- 3.1. Outline the immediate steps that you would take to improve utero-placental blood flow and oxygen delivery to the fetus before giving anaesthesia. (30 marks)
- 3.2. How would you assess and prepare this patient for LSCS? (40 marks)
- 3.3. List the advantages and disadvantages of giving spinal anaesthesia for this patient. (30 marks)
4. You are called to anaesthetise a 5 year old boy who is bleeding, 4 hours following a tonsillectomy.
- 4.1. List the problems that you would anticipate in this child. (40 marks)
- 4.2. How would you assess and optimize this child prior to surgery? (60 marks)
5. A 24 year old patient was brought to the A&E department following a road traffic accident with suspected head injury.
- On admission his GCS was 8/15, BP 100/70 mmHg, HR 110/minute
- You are called to intubate this patient prior to transfer to a neurosurgical centre.
- 5.1. What are the precautions you would take in intubating this patient? (30 marks)
- 5.2. List the factors that could lead to secondary brain injury in this patient. (30 marks)
- 5.3. Outline your preparation prior to transferring this patient to a neurosurgical centre. (40 marks)

6. A 26 year old ASA 1 patient is anaesthetised for an incision and drainage of a peri-anal abscess. He is breathing spontaneously on a Laryngeal Mask Airway. During the procedure his SPO<sub>2</sub> drops to 85% while on 40% Oxygen.
- 6.1. List the possible causes for desaturation. (30 marks)
- 6.2. Outline your management. (70 marks)
7. A 60 year old man requires urgent surgery for an amputation of a gangrenous lower limb. He is on Clopidogrel for ischaemic heart disease.
- 7.1. How would you assess and optimize this patient prior to surgery. (70 marks)
- 7.2. Explain with reasons why tachycardia and hypotension should be avoided in the peri operative period. (30 marks)
8. A 60 year old 60 kg male patient is awaiting a right hemicolectomy for a caecal malignancy.
- 8.1. How would you assess him pre operatively? (40 marks)
- 8.2. Mention what investigations you would request on him giving reasons. (30 marks)
- 8.2. What information would you provide this patient regarding the peri operative anaesthetic plan? (30 marks)