

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (ANAESTHESIOLOGY) PART 1A EXAMINATION, JULY 2019

ESSAY PAPER

Answer six (06) questions only.

Each question should be answered in a separate book.

Date : 1st July 2019

Time: 1.00 p.m. – 4.00 p.m.

1.

- 1.1. Draw and label a diagram of a self-inflating bag indicating the functions of each component (50 marks)
- 1.2. What are the uses of a self-inflating bag? (20 marks)
- 1.3. How would you provide different concentrations of oxygen using the above device? (10 marks)
- 1.4. How do you check the self-inflating bag? (20 marks)

2. List the indications with doses and side effects of the following drugs

- 2.1. Ketamine (30 marks)
- 2.2. Adrenaline (40 marks)
- 2.3. Morphine (30 marks)

3. A 25-year-old primigravida is scheduled to undergo an elective LSCS due to cephalopelvic disproportion.

- 3.1. How would you convince this mother to undergo spinal anaesthesia? (40 marks)
- 3.2. In spite of your efforts she refuses spinal anaesthesia. Briefly outline your peri operative management of this patient. (60 marks)

4. A 4-year-old (20kg) girl is scheduled for an urgent open appendicectomy. She has been vomiting for two days and is pyrexial (38.7 °C). Her pulse rate is 170 beats per minute with a capillary refill time of 4 seconds.
- 4.1. Outline your concerns in anaesthetizing this child. (30 marks)
- 4.2. How would you optimize this child? (40 marks)
- 4.3. Briefly describe your peri-operative pain management of this patient. (30 marks)
5. A 25-year-old man was brought to the A & E of a base hospital following a fall from a height. His GCS is 8/15, respiratory rate 26/minute, blood pressure 120/80 mmHg and pulse rate 100/minute.
- 5.1. Outline your initial management of this patient. (40 marks)
- 5.2. After your initial assessment, the patient was found to have an isolated head injury. How would you safely transfer this patient to a neurosurgical centre? (60 marks)
6. A 60-year-old 60 Kg male was scheduled to undergo a below knee amputation for an ischaemic limb. He has long standing diabetes mellitus and his random blood sugar was 300 mg/dL.
- 6.1. Outline your preoperative assessment of this patient. (40 marks)
- 6.2. Briefly describe your perioperative management of this patient. (60 marks)
7. A 45-year-old ASA1 patient was anaesthetized for a laparoscopic cholecystectomy. 20 minutes into the surgery the airway pressure rose to 40cmH₂O and the oxygen saturation dropped to 88%.
- 7.1. List the possible causes for the above situation. (40 marks)
- 7.2. Outline your immediate management. (60 marks)
8. A 40-year-old female on treatment for thyrotoxicosis is awaiting total thyroidectomy.
- 8.1. How would you assess and prepare her for surgery? (60 marks)
- 8.2. List the perioperative problems you would anticipate in this patient. (40 marks)