

## MANIPAL UNIVERSITY

### MD (ANAESTHESIOLOGY) DEGREE EXAMINATION – APRIL 2015

#### SUBJECT: PAPER I: BASIC SCIENCES AS APPLIED TO ANAESTHESIOLOGY

Wednesday, April 01, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss the various factors that affect the uptake and distribution of inhalation anaesthetics.  
(15 marks)
2. Describe the standard technique for the cannulation of the jugular vein. Enumerate the complication associated with the cannulation of left internal jugular vein.  
(15 marks)

3. **Write short notes on:**

- 3A. Co-axial circuits
- 3B. Capnography
- 3C. Oxygen Cascade
- 3D. Sugammadex
- 3E. Peak Expiratory Flow Rate
- 3F. Proseal Laryngeal mask airway
- 3G. Describe the safety features of anaesthesia machine
- 3H. Train of four
- 3I. Anion gap
- 3J. Counter current mechanism

(7 marks × 10 = 70 marks)



**MANIPAL UNIVERSITY****MD (ANAESTHESIOLOGY) DEGREE EXAMINATION – APRIL 2015****SUBJECT: PAPER II: ANAESTHESIA IN RELATION TO ASSOCIATE SYSTEMIC DISEASES**

Thursday, April 02, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ **Answer ALL the questions.**
- ✍ **Answer to the point as padding of answers will not fetch extra marks.**
- ✍ **Illustrate your answer with diagrams where appropriate.**

**✍ Long Essays:**

1. A 25-year old woman who sustained 20% burns involving the face and anterior part of neck and chest six months prior is now scheduled for scar excision and skin grafting. Outline your intraoperative management with special reference to the airway.  
(15 marks)
2. Discuss the relative merits and demerits of intrathecal and epidural adjuvants.  
(15 marks)
3. **Write briefly on:**
  - 3A. Supine hypotension syndrome
  - 3B. Anaesthetic considerations in foetal surgery
  - 3C. Chest compression techniques in infants
  - 3D. Pain pathways involved in different stages of labour
  - 3E. Interpleural block
  - 3F. Cyclo-oxygenase inhibitors in pain management
  - 3G. Anaesthetic implications of diabetes-related autonomic neuropathy
  - 3H. Anaesthetic concerns in a patient on angiotensin receptor blockers
  - 3I. Use of nitrous oxide and intravitreal injection of gas
  - 3J. Conscious sedation

(7 marks × 10 = 70 marks)



**MANIPAL UNIVERSITY****MD (ANAESTHESIOLOGY) DEGREE EXAMINATION – APRIL 2015****SUBJECT: PAPER III: ANAESTHESIA IN RELATION TO SUB SPECIALITIES**

Saturday, April 04, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays**

1. Describe the intracranial pressure volume relationship and discuss the methods of reducing the raised intra cranial pressure in a neurosurgical patient.

(15 marks)

2. Describe the anaesthetic management and post operative care of a full term neonate with Congenital Hypertrophic pyloric Stenosis weighing 3.8 kg scheduled for Ramstedt surgery.

(15 marks)

3. **Write short notes on:**

3A. Fat Embolism Syndrome

3B. Indications for one lung Ventilation

3C. Heparin induced Thrombocytopenia

3D. TURP Syndrome

3E. Apnoea of Prematurity

3F. IgE Mediated reactions during anaesthesia

3G. Neuroleptic Malignant Syndrome

3H. Informed Consent

3I. Macro shock in the operating theatre

3J. ASA guidelines for use of Trans Esophageal Echocardiography

(7 marks × 10 = 70 marks)



**MANIPAL UNIVERSITY**  
**MD (ANAESTHESIOLOGY) DEGREE EXAMINATION – APRIL 2015**  
**SUBJECT: PAPER IV: INTENSIVE CARE MEDICINE, PAIN MEDICINE AND**  
**RECENT ADVANCES**

Monday, April 06, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Describe the term Pulseless Ventricular Tachycardia. Discuss the current role of vasopressors in the event of cardiac arrest.

(15 marks)

2. Describe the term VAP. Discuss the measures taken to prevent ventilator associated pneumonia in a critical Care Unit.

(15 marks)

3. **Write short notes on:**

3A. Autologous Blood Transfusion

3B. Flial Chest

3C. Indications for Non Invasive Ventilation

3D. Tube Exchangers

3E. Paracetamol poisoning

3F. Anaesthetic implications in Robotically assisted radical prostatectomy

3G. Errors in Statistical Analysis

3H. Management of Chronic Back ache

3I. Thromboelastography

3J. Role of anaesthesiologist in Swine flu outbreaks

(7 marks × 10 = 70 marks)

