

## MANIPAL UNIVERSITY

## PG DIPLOMA IN ANAESTHESIOLOGY (DA) EXAMINATION – APRIL 2014

SUBJECT: PAPER I: BASIC SCIENCES AS APPLIED TO ANAESTHESIOLOGY: ANATOMY, PHYSIOLOGY, PHARMACOLOGY AND BIOCHEMISTRY, ETHICS, QUALITY ASSURANCE, MEDICOLEGAL ASPECTS

Tuesday, April 01, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

## Health Sciences Library

1. Describe in brief the physiology of nerve transmission and mechanism of action of local anaesthetics. Compare and contrast bupivacaine and Ropivacaine.  
(15 marks)
2. Describe with a neat labelled diagram the anatomy and physiology of autonomic nervous system. Describe the pharmacology and clinical uses of Nor epinephrine.  
(15 marks)
3. **Write short notes on:**
  - 3A. Describe Boyle's law and its applications in anaesthesia
  - 3B. Context sensitivity half time
  - 3C. Rocuronium
  - 3D. Describe oxygen dissociation curve and factors affecting it
  - 3E. Factors affecting cerebral Autoregulation
  - 3F. Venturi phenomenon
  - 3G. Etomidate
  - 3H. Functional Residual Capacity and its significance in anaesthesia
  - 3I. Describe the physiological changes in high altitude
  - 3J. Properties of nitrous oxide and its uses

(7×10 = 70 marks)



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PG DIPLOMA IN ANAESTHESIOLOGY (DA) EXAMINATION – APRIL 2014

SUBJECT: PAPER II: PRINCIPLES AND TECHNIQUES OF ANAESTHESIA  
INCLUDING REGIONAL ANAESTHESIA

Wednesday, April 02, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

## Health Sciences Library

1. Describe the anaesthetic management of endovascular coiling of middle cerebral artery aneurysm.  
(15 marks)
2. Describe the management of a neonate with tracheo-oesophageal fistula posted for surgery.  
(15 marks)
3. **Write short notes on:**
  - 3A. One lung ventilation
  - 3B. Describe the management of Atrial Fibrillation
  - 3C. DIC
  - 3D. TAP block
  - 3E. Preparation for awake fiberoptic intubation
  - 3F. Anaesthetic implications of laparoscopic surgeries
  - 3G. Risk stratification in anesthesia for patients with IHD
  - 3H. Ankle Block
  - 3I. Criteria for brain death
  - 3J. Analgesic nephropathy

(7×10 = 70 marks)



**MANIPAL UNIVERSITY****PG DIPLOMA IN ANAESTHESIOLOGY (DA) EXAMINATION – APRIL 2014**  
**SUBJECT: PAPER III: ANAESTHESIA IN RELATION TO ASSOCIATED SYSTEMIC DISEASES, INTENSIVE CARE MEDICINE, PAIN MEDICINE**

Thursday, April 03, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

1. Describe the physiological changes due to aging and the problems in the anaesthetic management of geriatric patient.

**Health Sciences Library**

(15 marks)

2. Describe the ACLS 2010 guidelines.

(15 marks)

3. **Write short notes on:**

- 3A. Weaning modes of ventilators  
3B. Modalities of pain relief for a patient with Ca cervix  
3C. Auto-Peep  
3D. Massive blood transfusion  
3E. Management of chronic Back Ache  
3F. Glasgow coma scale  
3G. Stellate ganglion block  
3H. Blood Loss Assessment in Polytrauma  
3I. Trans cutaneous nerve stimulation  
3J. Ventilator associated pneumonia

(7×10 = 70 marks)

