

MANIPAL UNIVERSITY**MD (ANAESTHESIOLOGY) DEGREE EXAMINATION – APRIL 2016****SUBJECT: PAPER I: BASIC SCIENCES AS APPLIED TO ANAESTHESIOLOGY**

Monday, April 18, 2016

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Describe the ventricular function of the heart with appropriate diagrams. Briefly explain the factors affecting the ventricular performance.

(15 marks)

2. Describe briefly the regulation of Acid Base Balance. Discuss the anion gap approach to investigate metabolic disturbances.

(15 marks)

3. **Write short notes on:**

3A. Bain's Circuit

3B. Double burst Stimulation

3C. Oxygen Dissociative Curve

3D. Clonidine

3E. Chiral Local Anaesthetics

3F. Liver Function Tests

3G. Beer Lambert's Law

3H. FRC v/s Closing Capacity

3I. Etomidate

3J. Gasserian ganglion

(7 marks × 10 = 70 marks)



MANIPAL UNIVERSITY**MD (ANAESTHESIOLOGY) DEGREE EXAMINATION – APRIL 2016****SUBJECT: PAPER II: ANAESTHESIA IN RELATION TO ASSOCIATE SYSTEMIC DISEASES**

Tuesday, April 19, 2016

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Classify anti-hypertensives. Describe the etiology and management of intraoperative Hypertension.

(15 marks)

2. What is oculocardiacreflex? Describe the pathway. How do you prevent and treat it.

(15 marks)

3. **Short Questions:**

3A. Pathophysiology of HELLP syndrome

3B. Anaesthetic management of manual removal of placenta

3C. Hypotensive anaesthesia for FESS surgery

3D. Anaesthetic management of 5 yr old child with post tonsillectomy bleed

3E. Anaesthetic management of extraction of wisdom teeth

3F. Management of a 2 yr old patient with 35% burns for dressing

3G. MELD Scoring in patients with liver disease

3H. Shivering during labour analgesia

3I. Rectus sheath block

3J. Thyroid Function Tests

(7 marks × 10 = 70 marks)



MANIPAL UNIVERSITY**MD (ANAESTHESIOLOGY) DEGREE EXAMINATION – APRIL 2016****SUBJECT: PAPER III: ANAESTHESIA IN RELATION TO SUB SPECIALITIES**

Wednesday, April 20, 2016

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. Describe the perioperative anaesthetic management of a 55-year old man, diagnosed case of chronic obstructive airway disease (smoker of 2 packets of cigarettes per day since 30 years) scheduled for elective cholecystectomy for gallstones.

(15 marks)

2. Discuss the preoperative evaluation and anesthetic management of a 1-day old neonate posted for repair of congenital diaphragmatic hernia.

(15 marks)

3. **Write briefly on:**

3A. Management of perioperative supraventricular arrhythmias

3B. Pathophysiology and anaesthetic implications of mitral stenosis

3C. Physiological and adverse effects of inflation and deflation of pneumatic lower limb tourniquet

3D. Management of raised intracranial pressure in a patient with traumatic brain injury

3E. Anaesthetic management of an 80-year old patient posted for transurethral resection of the prostate

3F. Anaesthetic considerations in a post-cardiac transplant patient undergoing elective noncardiac surgery

3G. Anaesthetic management of a 2-year old child weighing 10 kilograms with intestinal obstruction due to roundworm infestation

3H. Discuss drugs used (with routes, doses and relative merits/demerits) for premedication in children

3I. Discharge criteria for day care surgery

3J. Objectives of monitored anesthesia care

(7 marks × 10 = 70 marks)



MANIPAL UNIVERSITY**MD (ANAESTHESIOLOGY) DEGREE EXAMINATION – APRIL 2016****SUBJECT: PAPER IV: INTENSIVE CARE MEDICINE, PAIN MEDICINE AND
RECENT ADVANCES**

Thursday, April 21, 2016

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss the management of atrial fibrillation according to AHA/ACC/HRS guidelines 2014.
(15 marks)
2. Enumerate the etiology and management of chronic back ache.
(15 marks)

3. **Short Questions:**

- 3A. Current role of vasopressors in septic shock
- 3B. Percutaneous tracheostomy and its complications
- 3C. Intubating strategies in Temporomandibular ankylosis
- 3D. Adult Stroke algorithm
- 3E. Indications and contraindications for the use of trans esophageal echocardiography
- 3F. Mean, Mode, Median and Standard deviation
- 3G. Role of Magnesium in critical care
- 3H. Flail chest
- 3I. Ventilator associated pneumonia
- 3J. Xenon in Anesthesia

(7 marks × 10 = 70 marks)

