

April-2001

[KD 156]

Sub. Code : 2053

M.D. DEGREE EXAMINATION.

(All Regulations)

Branch X — Anaesthesiology

Part I

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the causes and management of acute renal failure. (25)
2. Discuss the etiopathogenesis and treatment of a young female patient with Myasthenia Gravis. (25)

Write short notes on :

(5 × 10 = 50)

- (a) Hypokalaemia
 - (b) Ventilation perfusion ratio
 - (c) Treatment of paroxysmal supraventricular tachycardia
 - (d) Morphine receptors
 - (e) Treatment of cerebral edema.
-

November-2001

[KE 156]

Sub. Code : 2053

M.D. DEGREE EXAMINATION.

(All Regulations)

Branch X — Anaesthesiology

Part I

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Define hypo perfusion state. Outline the evaluation, resuscitation of a patient presenting in acute hypo perfusion state or shock. (25)
2. What is oxygen cascade? What are the various causes of hypoxemic in the perioperative period? Classify oxygen therapy devices and describe them. (15 + 10 = 25)
3. Short notes : (5 × 10 = 50)
 - (a) Basic Life Support.
 - (b) Post operative delirium.
 - (c) Differential diagnosis of perioperative oliguria.
 - (d) Acute respiratory acidosis.
 - (e) Intra-Operative ventricular ectopics.

March-2002

[KG 156]

Sub. Code : 2053

M.D. DEGREE EXAMINATION.

(New/Revised Regulations)

Branch X — Anaesthesiology

Part I

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours /

Maximum : 100 marks

Answer ALL questions.

1. Describe the pathophysiology of Myasthenia Gravis. Discuss the merits and demerits of muscle relaxants in relation to it. (25)
 2. Discuss the patho-physiological changes in Mitral Stenosis and Anaesthetic management of closed Mitral Valvotomy. (25)
 3. Write short notes on : (5 × 10 = 50)
 - (a) Pickwickian syndrome.
 - (b) Goldman's risk index score.
 - (c) Oxygen flux.
 - (d) Lorazepam.
 - (e) Dextran.
-

September-2002

[KH 156]

Sub. Code : 2053

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch X — Anaesthesiology

Part I

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the current management strategies in acute bronchial asthma. (25)
 2. What are the causes of hyperpyrexia? Discuss the presentation of hyperpyrexia and its clinical management. (25)
 3. Write short notes on : (5 × 10 = 50)
 - (a) Nitric oxide
 - (b) Neuraxial opioids
 - (c) Brain preservation
 - (d) Clinical uses of evoked potentials
 - (e) Complications of blood transfusion.
-

April-2003

[KI 156]

Sub. Code : 2053

M.D. DEGREE EXAMINATION.

(All Regulations)

Branch X — Anaesthesiology

Part I

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. What are the causes of cardiac arrhythmias during general anaesthesia? How would you recognize and treat them? (25)
 2. Discuss the functions of the liver, with the tests and their relevance to anaesthesia. (25)
 3. Write short notes on : (5 × 10 = 50)
 - (a) Bronchodilators
 - (b) Verapamil
 - (c) Metabolic acidosis
 - (d) Duchenne's muscular dystrophy
 - (e) Pulmonary embolism.
-

[KJ 158]

Sub. Code : 2033

M.D. DEGREE EXAMINATION.

(All Regulations)

Branch X — Anaesthesiology

Part I

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and forty
minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

M.C.Q must be answered **SEPARATELY** on the
Answer Sheet provided as per the instructions on the
first page.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

1. (a) Define brain death. Write the causes of brain death. What are the prerequisites and diagnostic tests to confirm brain death?

(b) Describe the hazards of long term corticosteroid therapy. How will you manage such cases under anaesthesia? (2 × 15 = 30)

2. (a) Neurogenic pulmonary oedema.
(b) Resuscitation of the new born.
(c) Anaphylactic drug reactions.
(d) Write notes on pendulift.
(e) Method of doing fluid challenge test.
(f) Amiodarone.
(g) Nosocomial infections and safety measures.
(h) Infective Endocarditis prophylaxis.
(i) Tension pneumothorax and anaesthetic implications.
(j) How will you treat Hyperkalaemia? (10 × 5 = 50)

[KL 156]

Sub. Code : 2053

M.D. DEGREE EXAMINATION.

(All Regulations)

Branch X — Anaesthesiology

Part I

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay : (2 × 15 = 30)

(1) Define obesity and morbid obesity. Discuss the physiological changes and anaesthetic concerns in morbidly obese patients.

(2) Discuss the etiology, pathophysiology, clinical features and management of Acute Respiratory distress Syndrome.

II. Short notes :

(10 × 5 = 50)

- (a) Nitric oxide
- (b) Hyponatremia
- (c) Acute Normo Volemic Hemodilution
- (d) Opioid Receptors
- (e) Airway assessment
- (f) Preoxygenation
- (g) Swan Ganz catheter
- (h) Allen test
- (i) Negative pressure pulmonary oedema
- (j) Cerebral autoregulation.

[KO 156]

Sub. Code : 2054

M.D. DEGREE EXAMINATION.

Branch X — Anaesthesiology

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours **Maximum : 100 marks**

Theory : Two hours and forty minutes	Theory : 80 marks
---	--------------------------

M.C.Q. : Twenty minutes **M.C.Q. : 20 marks**

Answer ALL questions.

Draw diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

(1) Describe etiology and clinical features of Addison's Disease. Mention the perioperative anaesthetic concerns. Write a note on perioperative steroid supplementation.

(2) Mention the clinical features, diagnostic tests and treatment of myaesthesia Gravis. Mention perioperative anaesthetic implications.

II. Short notes : (10 × 5 = 50)

(a) Endocarditis chemoprophylaxis.

(b) Differences between obstructive and Restrictive lung diseases.

(c) Multi factorial Risk Index for predicting post-operative Respiratory failure after Non - cardiac surgery.

(d) Canadian cardiovascular society classification of cardiovascular status.

(e) **G.A.B.A. Receptors.**

(f) Obstructive sleep apnea.

(g) Esmolol.

(h) Low molecular weight Heparin and its anaesthetic implications.

(i) Modified child and Pugh's criteria to assess Hepatic Reserve.

(j) Transfusion Related Acute Lung Injury (TRALI).

[KP 156]

Sub. Code : 2054

II. Short notes :

(6 × 5 = 30)

M.D. DEGREE EXAMINATION.

Branch X — Anaesthesiology

MEDICINE APPLIED TO ANAESTHESIOLOGY

Time : Three hours **Maximum : 100 marks**

Theory : Two hours and forty minutes	Theory : 80 marks
---	--------------------------

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(1) A 60 year old man with a permanent DDD MP permanent pacemaker is posted for transurethral resection of the prostate. Describe the anaesthetic management. (20)

(2) Define and classify diabetes mellitus. Write in brief complications of diabetes and their implication to anaesthesiologist. (15)

(3) Describe etiology, pathophysiology and clinical features of Bronchial asthma. How will you treat such a case in Acute Respiratory Failure? (15)

- (a) Hypokalemia.
- (b) O₂ therapy.
- (c) Tocolytic agents.
- (d) Hypotensive anaesthesia.
- (e) P₅₀.
- (f) Peribulbar block.

[KQ 141]

Sub. Code : 2054

M.D. DEGREE EXAMINATION.

Branch X — Anaesthesiology

MEDICINE APPLIED TO ANAESTHESIOLOGY

Common to

Part I — (All Regulations)
(Candidates admitted from 1988–89 onwards)

and

Paper II — (For candidates admitted from 2004–2005 onwards)

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

1. A 20 years old male patient with mitral stenosis develops acute appendicitis. Discuss the anaesthetic management. (20)

2. Discuss the problems associated with anaesthesia for an elective surgery in patient chronic renal failure. (15)

3. Discuss the pathophysiology of hypertension. Describe the anaesthetic management for elective surgery on long time antihypertensive treatment. (15)

II. Short notes : (6 × 5 = 30)

- (a) Management of Tetanus**
- (b) Hepato Renal syndrome**
- (c) Hyperkalemia**
- (d) Remifentanyl**
- (e) Glasgo coma scale**
- (f) Atrial Fibrillation.**

MARCH 2008

[KS 144]

Sub. Code : 2039

M.D. DEGREE EXAMINATION.

Branch X — Anaesthesiology

MEDICINE APPLIED TO ANAESTHESIOLOGY

Common to

Part I — Paper I — (Candidates admitted upto 2003–04)

and

Paper II — (For candidates admitted from 2004–2005 onwards)

Q.P. Code : 202039

Time : Three hours

Maximum : 100 marks

Draw suitable diagrams wherever necessary.

Answer ALL questions.

- I. Essay questions : (2 × 20 = 40)
 - (1) Describe in detail the patho-physiology of mitral stenosis. Discuss the perioperative management of a 30 yr old female posted for closed mitral valvotomy. (20)
 - (2) Discuss the role of an anaesthebiologist in the management of a patient with 60% of acute burns. (20)
 - II. Short notes : (10 × 6 = 60)
 - (1) ACE inhibitors.
 - (2) Tests for autonomic function.
 - (3) Continuous Positive Airway Pressure (CPAP).
 - (4) Brain death.
 - (5) Neuromuscular monitoring.
 - (6) Anaesthetic considerations in electro convulsive therapy.
 - (7) Cardio vascular and respiratory changes in a geriatric patient.
 - (8) Supine hypotensive syndrome.
 - (9) Total parenteral nutrition.
 - (10) Anaphylactic shock.
-

March 2009

[KU 144]

Sub. Code: 2039

M.D. DEGREE EXAMINATION

**Branch X – ANAESTHESIOLOGY
(Common to all candidates)**

MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code : 202039

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions : (2 x 20 = 40)

1. Describe the pathophysiology of rheumatic valvular heart disease.
Discuss in brief the cardiopulmonary bypass management of valvular replacement.
2. Anaesthetic management of posterior cranial fossa tumor.

II. Write short notes on : (10 x 6 = 60)

1. Anaesthetic consideration in electroconvulsive therapy.
2. Lung compliance.
3. Amniotic fluid embolism.
4. Soda bicarbonate.
5. Post-operative jaundice.
6. Neuro endocrine stress response.
7. TURP syndrome.
8. Pre-operative preparation in case of broncho pleural fistula.
9. Anaphylactic shock.
10. Temporomandibular joint ankylosis.

September 2009

[KV 144]

Sub. Code: 2039

M.D. DEGREE EXAMINATION

**Branch X – ANAESTHESIOLOGY
(Common to all candidates)**

MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code : 202039

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions : (2 x 20 = 40)

1. Discuss the causes, diagnosis and management of cardiac dysrhythmias during anaesthetic practice.
2. Discuss the anaesthetic considerations and pathophysiology in obese patients.

II. Write short notes on : (10 x 6 = 60)

1. Thyroid storm
2. TURP syndrome
3. Diabetic ketoacidosis
4. Angiotensin receptor blockers
5. Preanaesthetic preparation of chronic smokers
6. Vasopressin in anaesthesia and ICU
7. Methods of airway assessment
8. Glassgow coma scale
9. End stage renal failure
10. Plasma volume expanders.

March 2010

[KW 144]

Sub. Code: 2039

M.D. DEGREE EXAMINATION

Branch X – ANAESTHESIOLOGY

**Paper II – (for candidates admitted from 2004-05 to 2007-08) and
Part II / Paper I – (for candidates admitted from 2008-2009 onwards)**

MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code : 202039

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions.

I. Essay questions : (2 x 20 = 40)

1. Anaesthetic management of a child of 4 yrs. posted for tetralogy of Fallot correction under cardiopulmonary bypass.
2. Discuss bronchopleural fistula and its anaesthetic management.

II. Write short notes on : (10 x 6 = 60)

1. Bispectral index.
2. HELLP syndrome.
3. Brain death.
4. Digitalis.
5. Porphyria.
6. Cushing syndrome – Anaesthetic problem and management.
7. Physiological changes in aged.
8. Kyphoscoliosis – anaesthetic problem.
9. Electrical burns.
10. Quincke and anaesthesia.

September 2010

[KX 144]

Sub. Code: 2039

M.D. DEGREE EXAMINATION

Branch X – ANAESTHESIOLOGY

MEDICINE APPLIED TO ANAESTHESIOLOGY

**Paper II – (for candidates admitted from 2004-05 to 2007-08) and
Part – II - Paper I – (for candidates admitted from 2008-2009 onwards)**

Q.P. Code : 202039

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. What is ARDS? Describe the Pathogenesis and Management of ARDS.
2. Discuss the Anaesthetic management of a patient with toxic multinodular goitre.

II. Write short notes on :

(10 X 6 = 60)

1. Vasopressin in anaesthesia and ICU.
2. Goldman's Cardiac Risk index.
3. Malignant hyperpyrexia.
4. Methods of airway assessment.
5. Diabetic ketoacidosis.
6. Post dural puncture headache.
7. Post operative shivering.
8. Paroxysmal supraventricular tachycardia.
9. Autologous blood transfusion.
10. Swan Ganz catheter.

MAY 2011

[KY 144]

Sub. Code: 2039

**M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
MEDICINE APPLIED TO ANAESTHESIOLOGY**

Q.P. Code : 202039

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages (Max.)	Time (Max.)	Marks (Max.)
-------------------------	------------------------	-------------------------

- | | | | |
|---|----|----|----|
| 1. Discuss the preoperative evaluation and anaesthetic management of a patient with Bronchial asthma for right upper lobectomy. | 11 | 35 | 15 |
| 2. Briefly outline the treatment of Diabetic ketoacidosis.
Discuss the anaesthetic management of a patient with Diabetic ketoacidosis for Below Knee Amputation. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Difficult airway algorithm. | 4 | 10 | 7 |
| 2. Temporary cardiac pacing. | 4 | 10 | 7 |
| 3. Pulmonary function tests. | 4 | 10 | 7 |
| 4. Hypertensive crises. | 4 | 10 | 7 |
| 5. Thyroid storm. | 4 | 10 | 7 |
| 6. Sir Ivan MAGILL. | 4 | 10 | 7 |
| 7. Functional residual capacity. | 4 | 10 | 7 |
| 8. Postoperative nausea and vomiting. | 4 | 10 | 7 |
| 9. Dextran. | 4 | 10 | 7 |
| 10. Hypoxic pulmonary vasoconstriction. | 4 | 10 | 7 |

October 2011

[KZ 144]

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code : 202039

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|---|----|----|----|
| 1. Discuss the Anaesthetic management of 65 year old man with diabetic Ketoacidosis posted for emergency below knee amputation. | 11 | 35 | 15 |
| 2. How will you manage a patient with chronic alcoholic with portal hypertension posted for laparotomy. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Peri operative hyperkalemia. | 4 | 10 | 7 |
| 2. Peri operative hyper Magnesemia. | 4 | 10 | 7 |
| 3. Anion Gap. | 4 | 10 | 7 |
| 4. Metabolic acidosis of cardiogenic shock. | 4 | 10 | 7 |
| 5. Advantages and disadvantages of crystalloids in fluid resuscitation. | 4 | 10 | 7 |
| 6. Management of incompatible blood transfusion. | 4 | 10 | 7 |
| 7. DIC – syndrome. | 4 | 10 | 7 |
| 8. Complications of massive blood transfusion. | 4 | 10 | 7 |
| 9. Transfusion related acute lung injury (TRALI). | 4 | 10 | 7 |
| 10. Hepatitis – post transfusion hepatitis. | 4 | 10 | 7 |

[LA 144]

April 2012

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code : 202039

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages (Max.)	Time (Max.)	Marks (Max.)
-------------------------	------------------------	-------------------------

- | | | | |
|--|----|----|----|
| 1. Describe various types of shock. Describe the management of Septic shock. | 16 | 35 | 15 |
| 2. Management of Acute respiratory failure. | 16 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Describe the collection , storage and transfusion of Platelets ? | 4 | 10 | 7 |
| 2. What are the effects of smoking in anesthesia? | 4 | 10 | 7 |
| 3. What is the anesthetic management in Pseudo muscular dystrophy. | 4 | 10 | 7 |
| 4. Discuss Anaphylaxis in anesthesia. | 4 | 10 | 7 |
| 5. How do you manage a patient in Alcohol withdrawal for anesthesia? | 4 | 10 | 7 |
| 6. Identification and management of Cognitive dysfunction following anesthesia in geriatric patients. | 4 | 10 | 7 |
| 7. What is the Role of magnesium in anesthesia? | 4 | 10 | 7 |
| 8. What is Pregnancy Induced Hypertension and discuss the choice for emergency caesarean section. | 4 | 10 | 7 |
| 9. What is Hepatorenal syndrome? | 4 | 10 | 7 |
| 10. What are the protocols for the use Anticoagulants in regional techniques ? | 4 | 10 | 7 |

[LB 144]

OCTOBER 2012

Sub. Code: 2039

**M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
MEDICINE APPLIED TO ANAESTHESIOLOGY
Q.P. Code : 202039**

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Discuss the preoperative evaluation and anesthetic management of an emergency abdominal operation in a 60 year old man who had myocardial infarction six weeks back.	16	35	15
2. Discuss the current concepts in the management of a case of chronic obstructive airway disease in respiratory failure.	16	35	15

II. Write notes on :

1. Enumerate the approaches and complications of cannulation of Internal Jugular Vein.	4	10	7
2. Explain the positional hazards under anesthesia.	4	10	7
3. Hazards of smoking, changes that occur following cessation of smoking.	4	10	7
4. Etio pathogenesis of Venous air embolism, diagnosis and Prevention.	4	10	7
5. Metabolic changes that occur in child with congenital pyloric stenosis.	4	10	7
6. Clinical use of alpha 2 agonists in anesthesia.	4	10	7
7. Write about injection Remifentanyl.	4	10	7
8. What is Functional residual capacity? How is it measured? what is it's importance?	4	10	7
9. Current oral antidiabetic drugs and their perioperative use.	4	10	7
10. Sick cell traits and the problems peculiar to them under anesthesia	4	10	7

(LC 144)

APRIL 2013

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X –ANAESTHESIOLOGY

MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P.Code: 202039

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Discuss the criteria to diagnose brain death.
2. Briefly elucidate the diagnostic criteria for SIRS, Septicemia and septic shock.

II. Write notes on:

(10X7=70)

1. Oxygen toxicity
2. Continuous renal replacement therapy
3. Guillain- barre syndrome
4. Lung compliance
5. Post-operative jaundice
6. Anaphylactic shock
7. Diabetic keto acidosis
8. Pulmonary edema
9. Atracurium
10. Adenosine

[LD 144]

OCTOBER 2013

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P.Code: 202039

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss in details the etiology, pathophysiology diagnosis and treatment of fat embolism.
2. Discuss the regulation of body temperature. What are the perioperative concerns of hypothermia?

II. Write notes on:

(10 x 7 = 70)

1. Describe the anatomy of foetal circulation and changes at birth.
2. Liver enzyme induction and implication for anaesthesia.
3. Clinical uses of alpha 2 agonists in anaesthesia.
4. What are the factors affecting placental drug transfer?
5. Write the guidelines for infective endocarditis prophylaxis.
6. Types of capnography and basic physiology of a capnogram.
7. Therapeutic uses of magnesium in anaesthesia intensive care & emergency medicine.
8. Third space loss and its anaesthetic implications.
9. Assessment of severity of mitral stenosis – Clinical and echo cardiography.
10. What is cardioversion? Discuss the indications, electrical energy requirement and anaesthesia for cardioversion.

[LE 144]

APRIL 2014

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X –ANAESTHESIOLOGY
MEDICINE APPLIED TO ANAESTHESIOLOGY
Q.P. Code :202039

Time : Three Hours

Maximum : 100 marks

I. Elaborate on: **(2X15=30)**

1. Discuss the pathophysiological changes that occur in various systems in a patient with End Stage Liver Disease (ESLD).
2. Discuss the micro and macro vascular changes that occur in various systems in a patient with Diabetes mellitus and briefly explain their anaesthetic implications.

II. Write notes on: **(10X7=70)**

1. Post operative pulmonary complications.
2. Preoperative preparation of Pheochromocytoma.
3. Anaesthetic implications in a patient with coronary stents.
4. Management of Ventricular Fibrillation.
5. Anaesthetic implications in a patient with Myasthenia Gravis.
6. Anaesthetic implications due to cancer chemotherapy.
7. EKG diagnosis and management of Hypokalemia
8. Stress response to surgery.
9. Anaesthetic implications of Hypothyroidism.
10. Carvedilol and Labetolol.

[LF 144]

OCTOBER 2014

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II - MEDICINE APPLIED TO ANAESTHESIOLOGY
Q.P. Code :202039

Time : Three Hours

Maximum : 100 marks

I. Elaborate on: **(2 x 15 = 30)**

1. Management of a thyrotoxic patient coming for Surgery.
2. What is COPD? How will you manage Oxygenation and pain in the post-operative period in a COPD patient coming for upper abdominal surgery?

II. Write notes on: **(10 x 7 = 70)**

1. Hazards of smoking and anaesthetic implications.
2. Peri-operative antiplatelet therapy.
3. Diastolic dysfunction and its anaesthetic implication.
4. Diabetic autonomic neuropathy and its implications.
5. Positional hazards in anaesthesia.
6. Anaesthetic implications in seizure disorders.
7. Non-invasive cardiovascular monitoring.
8. Atrial Fibrillation.
9. Plasma volume expansion.
10. Post-operative jaundice and its management.

[LG 144]

APRIL 2015

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P.Code: 202039

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the current management strategies in acute bronchial asthma.
2. Discuss the pathophysiology of myasthenia gravis. Discuss the merits and demerits of muscle relaxants in relation to it.

II. Write notes on:

(10 x 7 = 70)

1. Pickwickian syndrome.
2. Mendelson's syndrome.
3. Oxygen flux.
4. Postoperative delirium.
5. Acute respiratory acidosis.
6. Ventilation perfusion ratio.
7. Treatment of supraventricular tachycardia.
8. Brain death.
9. Clinical uses of evoked potential.
10. Air embolism.

[LH 144]

OCTOBER 2015

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Discuss Pathophysiological changes in a patient with end stage renal disease and implications for Anaesthesia.
2. How will you diagnose DVT? What are the methods of prophylaxis and management peri-operatively?

II. Write notes on:

(10 x 7 = 70)

1. Supraventricular tachycardias.
2. Obesity classification.
3. Causes and management of Venous Air Embolism (VAE).
4. Laryngospasm during Anaesthesia management.
5. Management of acute anaphylaxis.
6. Hepatitis and anaesthesia.
7. Management of early haemorrhagic shock.
8. Management of diabetic ketoacidosis.
9. Cushing Reflex.
10. Hypokalemia and management.

[LI 144]

APRIL 2016

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY
Q.P. Code :202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the functions of liver. Detail the liver function tests and their relevance to anaesthesia.
2. Define brain death. What are the causes of brain death? Discuss the prerequisite and diagnostic test to confirm brain death.

II. Write notes on: **(10 x 7 = 70)**

1. Anaphylactic drug reaction.
2. Infective endocarditis prophylaxis.
3. Invasive blood pressure monitoring.
4. Hyponatremia and management.
5. Duchennes muscular atrophy.
6. Ropivacaine.
7. Swan ganz catheter.
8. Allens test.
9. Cerebral autoregulation.
10. Pendelluft.

[LJ 144]

OCTOBER 2016

Sub. Code: 2039

**M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY**

Q.P. Code :202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Define the glycemic goals and steps to achieve in type II diabetes Mellitus. Discuss in detail the various Insulin preparations and the pharmacology.
2. Discuss the pathophysiology of cirrhosis of Liver, Liver function test and its significance in anaesthetic practice.

II. Write notes on: **(10 x 7 = 70)**

1. Primary survey in a polytrauma patient.
2. Neuraxial anaesthesia for a patient on Heparin.
3. Low flow anaesthesia - Merits and Demerits.
4. Baroreceptor reflex.
5. Dexmedetomidine.
6. Uterine relaxants.
7. Fresh frozen plasma.
8. Closing capacity – Clinical significance.
9. Brain protection strategies.
10. Anion gap.

[LK 144]

MAY 2017

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY
Q.P. Code :202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the causes and management of acute renal failure.
2. Discuss etiopathogenesis and treatment of young antenatal patient with Pregnancy induced hypertension. Describe HELLP syndrome.

II. Write notes on:

(10 x 7 = 70)

1. Hyperkalemia.
2. Morphine receptors.
3. Management of cerebral edema.
4. Postoperative nausea vomiting.
5. Intraoperative ventricular ectopics.
6. Goldman risk index.
7. Millrinone.
8. Massive blood transfusion.
9. Neuraxial opioids.
10. Foetal circulation.

[LL 144]

OCTOBER 2017

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code :202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Mention the endorgan damages caused by long standing hypertension.
Discuss the mechanism of action of Antihypertensive drugs.
2. Give an account of the clinical picture of Grave's disease.
Discuss the pre-operative preparation for an elective procedure?
How will you manage Thyroid storm?

II. Write notes on: **(10 x 7 = 70)**

1. Foetal circulation.
2. Fibrinolytic agents.
3. Hepato renal syndrome.
4. Vocal cord polyp – Laser ablation.
5. Bispectral index monitoring.
6. TET SPELL.
7. Neurohumoral response to pneumoperitoneum.
8. Flow volume loops in airway obstruction.
9. Obstructive sleep apnoea.
10. Hypokalemic periodic paralysis.

[LM 144]

MAY 2018

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code :202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe pathway of pain in labour. Methods of pain relief in labour? (Labour analgesia).
2. Describe the anaesthetic management and postoperative care of a patient with severe mitral stenosis for emergency appendicectomy.

II. Write notes on: **(10 x 7 = 70)**

1. Tetralogy of Fallot.
2. Metabolic Acidosis.
3. Haemophilia.
4. Treatment of Bronchial asthma.
5. Central anticholinergic syndrome.
6. Pneumothorax.
7. Bed side lung function tests.
8. Morbid obesity.
9. Autonomic neuropathy.
10. Hyponatraemia.

[LN 144]

OCTOBER 2018

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the clinical Manifestations, diagnosis and management of a patient with Acute Viral Hepatitis. Write notes on management of fulminant hepatitis.
2. Describe the anaesthetic management of a 20 year old primi of 20 weeks of pregnancy for appendisectomy?

II. Write notes on: **(10 x 7 = 70)**

1. Intra lipid infusion.
2. Myxoedema.
3. Cor pulmonale.
4. Treatment of parkinsonism.
5. Anaphylaxis.
6. Bronchiectasis.
7. Thyroid Storm.
8. Pulmonary oedema.
9. Guillain Barre syndrome.
10. Cryoprecipitate.

[LO 144]

MAY 2019

Sub. Code: 2039

**M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY**

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the pre operative evaluation and anesthetic management of a 60 year old male patient with Ischemic Heart Disease coming for emergency irreducible inguinal hernia surgery.
2. Describe the various types of shock and describe in detail Hypovolemic shock.

II. Write notes on: **(10 x 7 = 70)**

1. Post operative delirium.
2. Smoking and its anesthetic implication.
3. Atrial fibrillation.
4. Hypothyroidism.
5. Oxygen toxicity.
6. Lung compliance.
7. Anaesthetic implications of coronary stents.
8. Venous air embolism.
9. Hepatorenal syndrome.
10. Autologous blood transfusion.

[LP 144]

OCTOBER 2019

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. What are the indications of one lung ventilation? Discuss the preop preparation, anesthetic management and postoperative care of a patient posted for pneumonectomy.
2. Discuss the pathophysiology of Cirrhosis of liver. Discuss in detail liver function tests and its significance in anesthetic practice.

II. Write notes on: **(10 x 7 = 70)**

1. Low flow anesthesia.
2. Closing capacity and functional residual capacity.
3. Mendelsson syndrome.
4. Discuss Electrolyte imbalances in Chronic Kidney disease.
5. Capnography.
6. Adenosine.
7. Sick cell disease.
8. Management of pulmonary oedema in patient with mitral stenosis.
9. DIC.
10. Anaesthetic implications in a paediatric patient with upper respiratory infection.

[LQ 144]

AUGUST 2020
(MAY 2020 SESSION)

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Describe etiology, pathophysiology, clinical features and management of Bronchial asthma.
2. Discuss the anaesthetic management of 70 years old man with Diabetic keto acidosis posted for emergency below knee amputation.

II. Write notes on: (10 x 7 = 70)

1. Status Epilepticus.
2. Respiratory Acidosis.
3. Myxedema Coma.
4. Autonomic Hyperreflexia.
5. Aortic Stenosis.
6. Hyperkalemia.
7. Disseminated Intravascular Coagulation.
8. Hydropneumothorax.
9. Paroxysmal Supraventricular Tachycardia.
10. Amiodarone.

[LS 144]

NOVEMBER 2020
(OCTOBER 2020 SESSION)

Sub. Code: 2039

M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY
PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. What is Myasthenia Gravis? Discuss the clinical features, classifications, preoperative investigations, preparation, anaesthetic management of myasthenia patients posted for thymectomy?
2. Discuss the pathophysiology, signs, symptoms, diagnosis and management of venous air embolism?

II. Write notes on: (10 x 7 = 70)

1. Physiological changes during pregnancy.
2. Protamine.
3. Cryoprecipitate.
4. Artificial cardiac pacemaker.
5. Intraoperative bronchospasm.
6. Brain Protection.
7. Caudal epidural.
8. Guillain barre syndrome.
9. Tension pneumothorax and anesthetic implications.
10. Cardiovascular and respiratory system changes in geriatrics.

[MD 0721]

JULY 2021

Sub. Code: 2039

(MAY 2021 SESSION)

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss chronic obstructive pulmonary disease and its treatment modalities. Elaborate on the anaesthetic management of a 60 year old male patient with COPD posted for strangulated inguinal hernia surgery.
2. Discuss the management of a thyrotoxic patient posted for surgery.

II. Write notes on:

(10 x 7 = 70)

1. Hypokalemic periodic paralysis.
2. Positional hazards in anaesthesia
3. Diabetic autonomic neuropathy.
4. Preoperative preparation of pheochromocytoma.
5. Liver enzyme induction and its implication in anaesthesia.
6. Assessment of severity of mitral stenosis –clinical and echo-
- cardiography.
7. Metabolic changes that occur in a child with congenital pyloric
Stenosis.
8. Anaesthetic management of pseudomuscular dystrophy.
9. Complications of massive blood transfusion.
10. Malignant Hyperpyrexia.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MD 1121]

**NOVEMBER 2021
(OCTOBER 2021 SESSION)**

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. A 52 year old Male patient posted for Right Upper lobectomy , the diagnosis being Right Upper Lobe Aspergilloma. Discuss the Preoperative lung function tests and anaesthetic management.
2. Discuss the anaesthetic management of a patient with severe PIH with Eclampsia for Emergency LSCS.

II. Write notes on:

(10 x 7 = 70)

1. Temporomandibular joint Ankylosis.
2. ACE inhibitors.
3. Neuromuscular monitoring.
4. Atrial fibrillation
5. Management of Tetanus.
6. P₅₀.
7. Tocolytic agents.
8. G.A.B.A. Receptors.
9. Negative Pressure Pulmonary edema.
10. Resuscitation of Newborn.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0522]

MAY 2022

Sub. Code: 2039

**M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY**

PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe etiology, pathophysiology and clinical features of cirrhosis liver and management of hepatorenal syndrome.
2. Describe in anaesthetic management of a patient Ventricular septal defect posted for inguinal hernia repair.

II. Write notes on:

(10 x 7 = 70)

1. Hypoglycaemia.
2. Nephrotic syndrome.
3. Acute thyroid crisis.
4. Hypocalcaemia.
5. Ventricular tachycardia.
6. ACE Inhibitors.
7. Congestive cardiac failure.
8. Cerebral edema.
9. Fat embolism.
10. Pericapsular Nerve Group (PENG) Block for HIP fracture.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 1022]

OCTOBER 2022

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the anaesthetic management of 30 yrs old Primi with systemic lupus erythmatosis coming for emergency LSCS.
2. Discuss the management of patient with uncontrolled hypertension with gastric perforation posted for Emergency Laparotomy.

II. Write notes on:

(10 x 7 = 70)

1. Carbon Monoxide Poisoning.
2. Supra Ventricular Tachycardia.
3. Addison's disease – Anaesthetic importance.
4. Myasthenic syndrome.
5. Discuss the impact of Peri-operative Hypothermia
6. Acute Lung Injury.
7. Liver Function Test and it's anaesthetic implications.
8. Supine hypotension syndrome.
9. Anaesthetic management of Geriatric Patients.
10. Amniotic fluid embolism.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Pre operative Evaluation, Preparation and Anesthetic management of Hyper Thyroid Patient.
2. Anesthetic management of a Geriatric Patient for Bilateral Inguinal Hernia Surgery.

II. Write notes on:

(10 x 7 = 70)

1. Hyponatremia.
2. Hemophilia.
3. Supraglottic devices.
4. Newer Anticoagulants.
5. Complications of Spinal Anesthesia.
6. Lithotomy.
7. Magnesium Sulphate.
8. Coronary Circulation.
9. FFV1 / FVC.
10. Central Anticholinergic Syndrome.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 2039

M.D. DEGREE EXAMINATION

BRANCH X – ANAESTHESIOLOGY

PAPER II – MEDICINE APPLIED TO ANAESTHESIOLOGY

Q.P. Code: 202039

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Inherited and Acquired bleeding disorders and their evaluation. Briefly describe the Anticoagulant and Procoagulant drugs and perioperative management of Anticoagulation.
2. Systolic and Diastolic Heart failure and its Anaesthetic implications.

II. Write notes on:

(10 x 7 = 70)

1. POISE Trial 1 and 2.
2. Dementia.
3. Periodic Paralysis.
4. Renal Replacement Therapy.
5. Carcinoid tumors.
6. Mood Altering Drugs.
7. Anaesthetic interactions of common Ophthalmologic drugs.
8. Metabolic syndrome.
9. Pre-excitation syndrome.
10. Syndrome of Inappropriate Secretion of Anti Diuretic Hormone.
