Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination - 02-Jan-2025

Time: 3 Hours **Max. Marks: 100**

ANAESTHESIOLOGY
PAPER – I (RS-2/RS-3)
Q.P. CODE - 7291

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

Answer All The Questions **10 X 10 = 100 Marks**

1. Renal function tests and role of kidney in acid base balance
2. Bernoulli's principle and venturi principle and their applications in anaesthesia
3. Describe the bronchopulmonary segments with labelled diagram, add a note on postural drainage
4. Classification of opioids and mechanism of action. Describe opioid receptors
5. Describe thermoregulation and what are the effects of anaesthetic drugs on thermoregulation. A note on physical principles underlying temperature monitoring in anaesthesia practice
6. Describe the methods of assessment of airway. How will you manage the patient with an anticipated difficult airway in elective and emergency situations as per recent difficult airway society (DAS) guidelines?
7. Draw the schematic diagram of various Mapelson's breathing circuits. Give the functional analysis, advantages and disadvantages of Bain's circuit
8. Classify local anaesthetics. Discuss their mode of action. How will you manage local anaesthetic systemic toxicity (LAST)?
9. Discuss briefly about patient positioning and anesthetic considerations
10. Sir Robert Macintosh

M.D. Degree Examination - 04-Jan-2025

Time: Three Hours Max. Marks: 100

ANAESTHESIOLOGY
PAPER – II (RS-2/RS-3)
Q.P. CODE: 7292

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

Answer all the Questions **10 x 10 = 100 Marks**

1. Perioperative management of patient with uncontrolled diabetes
2. Oxygen toxicity
3. Obesity and **Pickwickian** syndrome
4. CRRT
5. Hepatorenal and hepatopulmonary syndrome
6. Rapid sequence induction
7. Management of hypertensive crisis
8. Autonomic dysfunction and tests to detect autonomic dysfunction
9. Management of atrial fibrillation
10. CVS and RS changes in Elderly

Rajiv Gandhi University of Health Sciences, Karnataka

MD Degree Examination – 06-Jan-2025

Time: Three Hours **Max. Marks: 100**

ANAESTHESIOLOGY
PAPER – III (RS-2/RS-3)
Q.P. CODE: 7293

Your answers should be specific to the questions asked
Draw neat labelled diagrams wherever necessary

Answer All The Questions **10 X 10 = 100 Marks**

1. Anaesthetic concern in thalassemia patients
2. A 3-day old baby is posted for repair of tracheo-esophageal fistula. Discuss preoperative evaluation and perioperative anaesthetic management
3. Anaesthetic management of radical prostatectomy
4. High frequency jet ventilation
5. Fondaparinux
6. Intraoperative anaesthetic considerations in adults with congenital heart disease
7. Role of anesthesiologist in management of acute burns
8. Anaesthetic management in micro laryngeal laser surgery
9. Describe the techniques employed in acute postoperative pain relief
10. Management of thyroid crisis

M.D. Degree Examination - 08-Jan-2025

Time: Three Hours Max. Marks: 100

ANAESTHESIOLOGY
PAPER – IV (RS-2/RS-3)
Q.P. CODE: 7294

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

Answer All The Questions **10 x 10 = 100 Marks**

1. Define brain death. Diagnosis and confirmation of brain death. Anaesthetic management of brain – dead patient for organ retrieval
2. Define chronic pain. Discuss the different modalities to manage cancer pain
3. A 40-year-old patient posted for Common Bile Duct (CBD) exploration with severe hyperbilirubinemia
   a. Etiology and pathogenesis of Jaundice
   b. Describe hepatorenal syndrome, diagnosis and management
4. Newer ventilatory modes for treatment of Acute Respiratory Distress Syndrome (ARDS)
5. Briefly outline the principles in management of traumatic brain injury in ICU
6. What is failed weaning from ventilator, its causes and management
7. a. Define Sepsis
   b. APACHE scoring system
8. Informed written consent
9. Uses of Ketamine in Anaesthesia and pain management
10. Role of simulators in modern day anaesthesia teaching and training

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination - 26-May-2025

[Time: 3 Hours] **[Max. Marks: 100]**

ANAESTHESIOLOGY
PAPER – I (RS-2/RS-3)
Q.P. CODE : 7291

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

Answer all the Questions **10 X 10 = 100 Marks**

1. Describe the anatomical and physiological aspects of coronary circulation.
2. Broncho pulmonary segments.
3. Venous admixture.
4. Opioid receptors.
5. Double burst stimulation and train of four.
6. Reynolds number.
7. Negative Pressure Pulmonary Edema (NPPE).
8. Archie brain.
9. Describe the functional analysis of Brain circuit.
10. Oxygen Toxicity.

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M.D. Degree Examination - 28-May-2025

Time: Three Hours Max. Marks: 100

ANAESTHESIOLOGY
PAPER – II (RS-2/RS-3)
Q.P. CODE: 7292

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

Answer all the Questions **10 x 10 = 100 Marks**

1. Clinical manifestations and treatment of anaphylaxis
2. Relevance of magnesium in anaesthesia
3. Robertshaw double lumen endotracheal tube and its indications
4. Circuit and equipment for cardio-pulmonary bypass
5. Pickwickian syndrome
6. Uterotonics
7. Intraoperative laryngospasm
8. Anaesthetic considerations in elderly patients with hip fracture
9. Pulmonary capillary wedge pressure
10. Plasmapheresis

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Rajiv Gandhi University of Health Sciences, Karnataka

MD Degree Examination – 30-May-2025

Time: Three Hours **Max. Marks: 100**

ANAESTHESIOLOGY
PAPER – III (RS-2/RS-3)
Q.P. CODE: 7293

Your answers should be specific to the questions asked
Draw neat labelled diagrams wherever necessary

Answer All The Questions **10 X 10 = 100 Marks**

1. Caudal epidural anesthesia
2. Challenges in airway management of large thyroid with retrosternal extension and difficult airway algorithm
3. Weaning criteria
4. Celiac plexus block
5. Anticoagulant management in coronary stents and anesthetic implications
6. High Flow Oxygen Therapy (HFNO)
7. Air embolism and management
8. **Bone cement and its implications**
9. Negative pressure pulmonary edema
10. 100 year old patient coming for hemiarthroplasty hip – Anesthetic challenges

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M.D. Degree Examination - 02-Jun-2025

Time: Three Hours Max. Marks: 100 Marks

ANAESTHESIOLOGY
PAPER – IV (RS-2/RS-3)
Q.P. CODE: 7294

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

Answer All The Questions **10 x 10 = 100 Marks**

1. Etiology and management of perioperative laryngospasm.
2. Transfusion Related Acute Lung Injury.
3. Trans esophageal echocardiography.
4. Non-invasive ventilation.
5. Inhaled Nitric Oxide as Pulmonary vasodilator.
6. Advanced Cardiac Life Support.
7. Catheter Associated Blood Stream Infection.
8. Etiology, diagnosis and management of supra ventricular tachycardia
9. Disseminated intravascular coagulation.
10. Percutaneous Tracheostomy.

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination - 24/Sep/2025

[Time: 3 Hours] **[Max. Marks: 100]**

ANAESTHESIOLOGY
PAPER – I (RS-2/RS-3)
Q.P. CODE : 7291

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

Answer All The Questions **10 X 10 = 100 Marks**

1. Name the broncho pulmonary segments and explain the technique of postural drainage.
2. With respect to lung volumes define residual volume, how will you measure it and, what is its significance?
3. Explain the concept of volume of distribution and its relevance.
4. Define Boyle's law and Charles's law. Application of these laws in Anesthesiology.
5. Tech-6 vaporiser.
6. Soda lime and Bara lime compare and contrast.
7. The pathophysiological changes in cardiovascular system secondary to mitral regurgitation.
8. Stellate ganglion.
9. Write about John Snow and his contribution to Anaesthesia.
10. Magnesium and Anaesthesia.

M.D. Degree Examination - 26/Sep/2025

Time: Three Hours Max. Marks: 100

ANAESTHESIOLOGY
PAPER – II (RS-2/RS-3)
Q.P. CODE: 7292

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

Answer all the Questions **10 x 10 = 100 Marks**

1. Describe the various anaesthetic problems in a cardiac patient posted for non cardiac surgeries
2. Anaesthesia consideration for posterior cranial fossa surgeries. Describe merits and demerits of sitting position craniotomy
3. Anaesthesia management of a severe PIH obstetric patient
4. Anaesthesia considerations in elderly patients for hip fracture surgeries
5. Define portal hypertension. Outline the anaesthetic management in a patient posted for portacaval shunt surgery
6. Pathophysiological changes in endstage renal disease (ESRD) and its anaesthetic implications
7. Anaesthesia management of a COPD patient posted for laparoscopic cholecystectomy
8. A sixty five years old ischemic heart disease patient with poor effort tolerance scheduled for an emergency laparotomy in view of intestinal obstruction. Discuss the perioperative anaesthetic management
9. Bone cement implantation syndrome
10. Peri bulbar and Retro bulbar block. Advantages and disadvantages of each

Rajiv Gandhi University of Health Sciences, Karnataka

MD Degree Examination – 29/Sep/2025

Time: Three Hours **Max. Marks: 100**

ANAESTHESIOLOGY
PAPER – III
Q.P. CODE: 7293

Your answers should be specific to the questions asked
Draw neat labelled diagrams wherever necessary

Answer All The Questions **10 X 10 = 100 Marks**

1. Perioperative anaesthetic management of a 20 day old neonate with congenital hypertrophic pyloric stenosis posted for pyloromyotomy
2. What are the causes of perioperative acute renal failure? Describe the anaesthetic management of a patient having bilateral renal calculi posted for nephrectomy
3. Describe the anaesthetic management of patient with cirrhosis of liver posted for emergency laparotomy. Write a brief note on hepato-renal syndrome
4. What are the coagulation disorders and anaesthesia management of sickle cell disease?
5. Discuss the anaesthetic management of a foreign body in right bronchus in a two year old child. Add a note on intraoperative bronchospasm
6. Indications for renal replacement therapy. Intraoperative anaesthesia management of renal transplantation
7. Discuss the anaesthesia management of a case of strangulated inguinal hernia in a sixty year old patient with an uncontrolled diabetes on oral hypoglycemic agents
8. Intercostal nerve block: anatomy, indications, procedure and complications
9. Anaesthetic challenges of non-operating room anaesthesia (NORA)
10. Discuss the various physiological changes in geriatric patients. Discuss the anaesthetic management of emergency laparotomy for intestinal obstruction

M.D. Degree Examination - 03/Oct/2025

Time: Three Hours Max. Marks: 100

ANAESTHESIOLOGY
PAPER – IV
Q.P. CODE: 7294

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

Answer All The Questions **10 x 10 = 100 Marks**

1. Describe various methods of management of post thoracotomy pain
2. Criteria for diagnosis of brain death
3. Immuno suppressive drugs and its anaesthetic implications
4. Point of care coagulation testing
5. Ramsay sedation score
6. Outline various measures to be taken by anesthesiologists towards infection control in clinical practice
7. Techniques of fibre-optic intubation
8. Enteral v/s parenteral nutrition in ICU
9. Physiological changes at high altitude
10. ASA task force recommendations on perioperative blindness