

**RAN-2406120101010501**
**M.D. (Anaesthesiology) Examination September - 2025**
**Paper - I**
**Time: 3 Hours ]**
**[ Total Marks: 100**
**સૂચના : / Instructions**
**(1)**

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
 Fill up strictly the details of signs on your answer book

Name of the Examination:

M.D. (Anaesthesiology)

Name of the Subject :

Paper - I

Subject Code No.: 2406120101010501

Seat No.:

     

Student's Signature

**Q-1. Write notes on: -**
**(3+4+3=10)**

- ANNOVA
- Cohort study in research.
- Student "t" test.

**Q-2. Discuss:-**
**(3+4+3=10)**

- Ropivacaine.
- Rocuronium
- Midazolam

**Q-3. Discuss how a child can't be a small adult.**
**(10)**
**Q-4. Discuss:-**
**(5+5=10)**

- Proportionating devices in anaesthesia machine for maintenance of required oxygen in gas mixture.
- Buska supra glottic airway.

**Q-5. Describe:-**
**(5+5=10)**

- Compliance of respiratory system.
- Work of breathing.

- Q-6. Discuss:- (5+5=10)**  
A. Non invasive methods of cardiac output monitoring  
B. Pulmonary artery catheter and data interpretation.
- Q-7. Discuss:- (6+4=10)**  
A. PSA oxygen plant.  
B. Rotameter
- Q-8. Short notes on: - (5+5=10)**  
A. Anaesthesia ventilators.  
B. Venous air Embolism.
- Q-9. Short note on:- (6+4=10)**  
A. Enumerate various markers of kidney function. How e-GFR is calculated;  
B. Oculo-cardiac reflex.
- Q-10. Short note on: - (5+5=10)**  
A. Phase II block and its management  
B. Capnography
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M.D. (Anaesthesiology) Examination September - 2025

Paper - II (Practice Of Anaesthesia)

Time: 3 Hours ]

[ Total Marks: 100

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M.D. (Anaesthesiology)

Name of the Subject :

Paper - II (Practice Of Anaesthesia)

Subject Code No.: 2406120101010502

Seat No.:

     

Student's Signature

- Q-1.** Describe liver function tests with interpretation to diagnose hepatobiliary disorder. How risk assessment done in patients with major hepatic disorder. Discuss anaesthetic management of patient with obstructive jaundice posted for Whipple's procedure. (3+2+5=10)
- Q-2.** Classify various hypoglycaemic agents recently being used and their anaesthetic considerations. Describe preoperative evaluation, risk stratification, optimisation and anaesthetic management of 55-year-old patient who is diabetic since last 20 years, posted for total knee arthroplasty. (10)
- Q-3.** What are post operative pulmonary complications (PPC) after prolonged general anaesthesia. Discuss preoperative optimisation and perioperative management in patient posted for lobectomy. (5+5=10)
- Q-4.** Short notes on: - (5+5=10)  
A. Hyponatremia in ICU  
B. Dynamic indices of fluid resuscitation
- Q-5.** Discuss anaesthetic management for awake craniotomy for seizure surgery. (10)

- Q-6. Discuss briefly: - (5+5=10)**
- A. Prophylaxis and management of DVT
  - B. Risk assessment in emergency/ urgent surgeries
- Q-7. Write notes on: - (5+5=10)**
- A. Anaesthetic implications in gastroenterological interventions outside operation room.
  - B. POCUS for anaesthesiologists.
- Q-8. Define “end of Life” care. What are the various components. What are the criteria of Euthanasia and DNI/ DNAR guidelines. (2+5+3=10)**
- Q-9. Write notes on:- (5+5=10)**
- A. clinical and confirmatory tests of brain death
  - B. myocardial protection during CPB.
- Q-10. Write briefly on: - (2+3+5=10)**
- A. Burnout among anaesthesiologists.
  - B. Remifentanyl in current clinical practice.
  - C. Role of Non-invasive ventilation in current clinical practice
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M.D. (Anaesthesiology) Examination September - 2025

Paper - III

Time: 3 Hours ]

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M.D. (Anaesthesiology)

Name of the Subject :

Paper - III

Subject Code No.: 2406120101010503

Seat No.:

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Student's Signature

- Q. 1. Discuss role of an anaesthesiologist in management of a patient with 60% acute burns. (10)
- Q. 2. The preoperative evaluation and anaesthetic management of a patient with toxic multinodular goiter with retrosternal extension. (4+6=10)
- Q. 3. Write notes on:- (5+5=10)
- A. Management of unanticipated difficult airway in obstetric patients.
- B. Supraclavicular brachial plexus block.
- Q. 4. Etiopathogenesis, treatment and anaesthetic management of a young female patient with myasthenia gravis posted for laparotomy (2+3+5=10)
- Q. 5. The causes, diagnosis and management of common cardiac dysrhythmias during anaesthetic practice. (10)
- Q. 6. Discuss OT preparation, anaesthetic concerns and management in OPCAB surgery. (2+4+4=10)

- Q. 7. Write notes on: -** **(3+4+3=10)**
- A. Amniotic fluid embolism.
  - B. Hepatorenal syndrome
  - C. Hepatopulmonary syndrome.
- Q. 8. Discuss briefly: -** **(5+5=10)**
- A. Anaesthetic management in Functional endoscopic sinus surgery (FESS)
  - B. Anaesthetic consideration in laser surgery for vocal nodule removal in singer.
- Q. 9. Comments on:** **(5+5=10)**
- A. Post tetanic count and its clinical applicability
  - B. Flow volume loop and its clinical applicability
- Q. 10. Comments on: -** **(2+3+2+3=10)**
- A. Walking epidural
  - B. Bailey's maneuver.
  - C. SAGO technique of intubation
  - D. Retrograde intubation.
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RAN-2406120101010504

M.D. (Anaesthesiology) Examination September - 2025

Paper - IV

Time: 3 Hours ]

[ Total Marks: 100

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M.D. (Anaesthesiology)

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Paper - IV

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- Q-1. Discuss the pharmacokinetics, pharmacodynamics and uses of Dexmedetomidine in anaesthesia and intensive care. (4+4+2=10)
- Q-2. Discuss anatomy, indication, technique and complication of coeliac plexus block. (2+2+3+3=10)
- Q-3. Discuss the anaesthetic concerns and management of ASD closure in two-year-old child in cath lab. (5+5=10)
- Q-4. Describe newer modes of ventilation, and their application in compromised lungs in ICU. (5+5=10)
- Q-5. Discuss in brief the anaesthetic considerations in- utero foetal surgery. (10)
- Q-6. Discuss briefly: - (4+3+3=10)
- Pathophysiology of pulmonary oedema.
  - Patient controlled analgesia
  - Adjuvants in spinal anaesthesia.

- Q-7.** Discuss the role of prehabilitation and multidisciplinary optimisation of geriatric surgical patients. (10)
- Q-8.** Discuss anaesthetic management of cytoreductive surgery and Hyperthermic Intraperitoneal Chemotherapy (HIPAC). (10)
- Q-9.** Discuss briefly: - (2+3+3+2=10)
- A. Cerebral blood flow monitoring
  - B. Cerebral Oxygenation Monitoring
  - C. Intracranial pressure monitoring.
  - D. Intracranial Biochemistry.
- Q-10.** Discuss Intraoperative blood conservation strategies. (10)
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