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**M.D. (Anaesthesiology) Examination January - 2026**  
**Anaesthesiology (Paper - I) (Level - I)**

Time: 3 Hours ]

[ Total Marks: 100

**સૂચના : / Instructions**

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
 Fill up strictly the above details on your answer book

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Student's Signature

- Q.1. Write short notes on: - (4+2+4=10)**
- A. Null hypothesis and alternate hypothesis.
  - B. Sample size calculation.
  - C. Blinding, Randomisation and allocation concealment.
- Q.2. Write short notes on: - (5+5=10)**
- A. Thromboelastography
  - B. Venturi principle and its clinical application.
- Q.3. Discuss: - (5+5=10)**
- A. FRC, closing volume and their importance in anaesthesia.
  - B. Factors affecting uptake and distribution of inhalational anaesthetic agents.
- Q.4. Describe: - (4+3+3=10)**
- A. Cerebral autoregulation and implication of various inhalational agents on it.
  - B. Informed consent in anaesthesia.
  - C. Key points in Crisis Resource Management in Operation Room.
- Q.5. Discuss: - (5+5=10)**
- A. Simulators in anaesthesia.
  - B. Chain of survival in adults and Paediatric patients.
- Q.6. Discuss Anatomy, physiology, regulation and transport across Blood-brain Barrier. (10)**
- Q.7. Write shortly on: - (5+5=10)**
- A. Sugammadex.
  - B. Noradrenaline
  - C. Propofol.
- Q.8. Write notes on:- (5+5=10)**
- A. TRALI
  - B. Modern Integrated Anaesthesia work station.

(5+5=10)

**Q.9. Write short notes on: -**

- A. Land marks of wrist block.
- B. Segmental spinal anaesthesia.

**Q.10. Write notes on: -**

(4+3+3=10)

- A. LMA- Supreme
- B. RAE tube.
- C. Videolaryngoscope.

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 M.D. (Anesthesiology) Examination January - 2026  
 General Medicine (Paper - II) Level - I

Time: 3 Hours ]

[ Total Marks: 100

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- (1) ઉપરોક્ત દશાવિલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
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- Q. 1.** Discuss preoperative evaluation, optimisation, intraoperative and postoperative management of potential kidney recipient in transplant surgery.  $(3+2+3+2=10)$
- Q. 2.** Define awareness during general anaesthesia. Describe risk factors, signs, various modalities to monitor depth of anaesthesia  $(1+2+2+5=10)$
- Q. 3.** Define morbid obesity. Discuss perioperative management of 32-year old male obese patient with OSA for sleeve gastrectomy.  $(2+8=10)$
- Q. 4.** Discuss challenges of non-operating room anaesthesia (NORA) in critically ill patients.  $(10)$
- Q. 5.** Describe the cardiac conduction system. Discuss the management of patient with implantable cardioverter defibrillator posted for laparotomy.  $(3+7=10)$
- Q. 6.** Define Post operative cognitive dysfunction (POCD). What are different test to evaluate POCD. Discuss in detail preventive and therapeutic measures in POCD. How to differentiate it from post operative delirium.  $(1+4+4+1=10)$
- Q. 7.** **Write notes on:**  $(5+5=10)$   
 A. Post cardiac resuscitation care.  
 B. Overpressure induction and its clinical application.
- Q. 8.** **Discuss briefly:**  $(5=5=10)$   
 A. ASRA guidelines for neuraxial blocks for patients on anticoagulants.  
 B. Enumerate various regional blocks for pain relief in abdominal surgeries, explain in detail any one of them.
- Q. 9.** **Write notes on:**  $(5+5=10)$   
 A. Anaesthesia considerations in robotic surgeries.  
 B. Anaesthesia management in patients of severe PPH.
- Q. 10.** **Write briefly:**  $(5+5=10)$   
 A. ERAS protocol  
 B. Discharge criteria from PACU.

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**M.D. (Anaesthesiology) Examination January - 2026**  
**Anaesthesiology (Paper - III) (Level - I)**

Time: 3 Hours ]

[ Total Marks: 100

**સૂચના : / Instructions**

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
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Student's Signature

1. Discuss anaesthetic management of parturient with severe PIH with HELLP syndrome. (10)
2. Perioperative management of 2 days old baby for Tracheoesophageal fistula repair surgery. (10)
3. **Write notes on :-** (5+5=10)
  - A. CPCR in pregnant patient.
  - B. Neonatal resuscitation.
4. **Discuss briefly: -** (5+5=10)
  - A. Anaesthetic Concerns in consumers of cannabis and other psychotropic agents.
  - B. Anaesthetic considerations for endovascular coiling of cerebral aneurysms.
5. **Write briefly: -** (5+5=10)
  - A. Anaesthesia concerns related to electroconvulsive therapy.
  - B. Potential nerve injuries during anaesthesia and surgical positioning
6. Discuss anaesthetic implications for laparoscopic Hysterectomy surgery. (10)
7. Discuss Pathophysiology, Clinical features, Diagnosis and management of Negative Pressure Pulmonary Oedema. (2+3+2+3=10)
8. **Write short notes on:** (3+3+4=10)
  - A. PENG block
  - B. TAP block
  - C. Scalp block
9. Discuss preoperative assessment, optimization, perioperative management of patient of Pheochromocytoma. (3+3+4=10)
10. Discuss perioperative concerns and anaesthetic management in spine surgeries. What are the anticipated complications and their prevention. (5+5=10)



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M.D. (Anesthesiology) Examination January - 2026

(Intensive care, Pain medicine and Recent Advances) (Paper - IV) Level - I

Time: 3 Hours ]

[ Total Marks: 100

## સૂચના : / Instructions

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- Q. 1.** Discuss in brief the benefits and implications of high flow nasal oxygen therapy in anaesthesia and critical care set up. (10)
- Q. 2.** Discuss the anaesthetic considerations for caesarean section in a super obese parturient. (10)
- Q. 3.** Discuss the role of trans oesophageal echocardiography (TEE) in anaesthesia and intensive care. (10)
- Q. 4.** **Discuss briefly:** (5+5=10)
  - A. Recent trends in vasodilatory shock.
  - B. Surviving sepsis guidelines.
- Q. 5.** **Discuss briefly:** (2+4+4=10)
  - A. Transdermal Drug administration.
  - B. Universal precautions in HIV patients Handling.
  - C. Novo Insulin preparations.
- Q. 6.** Discuss the importance of lung ultrasound in anaesthesia and intensive care. (10)
- Q. 7.** Discuss multi modal analgesia for major abdominal and thoracic surgeries along with newer regional blocks. (10)
- Q. 8.** **Short notes on :** (3+2+5=10)
  - A. Smart phone in anaesthesia practice.
  - B. A.I. in anaesthesia.
  - C. USG for airway assessment.
- Q. 9.** **Give a brief account of:** (5+5=10)
  - A. Simulators in anaesthesia training.
  - B. Methylene blue in Anaesthesia and Intensive care.
- Q. 10.** **Discuss:** (5+5=10)
  - A. Role of magnesium sulphate in anaesthesia practice.
  - B. Indices to recognise Frailty And its clinical implication..