

QP Code: 101101

Reg. No.:.....

**PG Degree Supplementary Examinations in Anaesthesiology (M.D)  
July 2025**

**Paper I – History, Basic Sciences & Equipments**

**Time: 3 hrs**

**Max marks:100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay: (20)**

1. Describe the anatomy of coronary circulation. How is coronary circulation regulated. Enumerate the major determinants of the myocardial oxygen consumption. (5+5+10)

**Short essays: (8x10=80)**

2. Discuss the clinical uses of Alpha-2 agonists in anaesthesia.
3. Draw oxygen haemoglobin dissociation curve and enumerate the factors producing leftward and rightward shift of the curve.
4. Define Minimum Alveolar Concentration (MAC). What are the factors affecting MAC. What is its significance in anaesthesia.
5. Describe the functional analysis of Bain's circuit. How will you check the functional integrity of Bain's circuit.
6. Discuss the interactions of pre-existing drug therapy with anaesthetic agents.
7. Contributions to Anaesthesia by
  - a) Sir Ivan Magill
  - b) Geudel (5+5)
8. Describe Venturi Principle. Discuss its application in anaesthesia practice. (2+8)
9. Describe nerve supply of Larynx. Discuss in brief various vocal cord palsies post thyroidectomy. (4+6)

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