RAN-2406120101010501

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M. D. (Anaesthesiology) Examination April - 2025

Anaesthesiology Paper - 1

(Basic Science Applied to Anaesthesiology)

Time: 3 Hours] **[Total Marks: 100**

સૂચના : / Instructions

(૧) **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 :

☛ **Anaesthesiology Paper - 1 (Basic Science Applied to Anaesthesiology)**

Subject Code No.: **2406120101010501**

Seat No.:

Student's Signature

Q.1 Discuss in brief:

(1) Write briefly with the help of diagrams about the flow volume loop in lung spirometry and discuss their interpretation **10**

(2) Describe the Mapleson classification of breathing circuits. Write functional analysis of the Bains circuit **10**

Q.2 Write briefly on:

(1) Discuss physiology of thermoregulation and causes of dysregulation of thermoregulation during anaesthesia. **10**

(2) Describe Oxygen Hemoglobin Dissociation Curve and enumerate the factors producing leftward and rightward shift of curve **10**

Q.3 **Write notes on:**

(1) Discuss Metabolic equivalents of task (METs) and its relevance in anaesthesia **10**

(2) Describe anatomy of celiac plexus. Write indications &complications of celiac plexus block. **10**

Q.4. **Write about following:**

(1) Describe the aetiology and management of perioperative hyperkalemia **10**

(2) Describe the pathophysiology of stress response during intubation and methods for prevention **10**

Q.5 **Write short notes on:** **20**

(1) Thromboelastography

(2) Alpha 2 agonists in neuraxial blockade

(3) Endtidal CO2 monitoring

(4) John Snow