

QP Code:101176

Reg. No.:.....

**P.G. Diploma Regular/Supplementary Examinations in Anaesthesiology
(DA) May 2022**

Paper I - Basic Sciences as Applied to Anaesthesiology

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. Draw a normal capnogram and explain its components. What is the principle of capnography. Explain the advantages and disadvantages of mainstream and side stream capnography

Short essays: (8x10=80)

2. Define Minimum Alveolar Concentration (MAC) of volatile anaesthetic agents; enumerate physiological and pharmacological factors affecting MAC.
3. Describe thyroid function tests with its anaesthetic implication.
4. Historical aspects of evolution of Boyles machine.
5. Enumerate bedside pulmonary function tests. Explain their clinical significance. What is the effect of smoking on respiratory physiology. (2+3+5)
6. Describe the physiology of neuromuscular junction and classify the neuromuscular blocking agents.
7. Protamine sulphate pharmacology and its anaesthetic implication.
8. Define venturi principle and Discuss the various application in anaesthesia.
9. Classify antihypertensives. How do you manage perioperative hypertensive crisis.
