FINAL EXAM NATIONAL BOARD OF EXAMINATIONS
DECEMBER 2020

NEURO ANAESTHESIA

PAPER-I

Time: 3 hours N.ANS/D/20/94/I
Max. Marks:100

Important Instructions:

- ***You are provided with 5 answer sheet booklets. Each individual answer sheet booklet consists of 10 pages excluding the covering jackets.***
- ***Answers to all the questions must be attempted within these 5 answer sheet booklets which must be later tagged together at the end of the exam.***
- ***No additional supplementary answer sheet booklet will be provided.***
- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

1.	Outline the indications for central venous cannulation in neurosurgical patients. Briefly mention the two common techniques and their complications.	5+5
2.	Role of dexmedetomidine in neuroanaesthesia practice.	10
3.	Discuss the cerebrospinal fluid dynamics. Briefly mention the effect of commonly used anaesthetic drugs on CSF.	8+2
4.	Discuss the concept of cerebral autoregulation and carbon dioxide reactivity. Describe the intracranial pressure-volume relationship.	7+3
5.	What is the rationale of hyperosmolar therapy in neuroanaesthesia? Compare Mannitol versus Hypertonic saline.	4+6
6.	Elucidate the pharmacological effects of inhaled anaesthetics on cerebral blood flow, metabolism and autoregulation.	4+3+3
7.	Describe the mechanism of injury following cerebral ischemia. Briefly outline the strategies for cerebral protection.	7+3
8.	Enumerate the physiological changes in a pregnant patient and their clinical significance in a patient undergoing neurosurgical procedure.	7+3
9.	Enumerate the various invasive techniques to measure intracranial pressure.	10
10.	Discuss the principle and applications of cerebral oximetry/near-infrared spectroscopy (NIRS). Mention the limitations of NIRS.	(3+4)+3

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