

**KALOJI NARAYANA RAO UNIVERSITY OF HEALTH SCIENCES  
WARANGAL, TELANGANA STATE – 506 002**

**POST DOCTORAL FELLOWSHIP EXAMINATIONS: DECEMBER, 2024**

**PEDIATRIC ANAESTHESIA  
PAPER–II**

**Time: 3 Hours.**

**Max Marks: 100**

**Note:** Answer all questions with neat diagrams whenever necessary  
All question carry equal marks.

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**Write an essay on the following:**

**10 X 10 = 100**

1. What are the functions of HME filter? How does it affect ventilatory management in paediatric anaesthesia?
2. Discuss the anaesthetic concerns and management of a 3-year-old girl coming for laparoscopic hernia repair.
3. What are the interactions between volatile anaesthetic agents and carbon-dioxide absorbent? What are the anaesthetic implications?
4. What is the purpose of pre-oxygenation in rapid sequence induction? How does Para oxygenation affect the conduct of anaesthesia?
5. What is the most likely cause of projectile vomiting after feeding in a 3-week baby? Discuss the possible diagnosis, assessment and pre-anaesthetic optimisation of this baby. What metabolic derangements are likely and what fluid should be used for correction?
6. What are the maximum allowable doses of between Ropivacaine and Bupivacaine? What is the difference between their effects? Discuss how local anaesthesia toxicity may present in 4-yearold child being given a caudal injection under general anaesthesia with an LMA.
7. Discuss the recent advances in management of the difficult paediatric airway.
8. What are the adverse effects of remifentanil? Discuss the use of remifentanil in paediatric anaesthesia.
9. Enumerate the components VATER (or VACTERL) syndrome and discuss the anaesthetic concerns in surgery for trachea-oesophageal fistula.
10. What are the different modes of stimulation for monitoring the effect of neuromuscular blockers Compare the effects of neostigmine and sugammadex.