

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

POST DOCTORAL FELLOWSHIP EXAMINATIONS: DECEMBER, 2024

**PEDIATRIC ANESTHESIA
PAPER–I**

Time: 3 Hours.

Max Marks: 100

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

Write an essay on the following:

10 X 10 = 100

1. How is cardiac output different between an infant and an adult, and what are the anaesthetic implications of these differences.
2. How are the physical characteristics of a child's airway different from an adult's.
3. What are the different stages of sedation. What are the minimum mandatory monitoring standards during sedation.
4. A 4-year-old (20kg) is admitted with acute appendicitis and is scheduled for urgent surgery. She has been vomiting for 2 days, is pyrexial, has a tachycardia of 170 bpm and prolonged capillary refill. Describe the perioperative fluid management of this case using intravenous crystalloids. What are the complications that can occur with inappropriate choice of IV fluid.
5. What is the significance of a past history of a viral upper respiratory infection within the past 2-4 weeks. Would you cancel an elective case if a child had a history of infection 1 week ago, but seems fine now. Is there a difference in these children between LIMA placement and intubation.
6. What is Pierre Robin Syndrome. Describe the anaesthetic management of a child with Pierre Robin Syndrome coming for cleft palate repair.
7. What are the preoperative fasting guidelines for anaesthesia and surgery. Discuss management of a child with inadequate fasting. How does POCUS help in decision making.
8. Define high quality CPR. Discuss the algorithm for paediatric cardiopulmonary resuscitation. Describe the management of ventricular fibrillation after a caudal block under anaesthesia in a 4-year-old boy.
9. How are the oxygen-haemoglobin curve and oxygen affinity affected by foetal haemoglobin. What are the anaesthetic implications.
10. Briefly describe the pathophysiology of Tetralogy of Fallot. Discuss the anaesthetic management of a 5-year-old boy with TOF for craniotomy for a brain abscess.
