

**PAEDIATRIC SURGERY (DIRECT 6 YEARS COURSE) -I****PAPER-II**Time: 3 hours  
Max. Marks:100

PED SURG 1/D/19/30/II

**Important Instructions:**

- 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. a) Describe various stages in the development of the lung. 4+3+3  
b) What is the current role of surfactant?  
c) How are ventilatory parameters adjusted based on arterial blood gas readings?
2. a) What is the energy and protein requirement in a neonate? 2+6+2  
b) Discuss the metabolic changes in a stressed surgical neonate.  
c) What are the recent advances in lipid replacement?
3. a) What are the current nil per oral instruction guidelines for preoperative patients? 2+3+5  
b) What are the side effects of anesthesia in preterm newborns?  
c) Discuss various pain relief techniques currently in use for children after major surgery.
4. a) What is oxygenation index? 2+3+5  
b) Draw a diagram of ECMO circuit.  
c) What are the possible complications with the use of ECMO?
5. a) What is tidal volume? 2+2+2+4  
b) How are initial ventilator parameters set?  
c) What is the role of PEEP? Discuss the principles of weaning from ventilator support.
6. Discuss incidence, risk factors and management of nosocomial infections. 2+3+5
7. a) Discuss radiographic changes after an inhaled foreign body. 3+3+4  
b) What factors make young children more prone to aspiration?  
c) Discuss causes of unsuccessful endoscopic airway foreign body removal and its management.

P.T.O.

**PAEDIATRIC SURGERY (DIRECT 6 YEARS COURSE) PART- I**

**PAPER-II**

8. a) Describe the anatomy of splenic artery with diagram(s). 2+2+2+4  
b) Discuss briefly the role of partial splenectomy.  
c) Enumerate the sites of accessory spleen and its importance.  
d) Factors influencing post splenectomy sepsis.
9. a) Describe the differences in embryology and presentation of 5+5  
gastroschisis and exomphalos major.  
b) Describe the principles of surgical management of both these conditions.
10. a) Discuss the pathophysiology of antenatal hydronephrosis. 5+5  
b) Describe pre-operative investigations in pelvi-ureteric junction obstruction and their interpretation.

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