

पाटन स्वास्थ्य विज्ञान प्रतिष्ठान सेवाआयोग  
प्राज्ञिक सेवा, शल्यचिकित्सा समूह, **Paediatric Surgery** उपसमूह, सहायक प्राध्यापक पद, नवौं (९ ख)  
तहको खुला र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

## **Paper II: Technical Subject**

### **Section (A) - 45 Marks**

#### **Expected competencies**

1. Awareness of the extent of Paediatric surgical practice and technical skills.
2. Ability to diagnose and manage common and complex Paediatric surgical problems.
3. Careful, accurate and speedy decision making in sick children with surgical problems.
4. Recognition of the unique peri-operative physiological processes in children.
5. Awareness about the key aspects of preparation of a child for surgery.
6. Familiarity with the postoperative care in children.
7. Ability to interpret common lab & imaging investigations in children.
8. Ability to manage paediatric surgical emergencies.

#### **Areas of Specific knowledge and skills**

1. Communication skills with parents and children (obtaining focused history from parents and children)
  2. Awareness about the impact of chronic disease on children and their families.
  3. Awareness about the important ethical, moral and social issues of Paediatric Surgical practice.
  4. Skill in teamwork and interaction with other disciplines.
1. **Basic sciences and principles of Pediatric Surgery**
    - 1.1 Knowledge of embryology, applied anatomy, physiology, biochemistry relevant to pediatric surgery
    - 1.2 Physiology of fluid and electrolytes, temperature regulation, metabolism, nutrition, growth and development
    - 1.3 Normal developmental milestones in children
    - 1.4 Gross developmental deformities in pediatric age group
  2. **Trauma**
    - 2.1 Blunt Abdominal Trauma.
    - 2.2 Burns
    - 2.3 Child abuse
  3. **General**
    - 3.1 Perioperative fluid management
    - 3.2 Thermoregulation in a Neonate
    - 3.3 Transport of a Surgical neonate

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4. **Recent Advances**

4.1 Should be able to discuss recent advances in the field of pediatric surgery

**Section (B) - 55 Marks**

5. **Clinical Surgery**

5.1 **Head & Neck**

- 5.1.1 Cystic Hygroma
- 5.1.2 Torticollis - Sternocleidomastoid Tumor
- 5.1.3 Branchial Cyst & Fistula
- 5.1.4 Thyroglossal Cyst & fistula
- 5.1.5 Cervical Adenitis
- 5.1.6 Cystic Lesions in floor of the mouth (Ranula, Sublingual Dermoid)
- 5.1.7 Pierre- Robin Association
- 5.1.8 Vascular Malformations and Tumors

5.2 **Thorax**

- 5.2.1 Acute Respiratory Distress
- 5.2.2 Pleural Collections (Pneumothorax, Pleural effusion, Chylo thorax, Empyema)
- 5.2.3 Congenital Lobar Emphysema
- 5.2.4 Congenital Cystic Adenomatoid Malformation
- 5.2.5 Lung Abscess
- 5.2.6 Esophageal Atresia
- 5.2.7 Congenital Diaphragmatic Hernia
- 5.2.8 Mediastinal Masses
- 5.2.9 Thoracic Duplication Cysts
- 5.2.10 Achalasia Cardia
- 5.2.11 Gastro- esophageal reflux

5.3 **Abdominal**

- 5.3.1 Cong. Pyloric Stenosis
- 5.3.2 Gastric Volvulus
- 5.3.3 Duodenal Obstructions
- 5.3.4 Malrotation of Gut
- 5.3.5 Intestinal Atresia
- 5.3.6 Intussusception
- 5.3.7 Meckels Diverticulum / Omphalo mesenteric duct lesions.
- 5.3.8 Duplication Cysts of Bowel
- 5.3.9 Necrotizing Enterocolitis
- 5.3.10 Hirschsprungs Disease
- 5.3.11 Ano- rectal Anomalies
- 5.3.12 GIT Bleeding.
- 5.3.13 Neonatal Intestinal Obstruction
- 5.3.14 Approach to abdominal masses
- 5.3.15 Appendicitis
- 5.3.16 Approach to Acute Abdominal Pain
- 5.3.17 Abdominal wall defects – Gastroschisis, Omphacocele

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5.3.18 Trichobezoar

5.4 **Hepato- Biliary**

- 5.4.1 Biliary Atresia
- 5.4.2 Choledochal Cyst
- 5.4.3 Hydatid Cyst
- 5.4.4 Portal Hypertension
- 5.4.5 Liver Trauma
- 5.4.6 Liver Tumors

5.5 **Genito- Urinary**

- 5.5.1 Hydrocele & Hernia / Umbilical Hernia
- 5.5.2 Undescended Testis
- 5.5.3 Hypospadias
- 5.5.4 Urinary tract infections in Children - Evaluation
- 5.5.5 Inter Sex
- 5.5.6 Hydronephrosis
- 5.5.7 Megaureters
- 5.5.8 Vu Reflux
- 5.5.9 Posterior Urethral Valves
- 5.5.10 Torsion Testis (Acute Scrotum & groin swellings).
- 5.5.11 Extrophy Epispadias Complex
- 5.5.12 Genito- urinary Trauma

5.6 **Neuro – Surgery**

- 5.6.1 Myelo-Meningocele
- 5.6.2 Encephalocele
- 5.6.3 Hydrocephalus

5.7 **Tumors**

- 5.7.1 Wilms Tumor
- 5.7.2 Neuroblastoma
- 5.7.3 Lymphomas
- 5.7.4 Soft Tissue Sarcoma
- 5.7.5 Hepatic Tumors
- 5.7.6 Testicular Tumors
- 5.7.7 Ovarian Tumors