

## SAUDI BOARD RESIDENCY TRAINING PROGRAM

### PAEDIATRIC SURGERY

#### Promotion Examination

##### Written Examination Format:

- A written examination shall consist of one paper with not less than 100 MCQs with a single best answer (one correct answer out of four options).
- The examination shall contain type K2 questions (interpretation, analysis, reasoning and decision making) and type K1 questions (recall and comprehension).
- The examination shall include basic concepts and clinical topics relevant to the specialty.
- Clinical presentation questions include history, clinical finding and patient approach. Diagnosis and investigation questions; include the possible diagnosis and diagnostic methods. Management questions; including treatment and clinical management, either therapeutic or non-therapeutic, and complications of management. Materials and Instruments questions; including material properties, usage, and selection of instruments and equipment used. Health maintenance questions; include health promotion, disease prevention, risk factors assessment, and prognosis.

##### Passing Score for Promotion Exam:

The trainee's performance is assessed in each of the evaluation formulas according to the following scoring system:

Score	Less than 50%	50% – 59.4%	60% - 69.4%	More than 70%
Description	Clear Fail	Borderline Fail	Borderline Pass	Clear Pass

1. To upgrade the trainee from a training level to the next level, She/he must obtain at least a **Borderline Pass** in each evaluation form.
2. The program director may recommend to the local supervision committee to request the promotion of the trainee who did not meet the previous promotion requirement according to the following:
  - A. In case that the trainee gets a **borderline Fail** result in **one** of the evaluation forms, the remaining evaluation forms must be passed with **Clear Pass** in at least **one** of them.

- B. In case that the trainee gets a **borderline Fail** result in **two** of the evaluation forms to a maximum, provided they do not fall under the same theme (Knowledge, Attitude, Skills). The remaining evaluation forms must be passed with **Clear Pass** in at least **two** of them.
- C. The promotion must be approved in this case by the scientific council for the specialization.

### Blueprint Outlines

No.	<u>R1</u> Section	Proportion%
1	General	4
2	Basic <sup>1</sup>	9
3	Trauma <sup>2</sup>	9
4	Oncology <sup>3</sup>	9
5	Head and Neck <sup>4</sup>	6
6	Thorax <sup>5</sup>	12
7	Abdomen <sup>6</sup>	11
8	Genitourinary disorders <sup>7</sup>	9
9	Special Areas of Pediatric Surgery <sup>8</sup>	4
10	Gastrointestinal tract/hepatobiliary <sup>9</sup>	14
11	Neonatal <sup>10</sup>	13
<b>Total</b>		<b>100%</b>

#### Note:

- Blueprint distributions of the examination may differ up to +/-3% in each category.
- Percentages and content are subject to change at any time. See the SCFHS website for the most up-to-date information.

<sup>1</sup>**Basic:** Includes A Brief History of Pediatric Surgery, Molecular Clinical Genetics, Gene Therapy, The Impact of Tissue Engineering in Pediatric Surgery, Advanced and Emerging Technologies in Surgical Technologies and the Process of Innovation, The Fetus as a Patient, Neonatal Physiology and Metabolic Considerations, Respiratory Physiology and Care, Extracorporeal Life Support and Cardiopulmonary Failure In Children, Neonatal Cardiovascular Physiology and Care, Sepsis and Related Conditions, Surgical Implications of Hematologic Disorders, IVF, TPN, Acid Base, Nutrition Support

in the Pediatric Surgical Patient, Pediatric Anesthesia and Ethical Considerations in Pediatric Surgery

**<sup>2</sup>Trauma:** Includes Infants and Children as Accident Victims and Their Emergency Management, Thoracic Injuries, Abdominal Trauma, Genitourinary Trauma, Musculoskeletal Trauma, Hand, Soft Tissue and Envenomation Injuries, Central Nervous System Injuries, Vascular Injury, Treatment of Burns and Child Abuse and Birth Injuries

**<sup>3</sup>Oncology:** Includes Principles of Pediatric Oncology/Genetics of Cancer and Radiation Therapy, Biopsy Techniques for Childhood Cancer, Wilms' Tumor, Neuroblastoma, Non-malignant Tumors of the Liver, Liver Tumors, Gastrointestinal Tumors, Rhabdomyosarcoma, Other Soft Tissue Tumors in Children, Teratomas and Other Germ Cell Tumors, Non Hodgkin's Lymphoma and Hodgkin's Disease, Ovarian Tumors, Testicular Tumors, Adrenal Tumors, Tumors of the Lung, Bone Tumors and Pediatric Brain Tumors

**<sup>4</sup>Head and Neck(general):** Includes Craniofacial Abnormalities, Cleft Lip and Palate, Otolaryngologic Disorders, Salivary Glands, Lymph Node Disorders, Surgical Diseases of the Thyroid and Parathyroid Glands, Cysts and Sinuses of the Neck and Torticollis

**<sup>5</sup>Thorax:** Includes Breast Lesions in Children and Adolescents, Congenital Chest Wall Deformities, Congenital Diaphragmatic Hernia and Eventration, Cysts of the Lungs and Mediastinum, Laryngoscopy, Bronchoscopy and Thoracoscopy, Lesions of the Larynx, Trachea and Upper Airway, Infections and Diseases of the Lungs, Pleura and Mediastinum, Esophagoscopy and Diagnostic Techniques, Esophageal Rupture and Perforation, Congenital Anomalies of the Esophagus, Caustic Stricture of the Esophagus, Esophageal Replacement, Disorders of Esophageal Function and Gastroesophageal Reflux Disease

**<sup>6</sup>Abdomen (general):** Includes Disorders of the Umbilicus, Congenital Defects of the Abdominal Wall, Inguinal Hernia and Hydroceles and Undescended Testis, Torsion and Varicocele

**<sup>7</sup>Genitourinary disorders:** Includes Renal Agenesis, Dysplasia, and Cystic Disease, Renal Fusions and Ectopia, Ureteropelvic Junction Obstruction, Renal Infection, Abscess, Vesicoureteral Reflux, Urinary Lithiasis and Renal Vein Thrombosis, Ureteral Duplication and Ureterocele, Megaureter and Prune-Belly Syndrome, Diversion and Undiversion, Disorders of Bladder Function, Structural Disorders of the Bladder, Augmentation, Bladder Exstrophy, Hypospadias, Abnormalities of the Urethra, Penis, and Scrotum, Ambiguous Genitalia and Abnormalities of the Female Genital Tract

**<sup>8</sup>Special Areas of Pediatric Surgery (general):** Includes Congenital Heart Disease and Anomalies of the Great Vessels, Management of Neural tube defects, Hydrocephalus, Refractory Epilepsy and Central Nervous System, Major Congenital Orthopedic Deformities, Bone and Joint Infections,



Amputations in Childhood, Congenital Defects of the Skin, Connective Tissues, Muscles, Tendons and Hands, Conjoined Twins, Vascular Anomalies: Hemangiomas and Malformations, Arterial Disorders, Venous Disorders in Childhood and Lymphatic Disorders

**<sup>9</sup>Gastrointestinal tract/ hepatobiliary:** Includes Peptic Ulcer and Other Conditions of the Stomach, Bariatric Surgery in Adolescents, Duodenal Atresia and Stenosis – Annular Pancreas, Jejunoileal Atresia and Stenosis, Meconium Ileus, Meckel’s Diverticulum, Intussusception, Disorders of Intestinal Rotation and Fixation, Other Causes of Intestinal Obstruction, Short Bowel Syndrome, Gastrointestinal Bleeding, Alimentary Tract Duplications, Mesenteric and Omental Cysts, Ascites, Gastrointestinal Tract Polyps, Necrotizing Enterocolitis, Crohn’s Disease, Ulcerative Colitis, Primary Peritonitis, Stomas of the Small and Large Bowel, Atresia, Stenosis and Other Obstructions of the Colon, Appendicitis, Hirschsprung Disease and Related Neuro-muscular Disorders of the Intestine, Hypertrophic Pyloric Stenosis, Intestinal Neuronal Dysplasia, Anorectal Malformations, Other Disorders of the Anus and Rectum, Anorectal Function, The Jaundiced Infant: Biliary Atresia, Choledochal Cyst, Gallbladder Disease and Hepatic Infections, Portal Hypertension, The Pancreas and Spleen

**<sup>10</sup>Neonatal:** Includes Congenital malformations, lymphangioma/ Hemangiomas, cleft lip and palate, esophageal atresia and tracheoesophageal fistula, intestinal atresia, necrotizing enterocolitis, meconium plugs, Hirschsprung's disease, Anorectal malformation, undescended testes, other abdominal/chest wall defects, omphalocele, gastroschisis, neonatal hernias, Neonatal Jaundice, Neonatal hypoglycemia, Cong. Diaphragmatic hernias, Conjoint twins, Neonatal infections, Cong. lobar Emphysema, Congenital cystic lung disease, Hydrops, Sacrococcygeal teratoma and Principals of antenatal diagnosis and fetal surgery

#### **Suggested References:**

- Pediatric Surgery, 7<sup>th</sup> Edition - edited by Arnold G. Coran, Anthony Caldamone, N. Scott Adzick, Thomas M. Krummel, Jean-Martin Laberge, and Robert Shamberger
- Ashcraft's Pediatric Surgery – 6<sup>th</sup> edition, George W. Holcomb III, J. Patrick Murphy
- Principles of Pediatric Surgery- 2<sup>nd</sup> edition- James O'Neill, Jay Grosfeld, Eric Fonkalsrud
- Current Practice in Pediatric Surgery (Surgical Clinics of North America) - Mike K. Chen, Catherine Bewick, Ronald F. Martin

### Crash Courses:

- Outline of each course including suggested reading references given by the provider.

### **Note:**

This list is intended for use as a study aid only. SCFHS does not intend the list to imply endorsement of these specific references, nor are the exam questions necessarily taken solely from these sources.

### Example Questions

#### EXAMPLE OF K1 QUESTIONS

##### Question 1

Which of the following conditions is associated with metabolic acidosis and an increased anion gap?

- A. Small bowel fistula
- B. Secretory diarrhea
- C. Ureterosigmoidostomy
- D. Glycogen storage disease, type I

#### EXAMPLE OF K2 QUESTIONS

##### Question 1

A 14-year-old adolescent boy presented to the Emergency Department with a history of frequent episodes of vomiting fresh blood. Upper gastrointestinal endoscopy showed an actively bleeding ulcer in the posterior wall of the first part of the duodenum which was controlled by a heat probe.

Which of the following arteries is the most likely source?

- A. Splenic
- B. Gastroduodenal
- C. Right gastroepiploic
- D. Superior mesenteric