

PEDIATRIC SURGERY (FINAL / PART 2)

PAPER-I

Time : 3 hours

PED SURG-2/D/11/29/I

Max. Marks : 100

Attempt all questions in order.

Each question carries 10 marks.

1. How will you define 'hyponatremia' and 'hypernatremia' in a surgical neonate? What are the important causes of deranged serum sodium concentrations in different hydration states – hypovolumic, euvolumic and hypervolumic. What is the significance of measuring urinary sodium? 2+2+2+2+2
2. Briefly mention the principles behind newer imaging techniques of functional MRI and Positron Emission Tomography (PET). Briefly mention clinical uses of these two technologies in Paediatric Surgery. 2.5+2.5+2.5+2.5
3. Enumerate the macronutrients and micro nutrients available in parenteral nutrition formulas. Briefly mention the volume, concentration, caloric value etc. of each macronutrient. Briefly mention major complications of total parenteral nutrition (TPN) 2+3+5
4. Briefly mention the different modes used in mechanical ventilation. Enumerate the complications of mechanical ventilation. 5+5
5. Draw schematic representation of coagulation cascade. Enumerate the blood tests used to detect bleeding disorders stating parameters used by each test. 5+5
6. Briefly mention the limitations of standard minimal access surgery techniques and technology that have paved path for introduction of robotic technology. What are the different types of robotic surgical systems that are presently available? Discuss briefly their advantages, limitations and applications in Paediatric Surgery. 2+3+5
7. Briefly mention the antenatal diagnosis and fetal management of myelomeningocele. Mention the rationale behind the clinical trial – the Management of Myelomeningocele Study (MOMS) and enumerate its primary objectives. 2+3+2+3

P.T.O

8. Enumerate the different energy sources used for open and minimally invasive surgery. Mention their mechanism of action, advantages and disadvantages. 2.5+2.5+2.5+2.5
9. Enumerate the fetal conditions in which maternal serum and amniotic fluid alfa fetoprotein levels are raised. At what gestation the fetal AFP levels reach their peak? What other bio-chemical markers are useful for fetal screening? 4+2+4
10. Enumerate modern immunosuppressants used in liver transplantation. Mention their action, principal use and common toxicities. 2.5+2.5+2.5+2.5

PEDIATRIC SURGERY (FINAL / PART 2)

PAPER- II

Time : 3 hours

PED SURG-2/D/11/29/II

Max. Marks : 100

Attempt all questions in order.

Each question carries 10 marks.

1. Draw schematic representations of 3 commonly performed surgical procedures for Hirschsprungs disease. How do you diagnose total colonic aganglionosis? List the various operative procedures for total colonic aganglionosis. 3+2+5
2. Briefly describe the various prognostic indices for Congenital Diaphragmatic Hernia (CDH). Briefly mention the paradigm shift that has taken place in the management of CDH. Briefly mention the various pharmacological agents used in CDH associated pulmonary hypertension. 4+3+3
3. What are the indications of liver transplantation in children? Briefly describe PELD score. Enumerate the post transplantation complications. 3+4+3
4. Define MKI in context of neuroblastoma. Give details of modified Shimada pathologic classification of neuroblastoma. Briefly describe risk based management of neuroblastoma. 2+4+4
5. Discuss the predisposing factors, clinical feature and management of liver abscesses in children. 2+3+5
6. Describe the diagnosis medical and surgical management of neonatal hyperinsulinemic hypoglycemia of infancy. 4+3+3
7. Discuss the classification, diagnosis and surgical management of choledochal cyst mentioning the pros and cons of different operative modalities. 2+2+6
8. Describe the different congenital anomalies involving the umbilicus with their embryological explanation with the help of schematic diagrams. 4+6
9. Enumerate the antenatal sonographic features suggestive of uretero-pelvic junction obstruction. Cite Society of Fetal Urology grading of hydronephrosis. Briefly mention the management algorithm for antenatally detected hydronephrosis. 2+2+6

P.T.O

FINAL EXAM
DECEMBER 2011

NATIONAL BOARD OF EXAMINATIONS

10. Define overactive bladder syndrome. Briefly mention the non-pharmacologic management of the syndrome, citing doses, common side effects and formulations available. 2+3+5

PEDIATRIC SURGERY (FINAL / PART 2)

PAPER- III

Time : 3 hours
Max. Marks : 100

PED SURG-2/D/11/29/III

Attempt all questions in order.
Each question carries 10 marks.

1. Briefly describe development of cleft lip and cleft palate. What do you understand by the cleft 'team' approach and what do these individual team members contribute to the management of the cleft patient. 2+2+2+4
2. Enumerate the indicators of augmentation of urinary bladder. What are the goals of such of a surgery? Briefly mention the merits and demerits of different procedures used for bladder augmentation. 2+2+6
3. Briefly mention the characteristic features of bladder exstrophy epispadias complex with schematic diagrams. Enumerate the various variants of BEEC. Briefly mention the different philosophies of operative management of BEEC with their pros and cons. 2+2+6
4. Briefly mention the three common congenital cystic lesions of the lung as regards to the embryology, pathology, diagnosis, treatment and prognosis. 2+2+2+2+2
5. Briefly discuss management of anastomotic leak in an operated patient of esophageal atresia and tracho-esophageal fistula in regard to incidence, etiology, diagnosis and management. 2+2+2+4
6. What is androgen insensitivity syndrome (AIS)? Briefly discuss the types, clinical features, diagnosis and treatment of AIS. 2+2+2+2+2
7. Briefly mention the treatment options, indications for surgery, surgical procedures with their merits and demerits and follow up strategy for vesico-ureteral reflux. 2+3+3+1+1
8. Briefly mention the prognostic factors affecting final outcome in subjects of biliary atresia. Briefly mention the diagnosis and various treatment strategies for biliary atresia. 3+3+4

P.T.O.

9. Briefly discuss management of Wilm's tumor as regards to diagnosis, staging, various treatment strategies that have evolved of clinical trials and their merits and demerits. 2.5+2.5+5
10. Briefly discuss management of antenatally diagnosed ventriculomegaly as regard to definition, diagnostic criteria, investigative modalities, different types of postnatal management and outcome. 1+2+2+4+1

P.T.O.