1. Describe, briefly, fetal circulation and the changes that occur at birth during the transition from fetal to neonatal circulation. (5+5)

2. Describe the metabolic consequences and the derangements in blood chemistry that occur in patients of infantile hypertrophic pyloric stenosis. What is paradoxical aciduria? (8+2)

3. Classify vascular anomalies. Describe the pathogenesis, clinical presentation and management of hemangiomas. (2+2+2+4)

4. Define shock. Enumerate the various types of shock. Explain the pathophysiology and briefly describe the management of septic shock. (2+2+2+4)

5. Describe the types of ECMO circuit and its applications in Pediatric Surgery. (4+6)

6. Describe the early resuscitation and management of blunt abdominal trauma in the pediatric age-group. (4+6)

7. What are tumor markers? Briefly describe their role in the evaluation of solid tumors in the pediatric age group. (2+8)

8. Briefly describe the anatomical, physiological and pathological factors that cause gastro-esophageal reflux. (3+3+4)

9. Describe the indications and current status of fetal intervention for posterior urethral valves and its outcome. (3+4+3)

10. Outline the principles of tissue engineering with emphasis on its current and future applications in Pediatric Surgery. (4+3+3)
1. Classify posterior urethral valves. Briefly describe the evaluation, resuscitation and the management of a new born presenting with urosepsis and uremia due to posterior urethral valves. 2+2+2+4

2. Describe the aetiopathogenesis, diagnosis and management of congenital lobar emphysema. 3+3+4

3. What are the common indications for esophageal substitution in the pediatric age-group? Briefly describe the operative steps of gastric transposition. 4+6

4. Describe briefly the clinical features, diagnosis and management of pheochromocytoma in children. 2+4+4

5. Outline the role of laparoscopy in the diagnosis and management of undescended testis. 4+6

6. Enumerate the causes of acute scrotum in a child and outline the management. 4+6

7. Classify ureteroceles and outline the principles of surgical management of ureteroceles. 4+6

8. Enumerate the common posterior mediastinal masses seen in the pediatric age-group. Describe the diagnosis and management of foregut duplication cysts. 2+4+4

9. What is nephroblastomatosis? Describe the relation of nephroblastomatosis with Wilms’s tumor. What is the management of nephroblastomatosis? 2+4+4

10. Describe the functions of the spleen. Describe post-splenectomy sepsis and its prevention. 4+4+2
PEDIATRICS SURGERY

PAPER – III

Time : 3 hours
Max. Marks : 100

Attempt all question in order.
Each question carries 10 marks


2. What are the advantages of Robotic surgery over conventional laparoscopic surgery? Name the Robotic systems in use.

3. What is Androgen Insensitivity Syndrome (AIS)? Describe briefly the types, clinical features, diagnosis and treatment of AIS.

4. Describe the epidemiology and pathogenesis of Neonatal Necrotizing Enterocolitis (NEC). Describe briefly the indications for surgical intervention in NEC.

5. What is Total Colonic Aganglionosis? Describe the diagnosis and management of Total Colonic Aganglionosis.


7. Describe the embryology, gross appearance and principles of cloacal exstrophy.

8. What is the incidence of Bilateral Wilm’s Tumor? Discuss the management of Bilateral Wilm’s Tumor.

9. Describe the presentation, diagnosis and management of “H”-type tracheo-esophageal fistula.

10. What is Apert’s Syndrome? Enumerate the common abnormalities associated with this Syndrome.

POSSESSION / USE OF CELL PHONES OR ANY SUCH ELECTRONIC GADGETS IS NOT PERMITTED INSIDE THE EXAMINATION HALL.