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.

1. Enumerate different components of blood therapy and the possible complications associated with their use. 5+5

2. What are the different grades of splenic injury? How is blunt trauma to the spleen in children managed? 4+6

3. Describe the total parenteral nutrition (TPN) requirement for a three kilogram newborn baby at day 12 of life diagnosed with necrotizing enterocolitis. What are the complications of TPN? 6+4

4. Describe the immunobiology of organ transplantation. What are the different types of liver transplantation? 5+5

5. Briefly outline the various types of research methodology (study types). Describe in detail how you will design a case control study giving an example. 5+5

6. How do you stage neuroblastoma? What are the different prognostic factors for neuroblastoma? 5+5

7. What are the types & different sites of rhabdomyosarcoma in children? Briefly outline the management of genitourinary rhabdomyosarcoma in children. (2+2)+6

8. Describe captopril renography – its physiological basis, clinical interpretation and contraindications. 4+4+2

9. What is Glasgow Coma Scale? Describe the management protocol for head injury in children. 2+8

10. What are the different modalities for antenatal diagnosis of congenital malformations? What is the current role of antenatal diagnosis for congenital malformations? 5+5

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