**Write short notes on:**

1. **Class - I HLA system under the following headings:**
   - a) Define class - I HLA system.  
   - b) Structure of class - I HLA.  
   - c) Clinical significance of class - I HLA in health and disease.

2. **Hyperkalemia under the following headings:**
   - a) Pathophysiology of complications of hyperkalemia.  
   - b) Immediate management.  
   - c) Newer anti-hyperkalemic agents.

3. **Renal diseases with their prevalence in:**
   - a) Rheumatoid arthritis.  
   - b) Sarcoidosis.  
   - c) Scleroderma.

4. **Vascular calcification in chronic kidney disease under the following heads:**
   - a) Pathology.  
   - b) Pathophysiology.  
   - c) Diagnosis.

5. **Management of chronic asymptomatic hyponatremia .**

6. a) Structure of the peritoneal membrane.  
   b) Steps to preserve ultrafiltration capacity.

7. **Role of urine dipstick testing:**
   - a) Parameters tested.  
   - b) False positivity and negativity.

8. a) Radionuclides used in Nephrology for imaging: Clinical usage and limitations.  
   b) Role of PET scan in renal patients.

   b) Renal transplantation in Alport’s disease.

10. a) Type IV RTA.  
    b) Secondary causes of renal tubular acidosis.  
    c) Management of distal RTA.

**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.