

**NEPHROLOGY**

PAPER-I

NEPH/D/18/20/I

Time: 3 hours  
Max. Marks:100

**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.

**Write short notes on:**

1. a) Handling of acid-base balance by the kidney. 6+4  
b) Management of distal renal tubular acidosis (Type I RTA).
2. a) Renal interstitium and its functions. 4+6  
b) Chronic interstitial nephritis – etiology and management.
3. a) Methods of estimation of Glomerular filtration rate (GFR). 5+5  
b) Hyper filtration injury in kidney diseases - clinical relevance and management.
4. a) Development of the kidney. 5+5  
b) Kidney diseases associated with developmental abnormalities.
5. a) Toll like receptors – role in kidney diseases. 5+5  
b) TGF beta receptor – role in kidney diseases.
6. a) Assessment of water quality in hemodialysis 4+6  
b) Problems associated with bad dialysis water quality in dialysis patients and measure to mitigate them.
7. a) Role of Statins in kidney disease. 5+5  
b) Pathogenesis of lipid abnormalities in nephrotic syndrome.
8. a) Clinical utilities of Longitudinal studies. 5+5  
b) Clinical utilities of Cross sectional studies.
9. a) IV iron preparations for correction of anemia. 5+5  
b) Erythropoietin stimulating agents.
10. a) Etiological factors for CKD in India. 5+5  
b) Heat stress nephropathy.

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