

QP Code:101504

Reg. No.:.....

**D.M. (Nephrology) Degree Regular/Supplementary Examinations
April 2025**

Paper I – Basic Sciences

Time: 3 hrs

Max marks: 100

- **Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space**
- **Answer all parts of a single question together • Leave sufficient space between answers**
- **Draw table/diagrams/flow charts wherever necessary**

Essay: (20)

1. Describe (with illustrations) the pathway of potassium excretion / reabsorption / secretion throughout the renal tubule.

Short essays: (8x10=80)

2. What are the changes that happen in the kidney when a woman gets pregnant.
Describe briefly.
3. Describe the site of action of different diuretics. Illustrate the sites of actions in the tubule.
4. Write briefly about the role of aquaporins in normal renal physiology.
5. What are the physiological determinants of glomerular filtration rate? Please describe with an illustration.
6. In a patient who presents with metabolic alkalosis, please describe the algorithmic approach for evaluation of his underlying acid-base abnormality.
7. Write briefly about C4D staining of renal biopsies
8. What is cystatin C. Where is/are its most likely clinical application/s.
9. Please explain calculation and relevance of “delta anion gap”.
