

**NEPHROLOGY****PAPER-I**Time: 3 hours  
Max. Marks:100

NEPH/J/19/20/I

**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) Uric acid handling in kidney. 5+5  
b) Management of hyperuricemia and gout in chronic kidney disease.
2. Cystic kidney diseases: 3+7  
a) Classification.  
b) Pathogenesis of ADPKD.
3. a) Epidemiology of acute kidney injury (AKI). 6+4  
b) Management of critically ill patient with AKI in an ICU setting.
4. Complete urine analysis. 10
5. Renal Tubular Acidosis-Type IV: 5+5  
a) Pathophysiology  
b) Management
6. a) Immunological evaluation of a patient with kidney disease. 5+5  
b) Complement cascade.
7. Renal biopsy: 2+2+3+3  
a) Indications  
b) Handling of specimen  
c) Tissue staining methods and morphological assessment  
d) Role of electron microscopy in renal diseases.
8. a) Nutrition assessment in CKD. 6+4  
b) DASH and Mediterranean Diet in CKD.
9. a) Study designs, bias and confounding. 5+5  
b) RCTs in diabetic nephropathy.
10. a) Structure and functions of mesangium. 5+5  
b) Glomerular basement membrane: structure, age and sex variation.

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