

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.
