

FINAL EXAM  
DECEMBER 2016

NATIONAL BOARD OF EXAMINATIONS

**NEPHROLOGY****PAPER – I**

NEPHRO/D/16/20/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) Physiology of renal autoregulation. 5+5  
b) Relevance of renal autoregulation in clinical conditions, especially with AKI.
2. Podocyte: Structure, functions and its clinical significance in health & disease. 3+3+4
3. Hypomagnesemia: Causes, manifestations, investigations and treatment. 4+2+2+2
4. a) Development of kidney and urinary tract. 8+2  
b) Enumerate structural anomalies of kidneys.
5. a) Pathophysiology of distal RTA. 5+5  
b) Clinical and metabolic consequences of RTA.
6. a) Etiology of lactic acidosis. 5+5  
b) Approach to a patient with lactic acidosis.
7. a) Common clinical research study designs. 5+5  
b) Phases in clinical trials.
8. Vascular calcification in CKD: Pathogenesis, diagnosis and management. 3+4+3
9. a) Methods of estimation of serum creatinine 2+8  
b) Methods of estimation of GFR.
10. Moderately increased albuminuria in diabetes: 2+3+3+2  
a) Etiology  
b) Limitations  
c) Natural history in type II diabetes  
d) Clinical trials to prevent progression to macroalbuminuria in phase II diabetes.

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