

# Question Paper

Exam Date & Time: 05-Mar-2019 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

**FIRST SEMESTER B.Sc. (RRT & DT) DEGREE EXAMINATION - MARCH 2019**  
**SUBJECT: BDT 101 - KIDNEY DISEASE I**  
**(2016 RV SCHEME)**  
**Tuesday, March 05, 2019 (14.00 - 17.00)**

**Marks: 100**

**Duration: 180 mins.**

**Answer all the questions.**

- 1) Describe endocrine functions of the kidney. (20)
- 2) Define glomerular filtration rate. Describe how it can be measured and list the factors affecting it. (20)
- 3) Explain how the myogenic mechanism and tubuloglomerular feedback are responsible for autoregulation of Glomerular Filtration Rate (GFR). (10)
- 4) Define acute kidney injury and classify according to the RIFLE criteria. (10)
- 5A) Mention the location of the Juxta glomerular apparatus and discuss its structure with a diagram. (5)
- 5B) Write the stages of chronic kidney disease and define eGFR. (5)
- 5C) Explain nephron filtration barrier. (5)
- 5D) Classify Chronic Kidney Disease (CKD). (5)
- 5E) Explain microscopic renal vasculature with a neat diagram. (5)
- 5F) List the components of the urinary system and illustrate urinary pathway. (5)
- 6A) What you mean by renal replacement therapies? (2)
- 6B) What is renal tubular reabsorption? (2)
- 6C) Write any four clinical features of acute kidney injury. (2)
- 6D) Write any two differences between hemodialysis and peritoneal dialysis. (2)
- 6E) Name any two nitrogenous waste products in the blood. (2)

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