

**VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)**

**B.Sc. (RENAL DIALYSIS TECHNOLOGY) DEGREE
EXAMINATION – March 2019
Second Year**

**APPLIED ANATOMY AND PHYSIOLOGY RELATED TO
DIALYSIS TECHNOLOGY**

Time: Three hours

Maximum: 75 marks

I. Write an essay on any ONE of the following: (1 x 20 = 20)

1. Describe the anatomy of the kidneys, ureters and urinary bladder.
Discuss the mechanism of urine formation.
2. Discuss the various functions of the kidney and write about the renal function tests.

II. Write short essays on any TWO of the following: (2 x 10 = 20)

3. Discuss the role of the kidneys in acid base homeostasis.
4. Describe the nerve supply of the bladder. Discuss the physiology of micturition.
5. Draw and label the parts of a kidney and explain the renal circulation in detail.
6. Describe the structural anatomy of femoral vein, internal jugular vein and subclavian vein.

III. Write short answers on any SEVEN of the following: (7 x 5 = 35)

7. Body fluid compartments.
8. Potassium metabolism in the body.
9. Hormones of the kidney.
10. Glomerular Filtration Rate.
11. Renal phosphate handling.
12. Peritoneal membrane.
13. Anomalies of kidney.
14. Renal handling of calcium.
15. Juxtaglomerular apparatus.
16. Histology of kidney.