

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

**B.Sc. (RENAL DIALYSIS TECHNOLOGY) DEGREE
EXAMINATION – August 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. Draw the structure of a kidney. Describe the various functions of the kidney?
2. Draw and label the various parts of a nephron. Discuss the role of the kidneys in acid base homeostasis.

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

3. Draw and describe the structure of urinary bladder, Juxtaglomerular apparatus and blood supply of the kidney?
4. Discuss in detail the role of the kidney in bone formation.
5. Discuss in detail the role of kidney in erythropoiesis.
6. Describe the structural 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. Calcium regulation in health and diseases.
8. Write a note on acidification and concentration.
9. Endocrine functions of the kidney.
10. Role of peritoneum in peritoneal dialysis.
11. Water metabolism.
12. Hyponatremia.
13. Types of bladder dysfunction.
14. Physiology of micturition.
15. Structure of the ureter.
16. Write a note on clearance studies.