



**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**  
(A DEEMED TO BE UNIVERSITY)

**B.Sc. Allied Health Sciences Second Year Semester-III**

September 2022 Examination

**B.Sc. Renal Dialysis Technology**

Time: 3 Hrs.

**Paper – I**

[Max. Marks: 100]

**Applied Anatomy & Physiology related to Dialysis technology**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

*(Use separate answer booklet for Section A & B)*

**Section – A**

**Applied Anatomy (50 Marks)**

**Q.P Code : J3475**

**LONG ESSAY**

**2 x 10 = 20 Marks**

1. Describe Kidney under following headings  
a) External features b) coverings c) Internal features d) blood supply (3+2+3+2)
2. Describe the Urinary bladder under following headings:  
a) External features b) Ligaments c) development d) Nerve supply (3+3+2+2)

**SHORT ESSAY (Answer any three)**

**3x5=15 Marks**

3. Describe the origin, course and branches of Femoral artery
4. Describe the attachment and function of Greater omentum
5. Discuss the development of Kidney
6. Illustrate the microscopic structure of Prostate and mention its salient features.
7. Describe the interior of urinary bladder

**SHORT ANSWERS (Answer any five)**

**5x3=15 Marks**

8. List the parts of male urethra
9. Mention the constrictions of Ureter
10. Enumerate any 3 branches of Femoral artery
11. Draw a labelled diagram of microscopic structure of Prostate
12. What is Horse-shoe kidney?
13. List 3 cells of Juxta glomerular apparatus
14. List the tributaries of left renal vein

**Section – B**

**Applied Physiology (50 Marks)**

**Q.P Code : J3476**

*(Use separate answer booklet for Section-B)*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Give the normal range of platelets. List the functions of platelets. Describe the role of platelets in formation of temporary haemostatic plug.
2. Describe obligatory and facultative reabsorption of water.

**SHORT ESSAY (Answer any three)**

**3 X 5 = 15 Marks**

3. Describe the mechanism of tubuloglomerular feedback.
4. Describe the significance of PAH clearance.
5. Describe renal handling of glucose in the proximal tubule of the nephron.
6. Describe the role of vasa recta in renal function.
7. List the Difference between cortical & juxtamedullary Nephron.

**SHORT ANSWERS (Answer any five)**

**5 X 3 = 15 Marks**

8. Classify diuretics
9. Define renal failure.
10. List the non excretory functions of kidney.
11. Give the effects of ADH on renal tubules and the sites of action
12. Mention the 3 basic renal processes that lead to formation of urine.
13. Give the normal pH of blood. List the body's major buffer system.
14. List the special features of renal circulation.

\* \* \*





**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**  
(A DEEMED TO BE UNIVERSITY)

**B.Sc. Allied Health Sciences Second Year (Semester-III)**  
**September 2022 Examination**  
**B.Sc. Renal Dialysis Technology**

Time : 2 Hrs.

[Max. Marks : 40]

**Paper-II**

**PHARMACOLOGY RELATED TO DIALYSIS TECHNOLOGY**

**Q.P Code : J3480**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

**Long essay**

**1 × 10 = 10 Marks**

1. Classify drugs used in hypertension. Explain mechanism of action, uses and adverse effects of ramipril (4+2+2+2)

**Short essay (Answer any three)**

**3 × 5 = 15 Marks**

2. Explain differences between crystalloids and colloids (2.5+2.5)
3. Explain mechanism of action and adverse effects of mannitol and hydrochlorthiazide (2.5+2.5)
4. Explain mechanism of action, uses and adverse effects of vasopressin (2+2+1)
5. Mention phosphate binders. Explain their advantages and disadvantages (2+3)

**Short answer (Answer any five)**

**5 × 3 = 15 Marks**

6. Mention **two** uses and **one** adverse effect of erythropoietin (2+1)
7. Mention **three** nephrotoxic drugs
8. List **three** indications for parenteral iron
9. Mention **three** uses of folic acid
10. Mention **three** dialyzable drugs
11. List **three** indications for vitamin D

