



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

**March 2025 Examination**

**B.Sc. Renal Dialysis Technology**

**Time: 2.30 Hrs.**

**Paper – I**

**[Max. Marks: 80]**

**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 (40 Marks)**

**Q.P Code : K3455**

**LONG ESSAY**

**1×10=10 Marks**

1. Describe the right kidney under the following headings  
a) Gross features b) Relations c) blood supply d) Applied anatomy

**SHORT ESSAY**

**3×5=15 Marks**

2. Inguinal hernia
3. Profunda femoris artery
4. Coverings of kidney

**SHORT ANSWERS**

**5×3=15 Marks**

5. Draw the microscopic structure of ureter
6. Boundaries of epiploic foramen
7. Draw a neat labelled diagram of nephron
8. Median cubital vein
9. What is lobulated kidney

**Section – B**

**Applied Physiology (40 Marks)**

**Q.P Code : K3456**

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

**LONG ESSAY**

**1×10=10 Marks**

1. Define GFR give its normal value and name the substance used to measure it? List five factors influencing GFR and explain any 2

**SHORT ESSAY**

**3×5=15 Marks**

2. Explain the Tubular reabsorption of water in the nephron
3. Describe the mechanism of the tubuloglomerular feedback
4. Draw a neat labelled diagram of the J.G apparatus and list the function of each component

**SHORT ANSWERS**

**5×3=15 Marks**

5. List the differences between the osmotic and water diuresis
6. Name any three renal function tests
7. Name the muscles of the Bladder and give the nerve supply
8. Name the substances that is reabsorbed in PCT
9. Give a brief note on the dialysis



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

**March 2025 Examination**

**B.Sc. Renal Dialysis Technology**

**Time : 2 Hrs.**

**Paper – III**

**[Max. Marks: 40]**

**Pharmacology Related Dialysis Technology**

**Q.P Code: K3460**

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

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**1 X 10 = 10 Marks**

1. Classify drugs used in hypertension. Explain mechanism of action of any three drugs from their different category with their adverse effects

**SHORT ESSAY**

**3 X 5 = 15 Marks**

2. Explain mechanism of action, uses and adverse effects of spironolactone
3. Explain pharmacokinetic factors affecting drugs used in dialysis
4. Mention colloids and crystalloids with their advantages and disadvantages

**SHORT ANSWERS**

**5 X 3 = 15 Marks**

5. Mention three uses of vitamin D analogues
6. Mention three uses and three specific adverse effects of hydrochlorothiazide
7. Mention three nephrotoxic drugs
8. List three drugs used in hypertensive emergency
9. Mention three uses of thiazides

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

**March 2025 Examination**

**B.Sc. Renal Dialysis Technology (RDT)**

**Time: 2.30 Hrs.**

**Paper – III**

**[Max. Marks : 80]**

**Concept of Renal Disease and its Management**

**Q.P Code: K3470**

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

*Draw neat, labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Define CKD. Mention the stages of CKD and discuss the pathogenesis and treatment of CKD
2. Define Acute Kidney Injury (AKI). Write about the classification and pathophysiology of AKI

**SHORT ESSAY**

**6 X 5 = 30 Marks**

3. Draw and Label Diagram of Nephron.
4. Define Nephritic syndrome. What are the differences between Nephrotic syndrome and Nephritic syndrome?
5. Secondary Nephrotic syndrome.
6. Define and mention the causes of Polyuria.
7. What is dysuria? What tests will be asked for a patient with dysuria?
8. Clinical manifestations of chronic kidney diseases (CKD).

**SHORT ANSWERS**

**10 X 3 = 30 Marks**

9. Mention 3 Causes of Asymptomatic Hematuria.
10. Mention 3 Causes of Proteinuria.
11. Mention 3 causes of Asymptomatic pyuria
12. List out three causes for secondary nephrotic syndrome.
13. Diet advice for a patient with nephrotic syndrome.
14. Sterile pyuria and its causes.
15. Define Anuria and few causes of Anuria.
16. Clinical evaluation of Hematuria.
17. Causes of dehydration.
18. Catheter associated UTI.

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