Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 08-May-2025

Time: Three Hours **Max. Marks: 80 Marks**

Pharmacology Related to Haemo and Peritoneal Dialysis – (RS-2)

Q.P. CODE: 1248

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Enumerate the factors that make a drug easily dialyzable. Explain four factors in detail with suitable examples.
2. Classify antihypertensives drugs. Explain the mechanism of action, uses and adverse effects of enalapril.
3. Classify vitamins. How does vitamin D act? What are it's uses and adverse effects?

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Barbiturate poisoning
5. Thiazide diuretics
6. Low molecular weight heparin
7. Propranolol
8. Erythropoietin
9. Plasma expanders
10. Oral iron preparations
11. Haemodialysis concentrates

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Name two antiemetic drugs and two uses.
13. Complications of intravenous fluid therapy
14. Spironolactone
15. Vasopressors in hypotension
16. Osmotic diuretics
17. Name two antihistaminics and two clinical uses.
18. Two adverse effects of aminoglycosides
19. Two clinical indications of folic acid
20. Two advantages and two disadvantages of inhalational route of drug administration
21. Treatment of metabolic acidosis
22. Three adverse effects of beta blockers
23. Dialysis for methanol intoxication

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 08-May-2025

Time: Three Hours **Max. Marks: 50 Marks**

Applied aspects of Pathology (RS-3)

Q.P. CODE: 3301

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 3301 and 3403 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Define and classify pyelonephritis. Explain in detail acute pyelonephritis.
2. Describe the renal changes in hypertension.

SHORT ESSAYS (Answer any Five) **5 x 5 = 25 Marks**

3. Describe rapidly progressive glomerulonephritis.
4. Discuss IgA Nephropathy.
5. Describe polycystic kidney disease.
6. Describe renal changes in diabetes.
7. Define and classify amyloidosis. Write the microscopic features of it.
8. Explain renal complications in pregnancy.

SHORT ANSWER (Answer any FIVE) **5 x 3 = 15 Marks**

9. Renal artery stenosis.
10. Types of renal calculi.
11. Name three causes of acute renal failure.
12. Urinary findings in Nephrotic syndrome.
13. Name three causes of hydronephrosis.
14. Name three causes of contracted granular kidney.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 13-May-2025

Time: Three Hours **Max. Marks: 50 Marks**

Applied Anatomy related to Dialysis Technology (RS-3)

Q.P. CODE: 3302

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 3302 and 3402 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Explain femoral artery – origin, course, distribution, branches and applied aspects.
2. Explain urinary bladder – Shape, external features, relation, blood supply and applied aspects.

SHORT ESSAYS (Answer any Five) **5 x 5 = 25 Marks**

3. Explain the blood supply of Kidney.
4. **Arch of Aorta**
5. Histology of Lung artery.
   Or
   Coverings of kidney
6. Right kidney.
7. Draw and label the parts of Nephron.
8. **Abdominal Hernias**

SHORT ANSWER (Answer any FIVE) **5 x 3 = 15 Marks**

9. Name any three Anomoly of excretory system.
10. Name three branches of Brachial artery.
11. Layers of Peritoneum.
12. Parts of Ureter.
13. Histology of Kidney.
14. Applied aspects of prostate gland.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 13-May-2025

Time: Three Hours **Max. Marks: 50 Marks**

APPLIED PHYSIOLOGY RELATED TO DIALYSIS TECHNOLOGY (RS-3)

Q.P. CODE: 3402

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 3302 and 3402 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Define GFR. Give its normal value. Explain the factors that regulate GFR
2. Define counter – current mechanism. Discuss its role in concentrating the urine

SHORT ESSAYS (Answer any Five) **5 x 5 = 25 Marks**

3. Describe the structure of Juxtaglomerular apparatus and explain its functions
4. Outline the role of ADH on renal tubules. Add a note on diabetes insipidus
5. Briefly explain the role of kidney in calcium metabolism
6. Discuss renal function tests
7. What is Renin angiotensin system? Explain its role in renal function
8. Describe auto regulation of renal blood flow

SHORT ANSWER (Answer any Five) **5 x 3 = 15 Marks**

9. Write notes on bleeding time and clotting time
10. Inulin clearance
11. List the coagulation factors
12. Give the normal values of serum creatinine, urea and sodium
13. Hypokalemia
14. Renal Splay

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 08-May-2025

Time: Three Hours **Max. Marks: 50 Marks**

Applied aspects of Microbiology (RS-3)

Q.P. CODE: 3403

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 3301 and 3403 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Enumerate the fungi causing opportunistic infection. Explain the pathogenesis and lab diagnosis of candidiasis.

2. Write in detail about universal precautions.

SHORT ESSAYS (Answer any Five) **5 x 5 = 25 Marks**

3. HAV infection.
4. Transport media.
5. Gram staining method and its uses.
6. Autoclave.
7. Write a note on HIV infection.
8. Prevention of UTI.

SHORT ANSWER (Answer any FIVE) **5 x 3 = 15 Marks**

9. Hepatitis C virus.
10. Kirby – Bauer disc diffusion method.
11. Name three Gram positive bacteria.
12. Settle plate method.
13. Z N staining.
14. Name three routes of vascular access for infections.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – 15-May-2025

Time: 3 Hours **Max. Marks: 50 Marks**

APPLIED PATHOLOGY (RS2)
Q.P. CODE: 1351

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

(Note: Both QP Codes 1351 and 1352 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. A ten-year-old boy presented with oliguria, hematuria, pedal edema, hypertension and skin infection. Discuss the etiopathogenesis and pathology of the conditions.
2. Discuss the causes, pathogenesis and laboratory diagnosis of Chronic Renal Failure.

SHORT ESSAYS (Answer any Five) **5 x 5 = 25 Marks**

3. Lupus nephritis.
4. Polycystic kidney diseases.
5. Congenital anomalies of urinary tract.
6. Discuss the etiology, urinary findings and complications of Urinary Tract Infections.
7. Hypertension associated changes in kidney.
8. Bacterial peritonitis.

SHORT ANSWERS (Answer any Five) **5 x 3 = 15 Marks**

9. Minimal change disease.
10. Four causes of nephritic syndrome.
11. Staghorn calculi.
12. Name renal function tests.
13. Four causes of hematuria.
14. Microalbuminuria.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – 15-May-2025

Time: 3 Hours **Max. Marks: 50 Marks**

MICROBIOLOGY (RS2)

Q.P. Code: 1352

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

(Note: Both QP Codes 1351 and 1352 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. With a neat labelled diagram write in detail about pathogenesis and lab diagnosis of hepatitis B.
2. Write in detail about antibiotic sensitivity testing.

SHORT ESSAYS (Answer any Five) **5 x 5 = 25 Marks**

3. Hand hygiene in dialysis unit.
4. Pathogenesis of Staphylococcus aureus.
5. Gram's staining.
6. Candidiasis.
7. Enumerate common vascular access sites. Describe subclavian catheter infection.
8. Discuss universal precautions.

SHORT ANSWERS (Answer any Five) **5 x 3 = 15 Marks**

9. Name three complications of Hepatitis C viral infection.
10. Principle and use of ELISA technique.
11. Enumerate the bacteria causing UTI.
12. Name any three fungus causing opportunistic infections.
13. Kass criteria.
14. Name any three samples used for lab diagnosis of UTI.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 15-May-2025

Time: Three Hours **Max. Marks: 100 Marks**

Pharmacology Related to Haemodialysis and Peritoneal Dialysis (RS-3)

Q.P. CODE: 3303

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Classify low efficacy diuretics. Explain mechanism of action adverse effect and uses of osmotic diuretics.

2. Mention the difference between haemodialysis concentrates and peritoneal dialysis. Explain complications of peritoneal dialysis.

   OR

   Classify antihypertensive drugs. Write in detail about calcium channel blockers.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Propranolol – mode of action, indication and dose.
4. Potassium exchange resins.
5. IV fluid therapy in renal patients.

   OR

   Mention mechanism of action and uses of Heparin.
6. Classify vasopressor agent with indication.
7. Drugs used in iron deficiency anemia.
8. **Explain advantages and disadvantages of IV route of drug administration**
9. **Amlodipine – mode of action and indications**
10. Classify vitamins. Mention therapeutic values of fat soluble vitamins.

    OR

    Explain dialyzable drugs with examples.
11. Define and classify antidiuretics with suitable examples. Mention uses of it.
12. Write a note on continuous renal replacement therapy.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Why is Vitamin D is recommended in dialysis patients?
14. Bicarbonates.
15. Write the uses of folic acids.

    OR

    Define inotropes with example.
16. Mention three uses of erythropoietin.
17. Treatment of metabolic acidosis.
18. Hepatitis B vaccine.
19. Name any three calcium supplements.
20. Name any three nephrotoxic drugs.

    OR

    Name any three low molecular weight heparin
21. Name any two parenteral iron formulation
22. Mention the three cause of fluid over load.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 20-May-2025

Time: Three Hours **Max. Marks: 100 Marks**

BASICS OF RENAL DIALYSIS TECHNOLOGY (RS-3)

Q.P. CODE: 3304

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Explain different types of peritoneal access devices used for peritoneal dialysis patients and their complications
2. With the help of neat labelled diagram classify artificial kidney

   OR

   Explain different steps of manual reprocessing

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Define diffusion in peritoneal dialysis and explain factors affecting it
4. Explain ultrafiltration profile in hemodialysis
5. Explain the procedure of heparin free dialysis

   OR

   Define hypotension and explain its management during dialysis
6. Discuss advantages and disadvantages of manual dialyzer reprocessing
7. Which filter in water treatment system removes Ca and Mg ions? Explain
8. Explain different Osmotic agents used in peritoneal dialysis
9. What are the precautions taken to prevent hepatitis B virus in dialysis patients?
10. Explain the structure of tunneled cuffed catheter

    OR

    Discuss indications for hemodialysis
11. Explain the composition of bicarbonate – based hemodialysis solution
12. Write a note on cleaning and disinfection of hemodialysis machine

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Write a short note on antidote for heparin
14. List three causes of anaemia in hemodialysis patients
15. List three functions of dialysate

    OR

    Explain the procedure for Allen's test
16. What is counter current and co current flow of dialysate?
17. Draw a neat labelled diagram of three pore model in peritoneal dialysis
18. List any three urgent indications of dialysis
19. List three signs of clotting in extracorporeal blood circuit
20. Define dialyzer reuse and reprocessing

    OR

    Discuss AN – 69 membrane
21. Define blood pressure. Write its normal range
22. Define ultrafiltration co-efficient

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Renal Dialysis Technology Degree Examination – 22-May-2025

Time: Three Hours **Max. Marks: 100 Marks**

Applied Dialysis Technology – Paper -I (RS-3)

Q.P. CODE: 3305

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Define peritonitis and explain diagnosis, management and prevention of the same
2. Enumerate acute complications of hemodialysis. What is intradialytic hypotension? How to prevent and manage intradialytic hypotension?

   OR

   Discuss principles of peritoneal dialysis.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. List various renal replacement therapies available for renal failure patients and write acute dialysis prescription.
4. Define dialysis withdrawal and explain procedure for dialysis withdrawal.
5. Describe in brief types of dialyzer based on membrane material, design and flux.

   OR

   Explain hydraulic circuit of hemodialysis machine.
6. Write a note on hemodialysis machine disinfection.
7. Discuss PD catheters with the help of neat labelled diagram.
8. Explain two types of hemodialysate.
9. Discuss heparin free dialysis.
10. Discuss manual reprocessing steps.

    OR

    Discuss investigations done in a patient on hemodialysis?
11. Explain infection control practices in hemodialysis unit.
12. Define AV fistula. Explain physical examination of AV fistula.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Explain rule of six of AV fistula.
14. What is KoA of a dialyzer?
15. What is ‘’Break in period’’ in CAPD?

    OR

    Define Kt/v. Write Kt/v for hemodialysis and peritoneal dialysis.
16. Write any three advantages of dialyzer reprocessing.
17. List three types of cannulation technique and which is the best.
18. Define dialysis disequilibrium syndrome and mention any one cause for it.
19. Define dry weight.
20. Discuss high and low transporters in peritoneal dialysis.

    OR

    List any three indications for peritoneal dialysis over hemodialysis.
21. List any three causes for outflow failure in peritoneal dialysis.
22. Mention different types of peritoneal dialysis.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 23-May-2025

Time: Three Hours **Max. Marks: 100 Marks**

Concepts of Renal Diseases: Clinical Manifestation and its Management (RS-3)

Q.P. CODE: 3300

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Define Acute Kidney Injury (AKI). Describe classification and causes of AKI.
2. Classify congenital anomalies of the kidney. Write briefly on renal agenesis.
   OR
   Explain renovascular hypertension with pathophysiology and its management.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Define urinary tract infection. Explain its causes, clinical features, management and prevention.
4. Define chronic kidney disease. Explain management of stage five CKD.
5. Discuss dietary recommendations for patients undergoing hemodialysis.
   OR
   Describe chronic pyelonephritis.
6. Explain anatomic and physiologic changes in kidney during pregnancy.
7. Explain nephrotic syndrome – primary and secondary.
8. Explain asymptomatic urinary abnormalities.
9. Discuss various benign renal tumours.
10. Explain renal replacement therapies.
    OR
    Discuss the etiopathogenesis of nephritic syndrome in a child.
11. Classify renal stones. Explain etiology and management of renal stone diseases.
12. Explain obstructive uropathy and its management.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Name three food rich in potassium.
14. Mention three common causes of chronic kidney disease.
15. Explain horseshoe kidney.
    OR
    Name three functions of kidney not replaced by hemodialysis.
16. List any three nephrotoxic drugs.
17. What is ARPKD?
18. Name three drugs to treat urinary tract infections.
19. Write normal serum value of calcium, phosphorus and parathyroid hormone.
20. Define the term oliguria, anuria and nocturia.
    OR
    Name three inherited diseases of the kidney.
21. Define renal osteodystrophy.
22. Mention three drugs used to treat oedema.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 30-Oct-2025

Time: Three Hours **Max. Marks: 80**

Pharmacology Related to Haemo and Peritoneal Dialysis – (RS-2)
Q.P. CODE: 1248

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Classify disinfectants. Explain the role of formalin as a disinfectant and residual effects of formalin
2. Classify diuretics. Describe mechanism of action. Uses and adverse effects of thiazides
3. Classify antihypertensive drugs. Describe mechanism of action. Uses and adverse effects of sympatholytic drugs

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Low molecular weight heparin
5. Describe the role of erythropoietin in dialysis patients
6. Describe phenobarbitone
7. Describe the mechanism of action of osmotic diuretics
8. Describe advantages and disadvantages of enteral and intramuscular route of drug administration
9. Describe vitamin K
10. List three antibiotics given for peritonitis. Explain any two
11. Folic acid in dialysis patients

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. List three vaccines given in hemodialysis patients
13. List three antihistamines
14. Mention the three complications of peritoneal dialysis
15. Mention the three IV fluids
16. Name three calcium channel blockers
17. List three adverse effects of phosphate binders
18. Mention three uses of heparin
19. List three dialyzable drugs
20. Name three vasopressors
21. Mention the composition of hemodialysate
22. Add a note on Vitamin D
23. List three uses of potassium exchange resins

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 28-Oct-2025

Time: Three Hours **Max. Marks: 100 Marks**

Concepts of Renal Diseases: Clinical Manifestation and its Management (RS-3)

Q.P. CODE: 3300

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Define acute kidney injury (AKI). Write about classification and pathophysiology of acute kidney injury.
2. Discuss the etiopathogenesis and management of nephrotic syndrome.
   OR
   Enumerate the various renal tumors and write briefly on renal cell carcinoma.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Define urinary tract infection. Write its clinical features and management.
4. Define chronic kidney disease. Describe stages of chronic kidney disease.
5. Discuss renal complications during pregnancy.
   OR
   Write a note on Wilm's tumor.
6. Discuss the renal changes in pregnancy and write briefly on pre-eclampsia.
7. Explain pathophysiology of renovascular hypertension.
8. Classify nutrients. Discuss assessment of protein energy malnutrition.
9. Write a note on autosomal dominant poly cystic kidney disease.
10. Explain HELLP syndrome.
    OR
    Discuss the etiopathogenesis and pathophysiology of nephritic syndrome in a child.
11. Explain asymptomatic urinary abnormalities.
12. **Classify Renal stones. Explain etiology and management of renal stone disease**

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Write any three dietary factors affecting blood pressure.
14. Name any three food rich in potassium.
15. Define renal osteodystrophy.
    OR
    Define the term oliguria, anuria and nocturia.
16. Name three congenital diseases of kidney.
17. Name three tumors of urinary system.
18. Name three organisms causing urinary tract infections.
19. Mention three common causes of chronic kidney disease.
20. Write normal serum value of calcium phosphorus and parathyroid hormone.
    OR
    Describe Alport's syndrome.
21. Mention three drugs causing acute kidney injury.
22. Mention three drugs used to treat oedema.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 30-Oct-2025

Time: Three Hours **Max. Marks: 50 Marks**

Applied aspects of Pathology (RS-3)

Q.P. CODE: 3301

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 3301 and 3403 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Describe the etiopathogenesis of acute and chronic pyelonephritis. What are the gross and microscopic features of chronic pyelonephritis?
2. List the cause of hydronephrosis. Describe the morphology and the microscopy of it.

SHORT ESSAYS (Answer any Five) **5 x 5 = 25 Marks**

3. Describe hereditary nephritis.
4. Describe adult polycystic kidney.
5. Describe types renal calculi.
6. Discuss nephrotic syndrome.
7. Renal changes in Diabetes Mellitus.
8. Discuss malignant hypertension.

SHORT ANSWER (Answer any FIVE) **5 x 3 = 15 Marks**

9. **Lab diagnosis of urinary tract infection**
10. List causes of renal artery stenosis
11. List causes of Acute tubular necrosis.
12. Name three causes of acute renal failure.
13. What is End stage renal disease.
14. Name three causes of granular contracted kidney.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 30-Oct-2025

Time: Three Hours **Max. Marks: 50 Marks**

Applied aspects of Microbiology (RS-3)

Q.P. CODE: 3403

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 3301 and 3403 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. What are Hepatotropic viruses? Explain Hepatitis B virus in detail.
2. List out the pathogens causing UTI and explain in detail sample collection and diagnosis of Urinary Tract Infections.

SHORT ESSAYS (Answer any Five) **5 x 5 = 25 Marks**

3. Lab diagnosis of HIV infection.
4. Universal precautions.
5. Aspergillosis.
6. Methods of sterilization.
7. Prevention of Opportunistic infections.
8. Antibiotic sensitivity testing.

SHORT ANSWER (Answer any FIVE) **5 x 3 = 15 Marks**

9. Hand washing techniques.
10. **Uses of Gram's Staining**
11. **Sero-markers of HBV**
12. Hot air oven.
13. Name three DNA viruses.
14. Chemical disinfectants.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 06-Nov-2025

Time: Three Hours **Max. Marks: 100 Marks**

PHARMACOLOGY RELATED TO HAEMODIALYSIS AND PERITONEAL DIALYSIS (RS-3)

Q.P. CODE: 3303

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Classify anticoagulants. Write a note on the mechanism of action, uses and contraindications of heparin
2. Classify colloids and crystalloids and add a note on their mechanism of action giving examples

   OR

   Classify antihypertensive drugs giving examples for each. Write a note on propranolol

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Erythropoietin – mode of action, indication and dose
4. Classify Loop diuretics and mode of action, side effects of Loop diuretics
5. Oral anticoagulants

   OR

   Composition and types of peritoneal dialysis solution
6. Write a note on angiotensin receptor blockers giving examples
7. Phosphate binders
8. Write a note on antibiotics used in renal patients
9. Write a note on the mechanism of action and adverse effects of calcium channel blockers
10. Vitamin D – indication and adverse effects

    OR

    Acetazolamide – indication and adverse effect
11. Renal replacement therapy solutions
12. Write a note on immunosuppressive drugs giving examples and uses

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Enlist the vasodilators used in hypertension
14. Vitamin K
15. Name three dialyzable drugs

    OR

    Calcium supplements
16. Enlist the vaccine used in dialysis patients with their use
17. Protamine sulphate – uses and side effects
18. Mannitol – uses and side effects
19. Difference between vasopressors and inotropic agents with one examples each
20. Spironolactone – indication and adverse effect

    OR

    Folic acid – indication and dose
21. Uses and two examples of alpha adrenergic blockers
22. Oral iron preparations – name any four