Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 14-Jan-2022

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

CONCEPT OF RENAL DISEASES – (RS-2)
Q.P. CODE: 1247

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. What is nephrotic syndrome? Causes treatment and management of nephrotic syndrome.
2. What are the causes of hypertension? Explain renal vascular disease and hypertension associated renal disease
3. Acute renal failure – definition, causes and management

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

4. Acute glomerulonephritis
5. Classification of proteinuria
6. Calcium phosphorous metabolism
7. Causes of obstructive uropathy? Add a note on reflux nephropathy
8. Discuss about pregnancy associated renal diseases
9. Triple phosphate stones
10. List complications of CKD
11. Congenital anomalies of urinary tract and write causes of CKD in children

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

12. Alport syndrome
13. Explain pulmonary edema
14. Procedure for collecting 24 hours urine
15. Define – CKD and UTI
16. Pre-renal azotemia
17. Microalbuminuria
18. Nephritic syndrome
19. Clinical features of lower urinary tract infection
20. Intravenous urography
21. Name three tumors of kidney
22. Ectopic kidney
23. Drugs causing acute renal failure

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 17-Jan-2022

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. Classify diuretics. Discuss the mechanism of action, uses and adverse effects of thiazide diuretics
2. Classify anti-hypertensives. Discuss the pharmacological actions, uses and adverse effects of calcium channel blockers
3. Classify anticoagulants. Discuss the pharmacological actions, uses and adverse effects of heparin

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

4. Folic acid supplementation
5. Write a short note about PD solution
6. Ergocalciferol
7. Osmotic diuretics
8. Low molecular weight heparin
9. Erythropoiesis stimulating agents
10. Protamine sulphate
11. Heparinoids

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

12. Three examples for ACE inhibitors
13. Disadvantages of formalin us in dialysis therapy
14. Three example for osmotic diuretics
15. What are direct thrombin inhibitors?
16. What are the disadvantages of oral route of drug administration?
17. Three examples for phosphorus binders
18. What is the mechanism of action of Nifedipine?
19. Pyridoxine deficiency
20. Potassium exchange resins
21. Plasma half-life
22. Define drug agonism and drug antagonism?
23. Three examples for beta blockers

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 19-Jan-2022

Time: 3 Hours **Max. Marks: 40 Marks**

APPLIED ANATOMY (RS2)
Q.P. CODE: 1249

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.
(Note: Both QP Codes 1249 and 1250 are to be answered within total duration of 3 hours)

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

1. Name the importance arteries of the neck and describe one of them.
2. Describe with the help of a diagram gross section of kidney. Draw and label parts of a Nephron.

SHORT ESSAYS (Answer any Three) **3 x 5 = 15 Marks**

3. Types of hernia.
4. Greater and lesser omentum.
5. Histology of prostate gland.
6. Nerve supply of urinary bladder.

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

7. Trigone of urinary bladder.
8. Congenital anomalies of ureter.
9. Applied importance of constrictions of ureter.
10. Draw a neat labeled diagram of microscopic structure of prostate gland (diagram only).
11. Write the difference between direct and in direct inguinal hernia.
12. Polycystic kidney.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 19-Jan-2022

Time: 3 Hours **Max. Marks: 40 Marks**

PHYSIOLOGY (RS-2)
Q.P. Code: 1250

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary
(Note: Both QP Codes 1249 and 1250 are to be answered within total duration of 3 hours)

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

1. Write in detail about micturition reflex
2. Write in detail about glomerular filtration rate and the factors affecting it

SHORT ESSAYS (Answer any Three) **3 x 5 = 15 Marks**

3. Write a note on renin angiotensin system
4. Innervation of urinary bladder
5. 24-hour urine sampling
6. Describe tubular secretion in the kidney with examples

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

7. Actions of aldosterone
8. Physical tests in renal function tests
9. Normal blood sodium, potassium and calcium levels
10. Normal GFR. What is renal failure?
11. Mechanisms of auto regulation
12. Blood supply to kidneys

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – 21-Jan-2022

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. What are the types of glomerular diseases? Describe the pathology of each briefly. Add a note on Nephrotic syndrome.
2. What are the causes of chronic pyelonephritis? Describe the morphology of the kidney in pyelonephritis.

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

3. Acute nephritic syndrome.
4. Pathology of the kidney in Diabetes Mellitus.
5. Cysts of the kidney.
6. Pathology of the kidney due to drugs and toxins.
7. Dialysis induced peritoneal pathology.
8. Causes of end stage renal disease.

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

9. Horse-shoe kidney.
10. Polycystic kidney.
11. Malignant Hypertension.
12. Tuberculosis of the kidney.
13. Hydronephrosis.
14. Renal pathology in pregnancy.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – 21-Jan-2022

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. List-out the Hepatotrophic viruses. Discuss about the mode of transmission, clinical features and universal precautions of Hepatitis B virus.
2. Describe the laboratory diagnosis of Urinary Tract infections.

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

3. Hand hygiene in Dialysis unit.
4. Yellow fever.
5. Subclavian catheter infection.
6. Femoral access infections.
7. Antibiotic sensitivity tests.
8. Sampling methods for Fungal culture.

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

9. Name three complications of Hepatitis C virus.
10. Name any three-gram negative bacilli causing UTI infections.
11. Rubella virus.
12. Giardia lamblia.
13. Define antiseptics. Name two disinfectants used in the hospital.
14. Name two selective media used in Microbiology laboratory.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 14-Jan-2022

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 chronic renal failure. What are the causes, stages and diagnosis of CRF?
2. Explain causes, classification, diagnosis and management of renal stone diseases.
   OR
   Discuss about congenital and inherited renal diseases.

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

3. Explain the causes and management of ARF.
4. Mention causes, management and prevention of UTI.
5. Renal artery stenosis.
   OR
   Acute Nephritic syndrome.
6. Tumors of kidney.
7. Nephrotic syndrome.
8. Asymptomatic Bacteriuria.
9. Obstructive uropathy in females.
10. Pregnancy associated renal diseases.
    OR
    SLED.
11. Diabetic kidney disease, diagnosis and management.
12. Nephrotic drugs.

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

13. Mention three complications of Nephrotic syndrome.
14. Define AKI and mention its treatment modalities.
15. Mention any three food rich in phosphorous.
    OR
    Is potassium good for hemodialysis patient? Give reasons for your answer.
16. Define hematuria, oliguria and proteinuria.
17. Recommended protein intake in PD patient.
18. Mention any three complications of HD.
19. Management of Renal hypertension.
20. Urine finding in Glomerulonephritis.
    OR
    Define Microalbuminuria and Macroalbuminuria.
21. Modes of renal replacement therapy.
22. What is atheroembolic renal disease? Mention any two symptoms.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 17-Jan-2022

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. How do you classify glomerular diseases? Describe the pathogenesis of glomerulonephritis. Write briefly about post-streptococcal glomerulonephritis.
2. Describe the renal changes in hypertension.

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

3. Describe bacterial peritonitis.
4. Describe dialysis induced changes in kidney.
5. Describe congenital anomalies of urinary system.
6. Discuss tubule-interstitial disease of the Kidney.
7. Pathology of End stage kidney disease.
8. Discuss malignant hypertension.

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

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

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 19-Jan-2022

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. Describe the Urinary bladder under the following headings: a) Location b) coverings c) parts d) Relations e) Applied aspects

2. Explain common carotid artery, course and distribution? Branches and applied anatomy.

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

3. Describe the development of Kidney.
4. Describe the gross anatomy and applied aspects of male urethra.
5. Describe the folds of the peritoneum.
6. Describe the gross anatomy of the Ureters.
7. Describe the relations of the right kidney.
8. Describe the microscopic structure of the kidney.

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

9. Name the coverings of the Kidney.
10. Mention any three applied aspects of kidney.
11. Name the branches of brachial artery.
12. Name any three types of abdominal hernias.
13. Describe the Epiplolic foramen.
14. Describe the renal arteries in brief.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 21-Jan-2022

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 heparin.
2. Classify diuretics. Explain the mechanism of action, uses and side effects of potassium sparing diuretics.
   OR
   Write a note on vasopressors.

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

3. Erythropoietin.
4. Vitamin D
5. Folic acid.
   OR
   ACE inhibitors.
6. Immunosuppressants.
7. Renal replacement therapy solutions.
8. Oral iron preparations.
9. Furosemide.
10. Mannitol.
    OR
    Protamine sulphate.
11. Explain dialyzable drugs with examples.
12. Note on vaccines used in dialysis patients.

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

13. Name three carbonic anhydrase inhibitors.
14. Name three vasodilators in hypertension.
15. Potassium exchange resins.
    OR
    Mention the uses of beta blockers.
16. Calcium supplements.
17. Enlist three antibiotics used in renal patients.
18. Classify vitamins giving two examples for each class.
19. Advantages of crystalloids.
20. Adverse effects of loop diuretics.
    OR
    Name two parenteral iron injections, write their route of administration.
21. Name three positive inotropes giving their uses.
22. Uses and two examples of angiotension receptor blockers.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 21-Jan-2022

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

Q.P. CODE: 3303

Corrections

Replace Question No.21 as follows:

21. Name three positive inotropes giving their uses.

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II Year B.Sc. Renal Dialysis Technology Degree Examination – 24-Jan-2022

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. Discuss types of Heparinisation in dialysis and its complications.
2. Discuss solute transport mechanism in haemodialysis and peritoneal dialysis.
   OR
   Mention the various vascular access used in HD.

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

3. Explain urgent indications of dialysis.
4. Safety alarms and daily preparation.
5. Dialyser reuse – advantages and disadvantages.
   OR
   Explain newer dialyser characteristics.
6. Discuss post dialysis assessment.
7. Management of hypotension during haemodialysis.
8. Water treatment for haemodialysis.
9. A V fistula.
10. Sustained Law Efficiency Dialysis (SLED).
    OR
    Explain different types of peritoneal dialysis solution.
11. Discuss dialysate composition.
12. Describe the precaution to be taken in Hemodialysing Hepatitis B positive patients.

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

13. Dialysis disequilibrium syndrome.
14. Co-current dialysis.
15. What is defibrillator**?**
    OR
    Define CPR.
16. What are the measurements for vital signs?
17. AVF cannulation techniques.
18. Name sites for A.V fistula constructions.

19. Catheter Related Blood Stream Infection (CRBSI).
20. What PPE stands for and their usage.

    OR

    Importance of Bio-Medical waste management in hospitals.
21. What is cardiac monitor?
22. Types of transfer set used in CAPD.

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II Year B.Sc. Renal Dialysis Technology Degree Examination – 19-Jan-2022

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. Explain the role of kidney in regulation of A) body water b) pH of blood
2. Draw a nephron. Explain the role of the different parts of nephron in urine formation.

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

3. Discus the role of kidney in sodium reabsorption.
4. Explain how inulin clearance is used as a renal function test.
5. Briefly describe the reabsorption of glucose by renal tubule.
6. Outline the extrinsic mechanism of blood coagulation.
7. Write a note on the Endocrine functions of the kidney.
8. Discuss about the Renal blood flow and its peculiarities.

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

9. Enumerate the Changes in renal system during pregnancy.
10. Write on the Twenty four hours of urinary indies of urea and creatinine.
11. Explain briefly Glomerulo – tubular feedback.
12. Write the principle of blood analysis as kidney function test.
13. Define clotting time and bleeding time with normal values. Mention the clinical significance of these times.
14. Give the normal values of the following: a) Blood uric acid b) Serum phosphate c) Clotting time d) Fasting blood glucose level

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 17-Jan-2022

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 Hepatotrophic viruses. Explain the mode of transmission and laboratory diagnosis of Hepatitis B virus. Add a note on vaccination for Hepatitis B infections.
2. Define Opportunistic infections. Enumerate fungi causing opportunistic infections. Describe in detail about the laboratory diagnosis of Candida.

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

3. Principle and procedure of Gram staining.
4. Hepatitis A virus – morphology and mode of transmission.
5. Laboratory diagnosis of urinary Tract infections.
6. HIV – morphology and laboratory diagnosis.
7. Enumerate common vascular access sites. Enumerate the signs and symptoms of vascular access site infection.
8. Disposal of infected waste in dialysis unit.

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

9. Name three selective media.
10. Name three pathogens causing nosocomial UTI.
11. Name three species of Aspergillus.
12. ELISA test.
13. Name any three universal precautions taken in hospital to prevent infections.
14. Name three RNA viruses.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 24-Jan-2022

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. Discuss types of Heparinisation in dialysis and its complications.
2. Discuss solute transport mechanism in haemodialysis and peritoneal dialysis.
   OR
   Mention the various vascular access used in HD.

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

3. Explain urgent indications of dialysis.
4. Safety alarms and daily preparation.
5. Dialyser reuse – advantages and disadvantages.
   OR
   Explain newer dialyser characteristics.
6. Discuss post dialysis assessment.
7. Management of hypotension during haemodialysis.
8. Water treatment for haemodialysis.
9. A V fistula.
10. Sustained Law Efficiency Dialysis (SLED).
    OR
    Explain different types of peritoneal dialysis solution.
11. Discuss dialysate composition.
12. Describe the precaution to be taken in Hemodialysing Hepatitis B positive patients.

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

13. Dialysis disequilibrium syndrome.
14. Co-current dialysis.
15. What is defibrillator**?**
    OR
    Define CPR.
16. What are the measurements for vital signs?
17. AVF cannulation techniques.
18. Name sites for A.V fistula constructions.
19. Catheter Related Blood Stream Infection (CRBSI).
20. What PPE stands for and their usage.
    OR
    Importance of Bio-Medical waste management in hospitals.
21. What is cardiac monitor?
22. Types of transfer set used in CAPD.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 18-Jul-2022

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

CONCEPT OF RENAL DISEASES – (RS-2)
Q.P. CODE: 1247

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. Mention the various types of Renal stones. Discuss there aetiopathogenesis and treatment.
2. What is Acute Kidney Injury (AKI)? Enumerate the causes of AKI and pathophysiology of AKI.
3. Define Chronic Kidney Disease (CKD). Mention the stages of CKD and causes of CKD in India.

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

4. Vitamins and kidney
5. Pregnancy associate renal diseases
6. Discussion the secondary causes of Nephrotic Syndrome.
7. Tumors of Kidney
8. Asymptomatic Urinary Abnormalities
9. Define Nephrotic Syndrome. Mention the causes of Primary Nephrotic Syndrome.
10. Urinary tract infection-clinical features and management
11. Discuss the various treatment options for CKD stage 5.

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

12. Mention a few causes of microscopic haematuria.
13. Hormones produced by the kidney
14. Asymptomatic bacteriuria
15. What is microalbuminuria?
16. Name three organisms causing Urinary Tract Infection.
17. Erythropoietin
18. Renal Osteo dystrophy
19. Mention the Normal values of Serum Albumin, Serum Calcium and Serum Phosphorus.
20. Mention different types of Renal Stones.
21. Autosomal Dominant Polycystic Kidney Disease (ADPKD)
22. Active Urinary Sediment
23. Horse Shoe Kidney

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 20-Jul-2022

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. Classify diuretics. Explain the mechanism of action, therapeutic uses and adverse effects of Thiazide diuretics.
2. Classify Antihypertensive drugs. Explain the therapeutic uses and adverse effects of Calcium Channel Blockers.
3. Classify Vitamins. Explain the importance of fat soluble vitamins related to dialysis.

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

4. Dialyzable drugs
5. Protamine Sulphate
6. Methanol
7. Therapeutic uses of ACE inhibitors
8. Acetazolamide
9. Erythropoietin
10. Iron preparations
11. IV fluid therapy

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

12. Name three antihypertensives safe in pregnancy.
13. Name three Bisphosphonates.
14. Name two β-blockers and mention one contraindication for the use of β-blocker.
15. Name three low molecular weight heparins.
16. Treatment of Phenobarbitone poisoning
17. Mannitol
18. Folic Acid
19. Name three disinfectants.
20. Name two loop diuretics and mention its one important use.
21. Potassium exchange resins
22. Phosphate binders
23. Mention three complications of peritoneal dialysis.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 20-Jul-2022

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 about the routes of transmission of Hepatitis B virus infection. Write in brief about the laboratory diagnosis and the methods to prevent the transmission of this infection.

2. Enumerate the fungi causing opportunistic infection. Explain in detail pathogenesis and laboratory diagnosis of **Candida**.

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

3. Bacteriological analysis of water.
4. Handwashing technique.
5. Laboratory diagnosis of HIV virus.
6. Principle and procedure of Acid Fast staining.
7. Enumerate the organisms causing UTI and write laboratory diagnosis of UTI.
8. Pathogenesis and laboratory diagnosis of Cytomegalovirus.

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

9. Draw a neat labelled diagram of HIV.
10. Aspergillosis.
11. Sampling methods for Blood culture.
12. Universal precautions.
13. Name three pathogens causing vascular access infections.
14. Culture media used to grow tubercle bacilli.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 22-Jul-2022

Time: 3 Hours **Max. Marks: 40 Marks**

APPLIED ANATOMY (RS2)
Q.P. CODE: 1249

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.
(Note: Both QP Codes 1249 and 1250 are to be answered within total duration of 3 hours)

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

1. Describe the course, branches and applied aspects of femoral artery.
2. Describe prostate gland under following headings:
    a) Position
    b) Coverings
    c) Lobes
    d) Microscopic anatomy
    e) Applied

SHORT ESSAYS (Answer any Three) **3 x 5 = 15 Marks**

3. Anomalies of kidney.
4. Urethral sphincters.
5. Metanephrons.
6. Arterial system of kidney.

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

7. Courses of brachial artery.
8. Polycystic kidney.
9. Parts of Ureter.
10. Vertebral level of the hilus of the kidney.
11. Detrussor muscle.
12. What is the length of ureter?

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 22-Jul-2022

Time: 3 Hours **Max. Marks: 40 Marks**

PHYSIOLOGY (RS-2)
Q.P. Code: 1250

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary
(Note: Both QP Codes 1249 and 1250 are to be answered within total duration of 3 hours)

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

1. Write in detail about hormonal function of kidney
2. Write a note on insulin clearance test and urea clearance test

SHORT ESSAYS (Answer any Three) **3 x 5 = 15 Marks**

3. Write a note on renin angiotensin system
4. What are the factors regulating GFR?
5. Write a note on physical test in urinalysis
6. Describe tubular reabsorption in kidney with examples

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

7. What is 24 hours urine sampling?
8. Innervation of bladder
9. What is myogenic response in Renal Autoregulation?
10. Write a note on the intrinsic mechanism of coagulation
11. Normal blood urea, creatinine and uric acid levels
12. Write a note principles of basic nutrition in renal disease

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 22-Jul-2022

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. Name the parts of urinary system. Describe kidney in detail with its blood supply
2. Describe the urinary bladder under following headings
   a) Gross anatomy b) Microscopic structure c) Applied anatomy

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

3. Male urethra
4. Internal jugular vein
5. Lesser sac
6. Subclavian artery
7. Abdominal hernia
8. Prostate gland

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

9. Constrictions of ureter
10. Varicose vein
11. Branches of axillary artery
12. Renal angel
13. Morison’s pouch
14. Bowman’s capsule

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 22-Jul-2022

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. Enumerate the steps of urine formation. Discuss in detail the role of renal reabsorption
2. Describe how plasma clearance study is useful as a renal function test

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

3. Define glomerular filtration rate. Give the normal value. Explain the factors influencing GFR
4. Give a flow chart of renal circulation. Explain the auto regulation of renal circulation
5. What is alkalosis? Mention the types of alkalosis and explain their causes
6. Outline the extrinsic mechanism of blood coagulation
7. Discuss the sodium handling by kidneys
8. Explain the role of kidney in water balance

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

9. Twenty four hours of urinary indices of urea and creatinine
10. Clinical significance of Prothrombin time and thrombin time
11. Causes and complications of metabolic acidosis
12. Causes and symptoms of hyponatremia and Hypokalemia
13. Explain why blood is not clotting inside blood vessel
14. Inulin clearance

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – 25-Jul-2022

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. Discuss the various causes of End Stages Renal Disease. Write a note on its pathology.
2. Describe the causes and pathology of chronic pyelonephritis. Write a note on urinary findings in chronic pyelonephritis.

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

3. Hydronephrosis.
4. Goodpasture's syndrome.
5. Polycystic Kidney disease.
6. Renal pathology in hypertension.
7. Rapidly progressive glomerulonephritis.
8. Tubulointerstitial diseases of Kidney.

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

9. Types of renal calculi.
10. Cysts of kidney.
11. Name any three renal function tests.
12. List three drugs causing interstitial nephritis.
13. Horse shoe kidney.
14. Hematuria.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – 25-Jul-2022

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

MICROBIOLOGY (RS-2)
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. Define disinfection. Explain the chemical methods of disinfection in detail.
2. Define vascular access infections. Explain the types, causative agents, clinical symptoms and laboratory diagnosis of vascular access infections.

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

3. Name the causative agents and laboratory diagnosis of UTI.
4. List the physical methods of sterilization with a neat diagram of autoclave and its parts.
5. Define Biomedical waste? Explain the segregation and disposal of hospital waste.
6. Standard precautions.
7. Explain the modes of infections of laboratory diagnosis of Hepatitis C virus.
8. Morphology and pathogenicity of HIV – AIDS.

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

9. Crytococcosis.
10. Prophylaxis of Hepatitis B virus.
11. Collection, transport and testing of environmental samples from dialysis unit.
12. Laboratory diagnosis of Hepatitis A virus.
13. Gram’s stain.
14. Define transport media. Give two examples.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 23-Dec-2022

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

CONCEPT OF RENAL DISEASES – (RS-2)
Q.P. CODE: 1247

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. Name various types of renal stones and their causes, investigation and management
2. Discuss in detail about the congenital **and** inherited renal disease
3. Define CKD. What are the stages of CKD & clinical manifestations?

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

4. Acute renal failure – definition and classification
5. Pregnancy associated renal disease
6. Tumors of the kidney
7. Nephrotic syndrome
8. Obstructive uropathy.
9. Classification and management of UTI
10. Anaemia management in CKD patients
11. Renovascular hypertension

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

12. Management of hyperkalemia
13. Name the vaccines used in CKD
14. Name three causes of gross hematuria
15. Acute glomerulonephritis
16. What is amyloidosis?
17. Renal osteodystrophy
18. Diet in CKD
19. Name the organisms causing UTI
20. Write the target values:
    a) Haemoglobin b) Iron c) Phosphorus
21. Name 3 nephrotoxic drugs
22. Name the causes of renal artery stenosis
23. Nephritic syndrome

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 23-Dec-2022

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. Discuss about congenital and inherited renal diseases.
2. Explain hemodialysis with circuit diagram.
   OR
   Define CKD and detail about stages, diagnosis and management.

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

3. Tumors of kidney.
4. Asymptomatic Bacteriuria.
5. Nephrotic syndrome.
   OR
   Causes and management of Aki.
6. Diuretics.
7. Renal artery stenosis.
8. Elaborate renal stone disease.
9. Nutrition in CKD patient on dialysis.
10. Obstructive uropathy in males.
    OR
    Acute Nephritic syndrome.
11. Pregnancy associated renal diseases.
12. Types of UTI with symptoms.

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

13. Stages of AKI.
14. Name any three foods rich in potassium.
15. Complications of renal biopsy.
    OR
    Lifestyle modification for prevention of hypertension.
16. Expand a)CRRT b)CAPD c)CAVHDF
17. Name the organisms causing UTI.
18. Name three causes of Hematuria.
19. Name the hormones produced by kidney.
20. Metabolic bone disease in CKD.
    OR
    What is atheroembolic renal disease? Mention any two symptoms.
21. Erythropoietin.
22. What are the types of food the patient has to include in their diet post renal transplantation?

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 26-Dec-2022

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. Discuss the causes, pathology and diagnosis of chronic renal failure.
2. Give a detailed account of classification of **Glomerular diseases.**

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

3. Urinary tract infections causes and lab diagnosis.
4. Polycystic kidney diseases.
5. List causes of peritonitis and add a note on tubular peritonitis.
6. Renal changes in diabetes mellitus.
7. Granular contacted kidney.
8. Describe the pathophysiology of Glomerulonephritis.

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

9. Urine examination findings in nephrotic syndrome.
10. Sterile pyuria.
11. List three causes of renal artery stenosis.
12. List four causes of hydronephrosis.
13. Types of renal calculi.
14. Supernumerary kidney.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 26-Dec-2022

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. Classify antihypertensive drugs. Discuss the pharmacological actions, uses and adverse effects of Amlodipine
2. Define disinfectants. Discuss formalin and its adverse effects
3. Classify vitamins? Discuss the mechanism of action, uses and adverse effects of vitamin "D"

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

4. Antiseptics
5. Plasma expanders
6. Peritoneal dialysis fluids
7. Drugs used in anaemia
8. Enumerate osmotic diuretics and discuss their mechanism of action and uses
9. Low molecular weight heparin
10. Potassium exchange resins
11. IV fluid therapy in renal failure patients

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

12. Define 'Prodrug' with two examples and their uses
13. What are Antidiuretics? Name two examples
14. Lithium toxicity
15. Vasopressors in hypotension
16. Protamine sulphate
17. Name three adverse effects of Insulin
18. Name three uses of atropine
19. Name dialyzable drugs
20. Name three phosphate binders
21. Ramipril
22. Mention three advantages of LMWH over heparin
23. Furosemide

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 28-Dec-2022

Time: 3 Hours **Max. Marks: 40 Marks**

APPLIED ANATOMY (RS2)
Q.P. CODE: 1249

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.
(Note: Both QP Codes 1249 and 1250 are to be answered within total duration of 3 hours)

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

1. Describe the development of kidney and add a note on its congenital anomalies.
2. Describe the gross anatomy of prostate gland and add a note on its applied aspects.

SHORT ESSAYS (Answer any THREE) **3 x 5 = 15 Marks**

3. Radial artery – origin, termination and applied anatomy.
4. Trigone of urinary bladder.
5. **Constrictions** of ureter. Add a note on applied aspects.
6. Nephron.

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

7. Great saphenous vein – formation, termination.
8. Applied Anatomy of Femoral **canal**
9. Name any three branches of external carotid artery.
10. Mention three sites where the peripheral pulsation can be felt in the body.
11. Describe briefly the arterial supply of kidney.
12. Name the parts of male urethra.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 28-Dec-2022

Time: 3 Hours **Max. Marks: 40 Marks**

PHYSIOLOGY (RS2)
Q.P. Code: 1250

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.
(Note: Both QP Codes 1249 and 1250 are to be answered within total duration of 3 hours)

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

1. Explain in detail the regulation of volume and Osmolality of urine.
2. Explain the mechanism of acidification of urine.

SHORT ESSAYS (Answer any Three) **3 x 5 = 15 Marks**

3. Describe the function of artificial kidney.
4. Regulation of renal blood flow.
5. Describe how glucose is handled by the kidney.
6. Describe the diet for a patient having renal failure.

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

7. Diabetes insipidus.
8. Normal constituents of urine.
9. Determinants of GFR.
10. Give the normal plasma values of sodium, potassium and calcium ions.
11. Illustrate the pathway for renal circulation.
12. Define obligatory and facultative reabsorption of water.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 28-Dec-2022

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. Describe the right kidney under the following headings: a) Location b) Coverings c) Parts d) Relations
2. Describe the Urinary bladder under the following headings: a) Location b) External features c) Relations d) Interior e) Blood supply

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

3. Describe the microscopic structure of the Kidney.
4. Describe the gross anatomy and relations of Prostate gland.
5. Describe the lesser sac in detail.
6. Describer the development of Kidney.
7. Describe the external carotid artery in detail.
8. Describe the microscopic structure of the large artery.

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

9. Name the parts of Male urethra.
10. Peripheral heart.
11. Name the branches of axillary artery.
12. Describe direct inguinal hernia.
13. Name any two applied aspects of prostate gland.
14. What is Ureteric calculi?

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination –28-Dec-2022

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

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. Discuss Renal handling of sodium in the renal tubules
2. Describe the role of kidney as an endocrine gland

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

3. Define plasma clearance. Add a note on urea clearance
4. Explain intrinsic mechanism of blood coagulation. Add a note on bleeding time and clotting time
5. Explain Tubuloglomerular feedback mechanism
6. Write a note on water reabsorption in renal tubules
7. Explain the role of vasa recta in the maintenance of renal medullary gradient
8. Outline the functions of proximal convoluted tubules. Add a note on the transport mechanisms on the PCT

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

9. Laplace's law
10. Prothrombin time
11. Hypernatremia
12. Give normal values of serum a) Calcium b) Phosphorous c) Uric acid
13. Define GFR and give the normal value
14. List the steps involved in urine formation

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – 26-Dec-202

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. Define sterilization. Classify sterilization. Explain in detail about moist heat method of sterilization.
2. Define UTI. Enumerate the causative agents of UTI and add a note on lab diagnosis of UTI.

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

3. Antimicrobial susceptibility testing.
4. Clinical manifestations of HIV.
5. Aspergillosis.
6. Lab diagnosis of candidiasis.
7. **Vascular access infection**
8. Hepatitis B virus.

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

9. Name any three Hepatotrophic viruses.
10. Name any three opportunistic infections.
11. Draw neat labelled diagram of Hot air oven.
12. Name any three uses of sterilization.
13. Z N staining.
14. Name any three Gram positive bacteria.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – 30-Dec-2022

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. Define nephritic syndrome. Discuss the etiopathogenesis, clinical features and laboratory diagnosis of acute post streptococcal Glomerulonephritis.
2. Discuss the congenital anomalies of the urinary tract.

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

3. Diabetic nephropathy.
4. Acute tubular necrosis.
5. Tuberculosis pyelonephritis.
6. Malignant nephrosclerosis.
7. Acute renal failure.
8. Pathology of kidney in acute pyelonephritis.

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

9. Types of renal calculi.
10. Causes of hydronephrosis.
11. Symmetrically contracted kidney.
12. Causes of end stage renal disease.
13. Name three renal function tests.
14. What are the urinary findings in nephrotic syndrome?

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – 30-Dec-2022

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. What is Ventilator associated pneumonia? Name the common organisms causing these infections. Describe the precautions to be taken to prevent these infections.

   Or

   Describe in detail about urinary tract infection.

2. Describe in detail the routes of transmission of HIV (Human immunodeficiency virus). Write in brief about the laboratory diagnosis and methods to prevent transmission of this infection.

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

3. Biomedical waste management.
4. Hot air oven: principle and functioning.
5. **Femoral catheter infection.**
6. Disinfectants used in a hospital.
7. Sterile zone in the CSSD.
8. Nosocomial infection prevention.

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

9. Use and disposal of gloves.
10. **Candidiasis**
11. **Hepatitis A Virus**
12. Water analysis in the hemodialysis unit.
13. Principle of Grams stain.
14. Antibiotic susceptibility tests.

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