

[KK 011]

Sub. Code :1204

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III — Nephrology

Paper III — NEPHROLOGY — DIALYSIS AND
TRANSPLANTATION

Time : Three hours

Maximum : 100 marks

Theory : Two hours and

Theory : 80 marks

forty minutes

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

A. Essay :

(2 × 15 = 30)

(1) Discuss about the planning and developing a transplant coordination model in your centre. Discuss the legal and ethical issues of cadaver organ donation in India.

(2) Discuss the history, principles, complications and recent advances in haemodialysis therapy.

B. Short notes on :

(10 × 5 = 50)

(1) Phosphatonins

(2) Vasopeptidase inhibitors

(3) Glucose toxicity in CAPD

(4) Pure red cell aplasia

(5) NESP – Novel Erythropoietin Stimulatory
Proteins

(6) Renal transplantation across blood group.

(7) Dialysis for inborn errors of metabolism

(8) X-linked renal related syndromes

(9) Adhesion molecules

(10) Transplantation tolerance.

[KM 011]

Sub. Code : 120

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III — Nephrology

Paper III — NEPHROLOGY — DIALYSIS AND
TRANSPLANTATION

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

(1) Adequacy of Dialysis in Continuous
Ambulatory Peritoneal Dialysis (CAPD).

(2) Cytomegalovirus infection (CMV) in renal
transplantation.

II. Write notes on : (10 × 5 = 50)

(a) Erythropoietin resistance.

(b) Bio-incompatibility.

(c) Anti-coagulation in dialysis.

(d) Immune tolerance.

(e) Problems of paediatric renal transplantation.

(f) Management of steroid resistant acute
rejection.

(g) Long term complications of renal
transplantation.

(h) Renal preservation solutions.

(i) Reverse osmosis.

(j) REDY system for Dialysis.

[KO 011]

Sub. Code : 1203

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III — Nephrology

Paper III — NEPHROLOGY – DIALYSIS AND
TRANSPLANTATION

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay questions : (2 × 15 = 30)

(1) Polyoma BK Virus in Renal transplantation.

(2) Continuous Peritoneal dialysis associated
Peritonitis – Current concepts.

II. Write notes on : (10 × 5 = 50)

(a) Antioxidant therapy in Uremia.

(b) Malnutrition in Dialysis patients.

(c) Ultrapure dialysate.

(d) Nocturnal Hemodialysis.

(e) Tacrolimus in renal transplantation.

(f) Acute Allograft dysfunction.

(g) ABO incompatible renal transplantation.

(h) Chronic Allograft nephropathy.

(i) Post transplant diabetes mellitus.

(j) Recurrence of disease after renal
transplantation.

[KP 011]

Sub. Code : 1204

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III — Nephrology

**Paper III — NEPHROLOGY — DIALYSIS AND
TRANSPLANTATION**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and

Theory : 80 marks

forty minutes

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

1. A 40 years old patient who had been on long term dialysis was admitted with problem of sensorial deterioration. Two days later he died. Discuss the pathophysiology of his condition and describe all. Possible pathological changes in vital organs. (20)

2. Discuss management of a patient of acute renal failure in the Intensive Care Unit setting. (15)

3. Discuss in detail Post-transplantation Lymphoproliferative disorders and their management. (15)

II. Write notes on :

(6 × 5 = 30)

(a) Advantages and disadvantages of Dialyzer Reuse.

(b) Management of early Arteriovenous Fistula Failure.

(c) Post-transplant hemolytic uremic syndrome.

(d) Ultrafiltration failure in peritoneal dialysis.

(e) Protocol Transplant Biopsies : Arguments for and against

(f) Renal replacement therapy in HIV patients.

[KQ 011]

Sub. Code : 1203

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III — Nephrology

**Paper III — NEPHROLOGY — DIALYSIS AND
TRANSPLANTATION**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M. C. Q : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

1. Discuss complications of CAPD. (20)
2. Recurrent FSGS in renal allograft — current concepts of pathogenesis and management. (15)
3. Pathogenesis and treatment of dialysis hypotension. (15)

II. Write short notes :

(6 × 5 = 30)

- (1) Dyslipidaemia in chronic kidney disease.
 - (2) Xanthogranulomatous pyelonephritis.
 - (3) Calcineurin nephrotoxicity.
 - (4) Renal replacement therapy in ARF— indications and goals.
 - (5) Treatment of end stage renal disease in diabetes
 - (6) Polyomavirus nephropathy.
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[KR 011]

Sub. Code : 1203

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III — Nephrology

**Paper III — NEPHROLOGY — DIALYSIS AND
TRANSPLANTATION**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

**1. Discuss dialysis therapy in elderly patients with
ESRD. (20)**

**2. Discuss causes, and management of post
transplant hypertension. (15)**

**3. Outline the metabolic complications of peritoneal
dialysis. (15)**

II. Write short notes on :

(6 × 5 = 30)

(a) Recurrent HUS in renal transplant recipients

(b) Oxidative stress in Chronic Renal Failure

(c) Podocytes

(d) Medullary cystic kidneys

(e) Wearable artificial kidney

(f) Immune tolerance.

August 2008

[KT 011]

Sub. Code: 1203

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch III -Nephrology

Paper III– NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P. Code: 161203

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40 Marks

1. Describe the viral infections following renal transplantation and describe in detail management of CMV and BKV infections.
2. Discuss the advances in pathogenesis, diagnosis and treatment of thrombotic thrombocytopenic purpura.

II. Write short notes on:

10 x 6 = 60 Marks

1. Ultrafiltration failure in peritoneal dialysis.
 2. Primary Hyperoxalurias.
 3. Contrast induced nephropathy.
 4. Snake-bite and renal injury.
 5. Pathological classification of FSGS.
 6. Malignancy after kidney transplantation.
 7. Non-infectious complications of CAPD.
 8. Management of intradialytic hypotension.
 9. Tuberculosis in renal transplant recipients.
 10. Endothelial Dysfunction in chronic kidney disease.
-

August 2009

[KV 011]

Sub. Code: 1203

D.M. DEGREE EXAMINATION

(Higher Specialities)

Branch III – Nephrology

(Revised Regulations)

Paper III – NEPHROLOGY - DIALYSIS AND TRANSPLANTATION

Q.P. Code: 161203

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. Inherited disorders of podocyte function – Discuss.
2. Discuss the aetiopathogenesis and management of chronic allograft nephropathy.

II. Write short notes on:

10 x 6 = 60

1. Parasitic infections in transplant recipients.
2. How to overcome ABO incompatibility in renal transplantation.
3. Sexual dysfunction in ESRD.
4. Restless legs syndrome.
5. Management of uremic pericarditis.
6. Bio compatible fluids in CAPD.
7. ADEMEX study.
8. Heparin induced thrombocytopenia.
9. Medullary sponge kidney.
10. Emphysematous pyelonephritis.

August 2011

[KZ 014]

Sub. Code: 1203

DOCTORATE OF MEDICINE (D.M.) DEGREE EXAMINATION

(SUPER SPECIALITIES)

BRANCH III – NEPHROLOGY

NEPHROLOGY - DIALYSIS AND TRANSPLANTATION

Q.P. Code: 161203

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Discuss the diagnosis and management of CAPD Peritonitis.	11	35	15
2. Discuss the evaluation and management of Renal transplantation in a pre-sensitized recipient.	11	35	15

II. Write notes on :

1. Dyslipidemia.	4	10	7
2. New onset diabetes after transplantation.	4	10	7
3. Transplantation in a HIV positive recipient.	4	10	7
4. Adynamic bone diseases.	4	10	7
5. Assessment of Nutritional status in dialysis patients.	4	10	7
6. Dialysis dysequilibrium.	4	10	7
7. Heparin induced Thrombocytopenia.	4	10	7
8. Tuberculosis in a Renal allograft recipient.	4	10	7
9. Nocturnal daily haemodialysis.	4	10	7
10. Immunisation in Renal allograft recipient and candidates.	4	10	7

[LB 011]

AUGUST 2012

Sub. Code: 1203

D.M – NEPHROLOGY

Paper – III NEPHROLOGY - DIALYSIS AND TRANSPLANTATION

Q.P. Code: 161203

Time: 3 hours
(180 Min)

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. What are the pulmonary renal syndromes? How do you investigate these? Mention the management of any of the conditions.	16	35	15
2. Hepatitis C virus infection associated kidney disease. Add a brief note on pre kidney transplant management of a case with this infection.	16	35	15

II. Write notes on:

1. Use of citrate for hemodialysis. What are the indications and precautions? How is it done?	4	10	7
2. Wilhelm Kolff and his contributions to care of patients with kidney disease.	4	10	7
3. Use of plasma exchange in nephrology.	4	10	7
4. Hanta virus and renal lesions associated with this infection.	4	10	7
5. Renal lesions seen with Mycobacterium leprae infection.	4	10	7
6. What are the variants of focal segmental glomerulosclerosis? Discuss the prognosis after kidney transplant in a patient with this condition.	4	10	7
7. Use of Tacrolimus for non organ transplant situations and efficacy.	4	10	7
8. What predisposing factors, clinical features, histology, treatment and Outcome of Atheroembolic renal disease?	4	10	7
9. Classification of vasculitis. What are the Clinical features, laboratory investigations and treatment of Churg Strauss disease.	4	10	7
10. How do you evaluate a highly sensitized recipient for a kidney Transplant? Add a note on pre surgery treatment and post operative follow up.	4	10	7

(LD 011)

AUGUST 2013

Sub. Code:1203

D.M. – NEPHROLOGY

Paper – III NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Describe the complications in patients on CAPD and outline the approach to their management.
2. Describe the viral infections following renal transplantation and describe in detail management of CMV and BKV infection.

II. Write notes on:

(10X7=70)

1. What are the Hurdles to Xenotransplantation?
2. Management of post transplant diabetes mellitus.
3. What are the problems of Post renal transplant Bone disease?
4. What are the advantages and disadvantages of Dialyzer Reuse.
5. How to manage of Malnutrition in Dialysis patients.
6. What are the advantages of Nocturnal hemodialysis.
7. How to manage early Arteriovenous Fistula failure.
8. What are the contraindications to living kidney donation?
9. What are the types of Ultrafiltration failure and management?
10. What are the Determinants of post transplant growth in pediatric transplant?

[LF 011]

AUGUST 2014

Sub. Code: 1203

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q. P. Code: 161203

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on:

(2 x 15 = 30)

1. What is Hemodiafiltration (HDF)?

What is the physiology of water and solute transport in HDF?

How will you setup a Hemodialysis Unit in your hospital?

2. What are the problems of ABO incompatible Kidney Transplantation?

How will you prepare the recipient for ABO incompatible Kidney Transplantation?

How will you manage the delayed graft function in the post transplant period in ABO incompatible Kidney Transplantation?

II. Write notes on:

(10 x 7 = 70)

1. Definition, Diagnosis and management of Access Failure.

2. Culture Negative Peritonitis in CAPD.

3. Experimental models of Hypertension.

4. Cryptococcal infection in a Post Kidney Transplant Patient.

5. THOA Act and its latest amendments.

6. TREG Cells in Kidney Transplantation.

7. Sorbents in Dialysis Therapy.

8. Donor Specific Antibody (DSA).

9. Merits and demerits of Nocturnal daily Hemodialysis.

10. Pancreas and Kidney Transplantation in a patient with Type I diabetes with diabetic kidney disease – discuss.

(LG 011)

FEBRUARY 2015

Sub. Code:1203

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. How will you evaluate the cardiovascular status in a patient with diabetic Kidney disease who is on dialysis, awaiting kidney transplantation? What are the current guidelines on evaluation and management of CVD in a CKD patient?
2. Define Catheter Related Blood Stream Infection. Discuss the microbiology and diagnosis of CRBSI. What are the current guidelines for prevention and treatment of catheter related blood stream infections?

II. Write notes on:

(10 x 7 = 70)

1. Management of acute complications of AVF.
2. Importance of residual renal function in dialysis patients and how to preserve it?
3. Costimulatory blockers in Kidney Transplantation.
4. What are the different types of ultrafiltration failure in CAPD and how will you manage it?
5. Non renal failure indications for haemodialysis
6. What are the challenges of Xeno Transplant? What is the current state of xeno Transplantation in clinical medicine?
7. Polyoma virus nephropathy.
8. What are the guidelines on diagnosis and treatment of Hepatitis C infection (HCV) in a patient on MHD? What are the recommendations to prevent HCV infection in a dialysis unit?
9. Organ preservation fluid- types , composition, advantages and disadvantages.
10. What is 'PD Plus'? What are the advantages over CAPD?

D.M. – NEPHROLOGY

PAPER III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P. Code: 161203

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. A 11 year old boy presents with chronic kidney disease. What are the potential causes for CKD in him? Discuss the plan, timing, risks, advantages and special features of paediatric renal transplantation.
2. Dialysis of a critically ill, hypotensive patient - enumerate the options, their advantages and disadvantages.

II. Write notes on :

(10 x 7 = 70)

1. CRBSI (Catheter related Blood stream Infection) - diagnosis and management. Comment on the role of 'Biofilm'.
2. Lymphocyte depleting induction immunosuppressives.
3. Diagnosis and management of BK virus nephropathy.
4. Culture negative peritonitis in a patient on CAPD (Continuous Ambulatory Peritoneal Dialysis) - How will you evaluate?
5. Transplant Glomerulopathy - Causes and pathology.
6. Enumerate mechanisms of 'Graft Tolerance'. Explain 'Chimerism'.
7. Management of cytomegalovirus disease in a renal transplant recipient.
8. Define 'ultrafiltration failure' in CAPD? How will you evaluate and manage?
9. Pregnancy in a renal transplant recipient lady - highlight on unique management issues.
10. Pregnancy in a lady with chronic kidney disease - When will you initiate haemodialysis? Mention the ideal haemodialysis prescription.

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Acute peritonitis in CAPD (Continuous Ambulatory Peritoneal Dialysis) – diagnosis, algorithmic management and complications. Enumerate the indications for catheter removal.
2. Post transplant lymphoproliferative disease – clinical presentation, diagnosis and management.

II. Write notes on: (10 x 7 = 70)

1. Sodium and ultrafiltration profiling in haemodialysis.
2. Pitfalls of Micro lymphocytotoxicity test.
3. Intradialytic hypertension – causes and management.
4. Treatment of Hepatitis B in renal transplant recipients.
5. High transporter status in CAPD – definition, complications and management.
6. Diagnosis and management of A-V fistula thrombosis.
7. Mechanism of action and complications of Sirolimus.
8. Causes and management of urine leak in a renal transplant recipient.
9. Cachexia in haemodialysis patients – causes and evaluation.
10. Atypical mycobacterial infection in renal transplant recipients – clinical presentation and management.

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. What are the risk factors for BK virus nephropathy?
How will you treat a patient diagnosed with BK virus nephropathy?
What are the recommended screening strategies for BK virus nephropathy?
2. What are the clinical manifestations, diagnostic criteria and principles of management of culture positive bacterial CAPD peritonitis?
What interventions have been shown to reduce the risk of developing CAPD peritonitis?

II. Write notes on:

(10 x 7 = 70)

1. C4d and its role in diagnosis of allograft dysfunction.
2. Non-infectious complications of CMV.
3. Banff classification for acute rejection.
4. Risk factors and management of recurrent FSGS.
5. Dialysis disequilibrium syndrome: Pathogenesis and prevention.
6. Management of a repeatedly hypotensive individual in Hemodialysis.
7. Pre-operative evaluation for vascular access.
8. Renal indications for therapeutic plasma exchange.
9. Icodextrin: Mechanism of action, benefits and adverse effects.
10. Measures of Peritoneal Dialysis (PD) adequacy.

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. In a critically ill patient on multiple inotropes and acute kidney injury, describe the options of renal replacement therapy that you would consider. What are the dialysis orders you will plan?
2. What are the different fluids available for peritoneal dialysis? Write the merits and demerits of the use of each of them. Briefly describe sodium sieving – mechanism and importance.

II. Write notes on:

(10 x 7 = 70)

1. Nocturnal home hemodialysis.
2. Diagnosis and management of tunnel infection in Continuous Ambulatory Peritoneal Dialysis (CAPD).
3. Hemodiafiltration.
4. Role of anti- human globulin test in pre-transplant crossmatch testing.
5. Drug non compliance in kidney transplantation.
6. Restless leg syndrome.
7. Single-pool Kt/V.
8. Predialysis Education Program.
9. Role of induction in kidney transplantation.
10. IgA nephropathy recurrence in the allograft.

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. What are the risk factors for Cytomegalovirus (CMV) infection?
Discuss the relative merits and demerits of Prophylactic and Pre-emptive CMV therapy. How will you treat a patient diagnosed with CMV disease?
2. Compare early and late complications of an ArterioVenous (AV) fistula. How will you evaluate and manage an AV fistula with declining flow rate and high venous pressures? Discuss vascular access surveillance strategies.

II. Write notes on:

(10 x 7 = 70)

1. Antibody mediated rejection : Diagnosis and management.
2. Renal transplantation in HIV positive recipients.
3. Crossmatch techniques in renal transplantation.
4. Dry weight and volume assessment in haemodialysis.
5. Steps to be taken to reduce the culture negative peritonitis rate for a peritoneal dialysis center.
6. Vascular steal syndrome : Clinical features and management.
7. Differential diagnosis and evaluation of PD catheter malfunction.
8. Anticoagulation in haemodialysis patients at risk for bleeding.
9. Role of peritoneal dialysis for management of refractory heart failure.
10. Hepatitis B vaccination schedule in patients on dialysis and interventions to improve seroconversion rate.

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Pathology and Pathogenesis of Chronic Tubulo interstitial disease. Causes of Renal Papillary Necrosis. Pathogenesis and management.
2. Classification, Evaluation and Management of deceased Donor before transplantation.

II. Write notes on: **(10 x 7 = 70)**

1. AKI in Nephrotic Syndrome. Describe Pathogenesis and Treatment of Acute allergic interstitial Nephritis.
2. Modalities of Dialytic Therapy for drug over dose and poisons.
3. NKF-K/DOQI Guidelines for fistula first programme. Optimal sites for AVF.
4. Mechanical and Metabolic complications of CAPD.
5. Various causes of skin infection after Renal Transplantation and its Management.
6. Calcineurin inhibitors-Mechanism of action, Drugs level monitoring and Toxicities.
7. Renal Transplant recipient workup for Diabetic Nephropathy and CKD.
8. Acute Cortical Necrosis – Causes, pathogenesis, pathology, natural history and treatment.
9. Methods and Monitoring of Pregnant Haemodialysis patient.
10. Various Etiological, Clinical presentation of UTI in Renal Transplantation.

(LR 011)

**NOVEMBER 2020
(AUGUST 2020 SESSION)**

Sub. Code: 1203

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Elaborate on risk factors, diagnosis and management of JC polyoma virus nephropathy.
2. Pre-operative assessment for vascular access construction for hemodialysis.

II. Write notes on: (10 x 7 = 70)

1. Warfarin nephropathy
2. Tissue typing for renal transplantation
3. Recurrent PD peritonitis
4. Vaccinations in chronic kidney disease
5. Interpretation of thyroid function tests in renal disorders
6. Chronic allograft injury
7. Role of physical exercise in hemodialysis patients
8. Role of eculizumab in nephrology
9. Recognition and management of central vein stenosis in dialysis population
10. Sorbent dialysis

(DM 0821)

AUGUST 2021

Sub. Code: 1203

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss diagnosis and management of mineral bone disorders in dialysis population.
2. Challenges of renal transplantation in focal segmental glomerulosclerosis.

II. Write notes on: **(10 x 7 = 70)**

1. Pediatric renal transplantation.
2. Changes in BANFF criteria for diagnosis of antibody mediated rejection.
3. Newer iron formulations in hemodialysis.
4. Renal complications of immune checkpoint inhibitors.
5. Anticoagulation in continuous renal replacement therapy.
6. Management of hepatitis C in dialysis population.
7. Electrolyte disorders in kidney transplantation.
8. Post-transplant erythrocytosis.
9. Imaging of a graft kidney.
10. Immediate surgical complications post-renal transplant.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0822]

AUGUST 2022

Sub. Code :1203

D.M. – NEPHROLOGY

Paper III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Discuss in detail the etiology, pathogenesis, experimental models, classification, clinical features, diagnosis and management of Renovascular hypertension.
2. Discuss the evaluation and management of Renal transplantation in a Pre-sensitized recipient.

II. Write notes on: (10 x 7 = 70)

1. Nontraditional risk factors for cardiovascular disease in CKD.
2. Complications of heparin therapy.
3. Diagnosis and management of exit and tunnel infections in a CAPD patient.
4. PET test- indications, method and interpretation.
5. Role of CYTOSORB in a septic- AKI patient.
6. Diuretic resistance.
7. Management of steroid dependant nephrotic syndrome in a child.
8. Renal pathology in snake bites AKI.
9. Role of rituximab in the maintenance phase of ANCA vasculitis.
10. Sleep disorders in CKD.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0223]

FEBRUARY 2023

Sub. Code :1203

D.M. – NEPHROLOGY

PAPER III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P.Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write in detail about various methods of tissue cross-match in renal transplantation. How do you approach positive CDC cross-match?
2. Explain about diagnosis, treatment and complications of acute peritonitis in CAPD. How do you approach culture negative peritonitis?

II. Write notes on:

(10 x 7 = 70)

1. CRRT vs SLED.
2. Renal transplantation in HIV patients.
3. Role of plasmapheresis in glomerular disease.
4. Vaccinations in dialysis patients
5. Treatment of chronic antibody mediated rejection in renal transplants.
6. Intradialytic hypertension management.
7. Sodium and ultrafiltration profiling in hemodialysis.
8. How do you evaluate an outflow failure in CAPD patients?
9. Long-term complications in hemodialysis patients.
10. Challenges in performing paediatric renal transplantation.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0823]

AUGUST 2023

Sub. Code :1203

D.M. – NEPHROLOGY

PAPER III – NEPHROLOGY – DIALYSIS AND TRANSPLANTATION

Q.P. Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. ABO-incompatible Kidney Transplantation.
2. Causes, evaluation and management of Ultrafiltration failure in Continuous Ambulatory Peritoneal Dialysis (CAPD).

II. Write notes on: **(10 x 7 = 70)**

1. Sodium profiling in hemodialysis.
2. Uses of imaging in CAPD.
3. Post-transplant erythrocytosis.
4. Nutritional recommendations in patients on chronic dialysis.
5. Assessment of volume status in dialysis patients.
6. Recurrence of IgA nephropathy after renal transplantation.
7. Surveillance of Arterio-venous fistula.
8. Chronic antibody mediated rejection.
9. Passenger Lymphocyte syndrome.
10. Mechanisms of graft tolerance in kidney transplantation.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0124]

JANUARY 2024

Sub. Code :1203

D.M. – NEPHROLOGY

PAPER III – NEPHROLOGY – DIALYSIS & TRANSPLANTATION

Q.P. Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Pregnancy in Kidney Transplant Recipients.
2. How will you assess adequacy of Hemodialysis and CAPD?

II. Write notes on:

(10 x 7 = 70)

1. Types and indications of automated peritoneal dialysis.
2. What is low transporter status in CAPD and how will you manage?
3. Diagnosis and management of catheter related blood stream infection.
4. Diagnosis of Brain death.
5. Discuss the principles and controversies of Iron therapy in patients on Dialysis.
6. Causes, complications and management of diarrhoeal disease in Renal Transplant.
7. Urgent start dialysis in CAPD.
8. Short notes- Surveillance of arteriovenous fistula.
9. Diagnosis and management of Tunnel infection in CAPD.
10. Diagnostic and treatment challenges of tuberculosis in patients on dialysis and renal transplant recipients.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0225]

FEBRUARY 2025

Sub. Code :1203

D.M. – NEPHROLOGY

PAPER III – NEPHROLOGY – DIALYSIS & TRANSPLANTATION

Q.P. Code: 161203

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Acute cellular rejection in Post Renal transplantation – Pathogenesis, Management and outcomes.
2. Complications during Hemodialysis – Pathogenesis, management and follow up.

II. Write notes on:

(10 x 7 = 70)

1. Water treatment for Hemodialysis.
2. Exit site and Tunnel Infection in CAPD.
3. Brain death: Definition, criteria, diagnosis, forms of declaration.
4. Pathogenesis & management of malnutrition in dialysis patients.
5. Post transplant diabetes mellitus.
6. Management of Toxic alcohol poisoning.
7. Bk Virus nephropathy.
8. Metabolic complications of CAPD.
9. Recurrent FSGS in Post Renal Transplant patient.
10. Vascular Access complications and management.
