[KD 010]

Sub. Code: 1202

D.M. DEGREE EXAMINATION.

(Higher Specialities)

Branch III - Nephrology

(Revised Regulations)

Paper II — CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

- Describe the clinical features, etiopathogenesis, management and prevention of peritonitis in patients on ambulatory peritoneal dialysis. (25)
- 2. Describe the clinical manifestations, pathogenesis, histology and management of IgA nephropathy. (25)
- 3. Write briefly on :

 $(5 \times 10 = 50)$

- (a) Interleukin 2 receptor antagonists
- (b) Hemostatic disturbances in chronic renal failure
- (c) Value of ambulatory blood pressure monitoring
- (d) Extrarenal manifestations of autosomal dominant polycystic kidney disease
 - (e) Renal involvement in lymphoma.

[KE 010]

Sub. Code: 1202

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II — CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

 Describe the pathogenesis, clinical presentation and management of pregnancy – induced hypertension.

(25)

- 2. Discuss the implication and management of pre and post-transplant hepatic dysfunction. (25)
- Write short notes :

 $(5 \times 10 = 50)$

- (a) Mal-nutrition in chronic renal failure
- (b) Long-term complication of renal transplantation
 - (c) Glomerular collagens in ALPORT syndrome
 - (d) REDY system for dialysis
- (e) Non-infectious complications of continuous ambulatory peritoneal dialysis.

[KG 010]

Sub. Code: 1202

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II — CLINICAL NEPHROLOGY DIALYSIS AND TRANSPLANTATION

Time: Three hours __Maximum: 100 marks

Answer ALL questions.

- Discuss the current concepts in the aetiopathogenesis of pregnancy induced hypertension and the principles of managing a case of HELLP syndrome presenting in 34th week of gestation. (25)
- Briefly describe the metabolic complications in patients on CAPD and outline the approach to their management. (25)
- Write briefly on : -

 $(5 \times 10 = 50)$

- (a) Steroid resistant Acute Rejection
- (b) Iron therapy in CRF patients
- (c) Nutrition in critically ill ARF patient
- (d) Cyclosporin in glomerular disease
- (e) Findings of the UKPD study and its relevance to the nephrologist.

[KK 010]

Sub. Code: 1202

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II - CLINICAL NEPHROLOGY

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

ours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes

M.C.Q.: 20 marks

Answer ALL questions.

A. Essay questions :

 $(2 \times 15 = 30)$

- (1) Discuss in detail about the long term management of Hepatitis B and Hepatitis C infected renal allograft recipient.
- (2) Discuss the differential diagnosis, investigations and management of paediatric hypertension.
- B. Short notes on :

 $(10 \times 5 = 50)$

- (1) Hepato renal syndrome
- (2) Cerebral salt wasting syndrome

- (3) Cast nephropathy
- (4) Sterile peritonitis
- (5) Organ preservation
- (6) Obstetric Acute renal failure
- (7) Cardio vascular risk intervention in End stage renal disease
 - (8) Medical management of Renal Stone disease
 - (9) Tertiary prevention of diabetic nephropathy
 - (10) Peritoneal equilibrium test.

[KM 010]

Sub. Code: 1202

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II - CLINICAL NEPHROLOGY

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:

 $(2 \times 15 = 30)$

- Discuss in detail the Renal involvement in HIV infection.
- (2) Discuss the factors responsible for the progression of Renal disease.

II. Write notes on :

 $(10 \times 5 = 50)$

- (a) Etio-pathogenesis of Malignant Hypertension.
- (b) Experimental models of Acute renal failure.
- (c) Hepato-Renal syndrome.

- (d) Current concepts of renal bone disease.
- (e) Infection localisation tests in Urinary Tract Infection.
 - (f) Type-4 Renal Tubular Acidosis.
 - (g) Plant toxin induced Acute Renal Failure.
- (h) Role of Anti Neutrophil Cytoplasmic Antibody (ANCA) in vasculitis.
 - (i) Steroid Resistant Nephrotic Syndrome.
- (j) Endocrine abnormalities in Chronic Kidney Disease.

[KO 010]

Sub. Code: 1202

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II — CLINICAL NEPHROLOGY

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

M.C.Q.: Twenty minutes

Theory: 80 marks

forty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Essay:

 $(2 \times 15 = 30)$

- Discuss the specific pharmacological approaches to clinical Reno protection.
- Discuss cardiovascular disease in chronic kidney disease.

Write short notes on :

 $(10 \times 5 = 50)$

- (a) Parenteral Iron therapy in Chronic Kidney disease.
- (b) Acute Renal Failure in specific clinical settings.

- (c) Contrast induced nephropathy.
- (d) Fluid and Electrolyte disorders in the ICU.
- (e) Microalbinuria its role in kidney disease.
- Hypertension in chronic kidney disease.
- Renal involvement in multiple myeloma.
- Treatment of IgA nephropathy.
- Catheter associated urinary tract infection.
- Ischemic Nephropathy.

September-2006

[KP 0107

Sub. Code: 1202

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II — CLINICAL NEPHROLOGY

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

M.C.Q.: Twenty minutes

Theory: 80 marks

forty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Essay:

- (1) Describe the clinical manifestations. pathogenesis. histology and management of IgA nephropathy. (20)
- Pathologic classification and management of FSGS. (15)
- Metabolic syndrome and renal consequences. (15)

II. Write notes on:

 $(6 \times 5 = 30)$

- Polycystic kidney disease and cilia.
- Tuberculosis and the Kidney.
- Thin basement membrane disease.
- Renal Failure Associated with Cancer.
- Obesity and the Kidney.
- Fungal infections of urinary tract.

[KQ 010]

Sub. Code: 1202

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, 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:
- Discuss pathogenesis, clinical manifestations and management of hepatitis C associated glomerular disease. (20)
- Discuss the factors responsible for the progression of Renal disease. (15)
- 3. Pathogenesis, diagonsis and treatment of thrombotic thrombocytopenic purpura. (15)

- II. Short notes: $(6 \times 5 = 30)$
- 1. Filarial nephropathy.
- Obstructive nephropathy.
- Post-transplant lymphoproliferative disease.
- Refractory post-transplant hypertension.
- Deafness and renal disease,
- 6. Renal epidemiology in India.

[KQ 010]

2

[KR 010]

Sub. Code: 1202

I. Short notes:

 $(6 \times 5 = 30)$

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II — CLINICAL NEPHROLOGY, DIALYSIS, 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 questions:

 Discuss Etiopathogenesis, clinical spectrum and management of ANCA-associated vasculitis (AAV).

(20)

- (2) Discuss the management of Hypertension during pregnancy. (15)
- (3) Describe renal diseases associated with dysproteinemia. (15)

(a) Cholesterol embolism

(b) Chronic malarial nephropathy

(c) Calcimimetics agents

(d) Eractile dysfunction in chronic renal failure

(e) Post transplant proteinuria

(f) Renal papillary necrosis.

August 2008

[KT 010]

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch III - Nephrology

Paper II- CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P. Code: 161202

Time: Three hours Maximum: 100 Marks

ANSWER ALL QUESTIONS Draw suitable diagrams wherever necessary.

I. Essays:

 $2 \times 20 = 40 \text{ Marks}$

Sub. Code: 1202

- 1. IgA nephropathy: Pathogenesis, histology, markers of progression and management.
- 2. Relationship between aldosterone blockade, ACE inhibition and PROTEINURIA.

II. Write short notes on:

 $10 \times 6 = 60 \text{ Marks}$

- 1. Cisplatin nephrotoxicity.
- 2. Role of podocyte in renal disease.
- 3. Acute kidney injury in pregnancy.
- 4. Adynamic bone in patients with CKD.
- 5. Early arteriovenous Fistula Failure.
- 6. Personal Dialysis Capacity test.
- 7. Screening for renovascular hypertension.
- 8. Pathogenesis and diagnosis of myeloma kidney.
- 9. Sustained low efficiency or extended daily dialysis.
- 10. Use of mycophenolic acid in non-transplant renal diseases.

August 2009

[KV 010] Sub. Code: 1202

D.M. DEGREE EXAMINATION

(Higher Specialities)

Branch III – Nephrology

(Revised Regulations)

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P. Code: 161202

Time: Three hours Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays: $2 \times 20 = 40$

1. Discuss the pathogenesis of renal stone disease.

2. Discuss on biomarkers in acute and chronic kidney disease.

II. Write short notes on:

 $10 \times 6 = 60$

- 1. Bartter syndrome.
- 2. Pathogenesis of Nephrotic hyperlipidemia.
- 3. RIFLE classification scheme for ARF.
- 4. Bone marrow transplantation nephropathy (BMTN).
- 5. Renal vein thrombosis.
- 6. Vascular access related steal syndrome.
- 7. No Heparin hemodialysis.
- 8. First use syndrome.
- 9. Fungal peritonitis.
- 10. Peritoneal equilibration test (PET).

August 2011

[KZ 010] Sub. Code: 1202

DOCTORATE OF MEDICINE (D.M.) DEGREE EXAMINATION (SUPER SPECIALITIES)

BRANCH III – NEPHROLOGY

CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION Q.P. Code: 161202

Time: 3 hours (180 Min)	Maximum: 100 marks		
Answer ALL questions in the same order	r.		
I. Elaborate on :	Pages	Time	Marks
	(Max.)	(Max.)	(Max.)
 Discuss in detail the etiology, pathogenesis, experimental models, classification, clinical features, diagnosis and management of Renovascular hypertension. 	11	35	15
2. Detail nutritional assessment in nephrology. Discuss dietary management in nephrotic syndrome, AK1 and CKD	. 11	35	15
II. Write notes on:			
1. Renal failure indices.	4	10	7
2. Non proteinuric hypertension in pregnancy.	4	10	7
3. Nail Patella Syndrome.	4	10	7
4. Ethylene glycol poisoning.	4	10	7
5. Treatment of 19A Nephropathy.	4	10	7
6. Schistosomiasis and Renal Transplantation.	4	10	7
7. Cast Nephropathy.	4	10	7
8. Dialysis dosing in AK1.	4	10	7
9. Xeno transplantation.	4	10	7
10. Hepato renal syndrome.	4	10	7

[LB 010]

AUGUST 2012 Sub. Co D.M – NEPHROLOGY Paper – II CLINICAL NEPHROLOGY, DIALYSIS,

TRANSPLANTATION

Sub. Code: 1202

Q.P. Code: 161202

Time: 3 hours Maximum: 100 marks (180 Min)

Answer	ALL	questions	in tl	ie same	order.
AllSWCI	$\Delta L L$	questions	111 (1	ic same	or acr.

I. Elal	porate on:	Pages		Marks
1.	What is amyloid? How is it classified? Describe the renal lesi in amyloidosis.	(Max.) ons 16	(Max.)	(Max.)
	Describe the renal lesions on systemic sclerosis. What is scler crisis and how is it managed? ite notes on:	oderma 16	35	15
	What is pseudohyperkalemia? What are the manifestations of acute hyperkalemia and how do you treat this?	4	10	7
2.	How would you investigate a case suspected to have diabetes Insipidus? What is the differential diagnosis?	4	10	7
3.	What is the current opinion on the role of Dopamine in acute Injury?	kidney 4	10	7
4.	What are the RIFLE and AKIN classification? What is the debetween the two and advantages of each?	ifference 4	10	7
5.	Describe the kidney lesions seen with malarial infection.	4	10	7
6.	What is the abnormal serology and pathology seen in the kidn in Wegners Granulomatosus? How is the condition treated?	ney 4	10	7
7.	What is Schols solution? What is its composition and indication for its use?	ons 4	10	7
8.	What are direct renin inhibitors? What is the advantage of usi converting enzyme inhibitors or angiotensin receptor blockers	_	10	7
9.	What is e GFR? What is its importance? What are the commo methods of estimating e GFR?	on 4	10	7
10.	What is Masugis nephritis? How is it produced and what is the human equivalent? *******	4	10	7

D.M. – NEPHROLOGY Paper – II CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION Q.P.Code: 161202

Time: Three Hours Maximum: 100 marks

I. Elaborate on: (2X15=30)

1. Membranous Nephropathy---Pathogenesis, Pathology, Natural History, Management and Post transplant recurrence.

2. Describe Rubin's time table of infections post transplant. Describe in detail the etiopathogenesis, clinical features, risk factors, diagnostic modalities and management of CMV infection in the post renal transplant setting.

II. Write notes on: (10X7=70)

1. Types of Heparin induced thrombocytopenia and management strategies.

- 2. Dialysis prescription in a pregnant woman on maintenance HD program.
- 3. Post transplant lymphoproliferative disorder types, clinical features, diagnosis and management.
- 4. Banff 2007 updated working classification of renal allograft pathology
- 5. Indications and complications of therapeutic plasma exchange.
- 6. Discuss the non-uremic applications of extracorporeal blood purification.
- 7. How to manage steroid resistant nephritic syndrome in children.
- 8. Causes and Management of Metabolic Acidosis in ICU.
- 9. Acute Kidney Injury in HIV patients: Epidemiology, Etiology, Risk factors and management.
- 10. Emphysematous Pyelonephritis: Clinicoradiological Classification, Pathogenesis Current Management and Prognosis.

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION Q. P. Code: 161202

Time: Three Hours Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on: $(2 \times 15 = 30)$

- 1. Discuss the Clinical features, Genetics, Histology & Management of Steroid Resistant Nephrotic Syndrome in a 6 year old boy.
- 2. Discuss the various changes in renal senescence.
 What are the risk factors of Acute Kidney Injury in elderly?
 How will you prognosticate & treat an elderly man with Acute Kidney Injury?

II. Write notes on: $(10 \times 7 = 70)$

- 1. ACOG 2014 classification of Hypertensive Disorders of Pregnancy.

 Compare the current classification with the previous classification and write the explanations for the modification.
- 2. Role of Ambulatory Blood Pressure Monitoring (ABPM) in the management of Hypertension.
- 3. What are the Podocyte changes in Diabetes? How will you retard the progression of Diabetic Kidney Disease?
- 4. Current guidelines on management of Granulomatosis with Polyangitis?
- 5. What is resistant Lupus Nephritis? How will you treat a patient with resistant Lupus Nephritis?
- 6. How will you diagnose and treat HCV infection in a patient on Hemodialysis, awaiting Kidney transplantation?

 What are the guidelines to prevent spread of HCV infection in the Dialysis Unit?
- 7. Differential Diagnosis of Nodular glomerulosclerosis.
- 8. Explain ADPKD as a ciliopathy. What are the drugs used in the treatment of ADPKD?
- 9. What are the strategies to enhance the donor pool in Kidney Transplantation?
- 10. Pathophysiology of VUR and Reflux Nephropathy.

Sub. Code:1202 D.M. – NEPHROLOGY

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION O.P.Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Discuss the merits and demerits of different forms of Renal replacement therapy in a patient with diabetic kidney disease stage 5.

2. Discuss the pathophysiology of Edema formation in renal disease. Write a diuretic prescription for nephrotic syndrome. What is diuretic resistance and how will you tackle it?

II. Write notes on: $(10 \times 7 = 70)$

- 1. Enumerate trials in the treatment of reflux nephropathy.
- 2. Chronic AMR as a cause of late graft dysfunction. How will you diagnose and treat it?
- 3. Pathophysiology of vascular calcification in CKD.
- 4. Pure red cell aplasia.
- 5. How will you assess the nutritional status of pediatric CKD patients? What are the current guidelines for nutritional supplementation in Pediatric CKD?
- 6. Pathogenesis of IgA Nephropathy.
- 7. Dialysis prescription for a pregnant lady with renal failure.
- 8. What is Resistant HTN? What are the newer interventional treatments for **Resistant HTN?**
- 9. Renal involvement in multiple myeloma. Critically analyse the Bortezomib based regimen in myeloma kidney.
- 10. Current KDIGO guidelines for management of a child with nephrotic syndrome.

PAPER II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P.Code: 161202

Time: Three Hours Maximum: 100 marks

Answer ALL questions

I. Elaborate on: $(2 \times 15 = 30)$

- 1. Pathogenesis, Pathology and Treatment of idiopathic FSGS (Focal segmental Glomerulosclerosis).
- 2. Enumerate renal lesions caused by systemic lupus erythematosus NOT included in ISN RPS (International Society of Nephrology Renal Pathology Society) classification. Describe the pathology and clinical presentation of each one of them.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Cerebral salt wasting syndrome aetiology, pathomechanism and treatment.
- 2. Renal lesions associated with haematopoietic stem cell transplantation.
- 3. What are phosphatonins? How do they act?
- 4. Formulae for estimation of glomerular filtration rate caveats and drawbacks. Highlight the formula validated in Asian population.
- 5. Enumerate causes, clinical features, histopathology of endemic nephropathies.
- 6. Emphysematous pyelonephritis risk factors, grading and treatment.
- 7. Non traditional risk factors for cardiovascular disease in chronic kidney disease patients.
- 8. Exit site infection diagnosis and treatment.
- 9. Arteriovenous fistula thrombosis causes, early diagnostic clues and management.
- 10. Post renal transplant erythrocytois causes, complications and management.

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P.Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Pathogenesis, and management of IgA nephropathy.

2. Pathologic classification of diabetic nephropathy and therapeutic trials in retarding progression of diabetic nephropathy.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Liddle's syndrome pathophysiology, clinical features and management.
- 2. Role of alkali supplementation of Chronic Kidney Disease.
- 3. IgG4 related renal disease pathology, clinical features and treatment.
- 4. Causes and management of Hypercalcemia.
- 5. Rifampicin induced acute kidney injury pathomechanism and pathology.
- 6. Pure red cell aplasia diagnosis, causes and management.
- 7. Online haemodiafiltration principle and advantages.
- 8. Vaccination of patients awaiting renal transplantation.
- 9. KDIGO (Kidney Disease Improving Global Outcome) guidelines on Iron therapy in Chronic Kidney Disease patients.
- 10. Pathology of antibody mediated rejection.

Paper II - CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P.Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Describe the management options of class 4 lupus nephritis. Justify each with relevant clinical trials.

2. Renal diseases in a patient with Human Immunodeficiency Virus (HIV) infection.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Describe evaluation of hematuria.
- 2. Management of membranoproliferative glomerulonephritis (MPGN).
- 3. Briefly explain the changes in renal functions associated with aging.
- 4. Management of steroid dependent nephrotic syndrome in a child.
- 5. Evaluation of a related kidney donor for a patient with Autosomal dominant polycystic kidney disease (ADPKD).
- 6. Xanthogranulomatous pyelonephritis.
- 7. Aminoglycoside induced nephrotoxicity how to reduce risk?
- 8. What is the pathogenesis of rhabdomyolysis induced Acute kidney injury? Describe about management?
- 9. Management of pregnancy induced hypertension.
- 10. Describe the principles of drug dosing in a patient with kidney disease.

Sub. Code:1202

D.M. – NEPHROLOGY

Paper II - CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P.Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Classify hypertensive disorders in pregnancy. Briefly describe the pathogenesis of preeclampsia. What are the steps of evaluation and antenatal management of a 24-week pregnant woman who comes to the clinic with a Blood pressure 144/92 mmHg who is otherwise asymptomatic at present?

2. Describe the important considerations for the diagnostic evaluation of a renal transplant recipient with a rising creatinine. How would you use the Banff classification in this situation?

II. Write notes on: $(10 \times 7 = 70)$

- 1. Calciphylaxis.
- 2. Neutrophil gelatinase-associated lipocalin.
- 3. Uremic pruritis.
- 4. Management of hypercalcemia.
- 5. C3 glomerulopathy.
- 6. Cinacalcet.
- 7. Vitamin D in chronic kidney disease.
- 8. Diuretics.
- 9. Hyperoxaluria.
- 10. Oxford classification of IgA Nephropathy.

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P.Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Mention the ISN / RPS classification of Lupus nephritis. Describe the management of class 4 lupus nephritis.

2. Explain the immunofluorescence (IF) on renal histology based classification of Membranoproliferative glomerulonephritis (MPGN) and its use.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Strategies for prevention of diabetic nephropathy.
- 2. Causes and management of acute kidney injury (AKI) in a patient on antiretroviral therapy for HIV infection.
- 3. Atheroembolic Renal disease.
- 4. Management of steroid dependent nephrotic syndrome in a child.
- 5. Nephronophthisis.
- 6. Management of an incidentally detected renal stone.
- 7. Renal diseases after snake envenomation.
- 8. What is the importance of Monoclonal gammopathy of renal significance?
- 9. How will you advise a lady with Chronic kidney disease who is planning her pregnancy?
- 10. Atypical hemolytic uremic syndrome Pathogenesis, Evaluation and Treatment options.

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

O.P. Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Describe Renal Pathology and functional abnormalities in sickle cell disease clinical syndrome associated. Impact of sickle cell disease and Renal Transplantation.

2. Describe in detail water treatment devices and processes for in-center Hemodialysis? What are the procedures for obtaining water samples? How will you monitor quality of water treatment?

II. Write notes on: $(10 \times 7 = 70)$

- 1. Copper sulphate poisoning and Acute Kidney injury Mechanism, modes of prevention and treatment prognosis.
- 2. Discuss changes in kidney in pregnancy. Write notes on renal disorders in pregnancy.
- 3. Describe the complex Rheology and pathogenesis in Malarial Acute Renal failure.
- 4. Describe the Renal syndromes peculiar in Tropical Countries. Discuss on Leptospiral AKI in detail.
- 5. Discuss in detail Cardiac arribythmias in hemodialysis patients. Monitoring and preventive strategies.
- 6. Describe the Pathology associated in the TTP, HUS. Discuss the Pathogenesis associated with endothelial damage.
- 7. Describe the fluid and electrolytes abnormalities complicating Diabetes Mellitus. Discuss K⁺ hemostasis and its management in DKA.
- 8. Genetic and Enzyme defect in Primary Oxalosis. Clinical features and Treatment options.
- 9. Renal complications of Hereditary Polycystic Kidney disease and its treatment.
- 10. Lithium Toxicity, Clinical Features and its Management.

NOVEMBER 2020 (AUGUST 2020 SESSION)

Sub. Code: 1202

D.M. – NEPHROLOGY

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P. Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Medical management of autosomal dominant polycystic kidney disease

2. Hyporesponsiveness to erythropoietin stimulating agents

II. Write notes on: $(10 \times 7 = 70)$

- 1. Sudden cardiac death in hemodialysis
- 2. Evaluation of coronary artery disease in chronic kidney disease- stage IV & V
- 3. Post-transplant lymphoproliferative disorders
- 4. IgG4-related renal disease
- 5. Evaluation of febrile acute kidney injury
- 6. Mechanisms of renal stone formation
- 7. Management of pregnancy in lupus nephritis
- 8. Treatment of steroid resistant nephrotic syndrome
- 9. Fibrillary glomerulonephritis
- 10. Thiazide induced hyponatremia

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P. Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Describe etiology, pathogenesis and management of acute kidney injury in chronic liver disease.

2. Describe etiology, pathogenesis and management of emphysematous pyelonephritis.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Thrombotic complications of nephrotic syndrome.
- 2. Management of metabolic acidosis of chronic kidney disease.
- 3. Ambulatory blood pressure monitoring and its relevance in nephrology.
- 4. Treatment of hyperuricemia in chronic kidney disease.
- 5. Cardio-renal syndrome.
- 6. Living donation from marginal donors.
- 7. Urinary micro RNA.
- 8. Transplant renal artery stenosis.
- 9. Tailoring immune suppression during infection in renal transplant recipients.
- 10. Tuberculosis in chronic kidney disease.

[DM 0822] AUGUST 2022 Sub. Code :1202

D.M. – NEPHROLOGY

Paper II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P. Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Describe the causes of malnutrition in a dialysis patient. Explain the methods of nutritional assessment in a dialysis patient. Write a note on management of malnutrition in a dialysis patient.

2. Discuss the clinical features, risk factors, diagnosis and management of CMV infection in a renal transplant patient. Mention the recent advances in the management of CMV infection.

II. Write notes on: $(10 \times 7 = 70)$

1. Evaluation and management of graft dysfunction immediate post transplant.

- 2. COVID-19 induced glomerular diseases.
- 3. Hepatorenal syndrome- current diagnostic criteria and management.
- 4. Enteric dialysis.
- 5. Renal lesions and management of Scleroderma renal crisis.
- 6. Growth hormone therapy in CKD.
- 7. Preeclampsia ACOG guidelines on diagnostic criteria and management.
- 8. Differential diagnosis of nodular glomerulosclerosis.
- 9. Bartter syndrome.
- 10. Type 4 RTA- causes and management.

[DM 0223] FEBRUARY 2023 Sub. Code :1202

D.M. – NEPHROLOGY

PAPER II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P. Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Discuss about pathogenesis and pathology of diabetic kidney disease. Novel therapies in diabetic kidney disease.

2. Write in detail about early vs late start of renal replacement therapy in acute kidney injury patients.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Renal lesions in mixed connective tissue disease.
- 2. Skin manifestations of chronic kidney disease and write in detail about Calcific Uremic Arteriolopathy.
- 3. Acute kidney injury in Scrub typhus.
- 4. Amphotericin nephrotoxicity.
- 5. Autosomal dominant tubulointerstitial kidney disease.
- 6. CKD of undetermined etiology in India.
- 7. Treatment of renovascular hypertension.
- 8. Pathogenesis and treatment of contrast induced nephropathy.
- 9. Anti-retroviral therapy and kidney.
- 10. Pathogenesis of renal stone formation.

[DM 0823] AUGUST 2023 Sub. Code :1202

D.M. – NEPHROLOGY

PAPER II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P. Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Enumerate the Renal lesions associated with Paraproteinemias. Discuss the pathology and management of Cast Nephropathy.

2. Pathophysiology and mitigation strategies of Cardiovascular Disease in Chronic Kidney disease.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Discuss on renal diseases associated with lymphomas.
- 2. What are Phosphatonins? Write a brief note on Fibroblast Growth Factor 23 (FGF-23).
- 3. Amphotericin related Nephrotoxicity.
- 4. Bone disease in Renal Transplant recipients.
- 5. Cryoglobulinemic Glomerulonephritis.
- 6. Lowe's syndrome.
- 7. Wasp sting induced acute Kidney injury.
- 8. IgA dominant infection related Glomerulonephritis.
- 9. Pathophysiology and management of Hypophosphatemic Rickets.
- 10. Thrombotic Microangiopathy in Medical Oncology unit.

[DM 0124] JANUARY 2024 Sub. Code :1202

D.M. – NEPHROLOGY

PAPER II – CLINICAL NEPHROLOGY, DIALYSIS, TRANSPLANTATION

Q.P. Code: 161202

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Enumerate the causes of Pigment Nephropathy in India and give a brief outline of management.

2. Discuss the recent advances in the pathogenesis and treatment of Idiopathic Membranous Nephropathy.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Discuss the causes and management of acute kidney injury associated with acute Pancreatitis.
- 2. Fibrillary glomerulonephritis.
- 3. Autosomal dominant Tubulointerstitial kidney disease.
- 4. Enumerate Podocytopathies and write a brief note on Diffuse Mesangial Sclerosis.
- 5. Clinical features and management of Fabry's disease.
- 6. Kidney involvement in Antiphospholipid antibodies.
- 7. Discuss the defense mechanism in the Kidney and Urinary Tract against Urinary Tract Infections and briefly outline on the management of Acute Pyelonephritis.
- 8. Pathomechanism and management of Uremic pruritus.
- 9. Write short notes on Henoch-Schönlein Purpura.
- 10. Causes and management of growth retardation in Chronic Kidney disease.