DM Nephrology – Final key

- 1 "Purple urine bag syndrome" occurs in which of the following situations
- A) Chyluria
- B) Urinary excretion of porphobilinogen
- C) Enterococcal infection in patients with permanent bladder catheterization
- D) Alkaptonuria
- 2 In a patient with malignancy with bone metastasis and hypercalcemia causing acute kidney injury, which of the following diuretics would you prefer?
- A) Chlorthalidone
- B) Mannitol
- C) Spironolactone

D) Bumetanide

- 3 With respect to animal models in Nephrology, for which condition was Heyman nephritis studied as an animal model?
- A) Minimal change disease

B) Primary membranous nephropathy

- C) Diabetic nephropathy
- D) Anti-Glomerular Basement Membrane disease
- 4 The leukocyte esterase dipstick test is a simple and valuable tool for the clinician. Which of the statements regarding this test is NOT true?
- A) It is based on activity of an indoxyl esterase released from lysed neutrophils
- B) High urinary protein (≥5 g/l) leads to a false-negative result
- C) Formaldehyde used as urine preservative leads to a false-positive result

D) High specific gravity leads to increased leukocyte lysis

- 5 Regarding computerized tomography urography (CTU) and magnetic resonance urography (MRU), which of the following statements is NOT true?
- A) Both are comparable in identifying the anatomic location of urinary tract obstruction
- B) CTU is preferable to evaluate urinary tract calculi
- C) MRU is superior to CTU in identifying non-calculous causes of obstruction

D) CTU is preferred in depicting anatomy in patients with urinary diversion to bowel conduits

- 6 The MOST common cause of peritoneal dialysis peritonitis is
- A) Escherichia coli
- B) Streptococcus faecalis
- C) Staphylococcus aureus

D) Staphylococus epidermidis

- 7 Unfractionated heparin is the most commonly used anticoagulant in the hemodialysis unit. Of the following complications, which one is NOT usually attributed to unfractionated heparin?
- A) Osteoporosis

B) Hypertension

- C) Generalized itching immediately after administration of the drug
- D) Transient thrombocytopenia

- 8 Mr.T is planned for a renal biopsy to elucidate the etiology of high proteinuric renal illness. Which of the following statements regarding renal biopsy is TRUE?
- A) Immediately after biopsy a sample of renal tissue is placed in liquid paraffin for preservation for light microscopy

B) Normal saline and snap freezing are good preservation media/method for immunofluoresence samples

- C) Glyceraldehyde is the medium for transport of samples for electron microscopy
- D) Sometimes the same solvent can be used for light microscopy, immunofluoresence and electron microscopy samples
- 9 26 year old Ms.A is a renal allograft recipient who received her kidney from her mother. She developed severe diarrhea and required hospitalization and intravenous fluids. Which of her drugs are likely to show a higher value if measured now?

A) Tacrolimus

- B) Cyclosporine
- C) Mycophenolate mofetil
- D) Azathioprine
- 10 Mr.N developed hematuria and hypotension following a renal biopsy. Immediate angiogram showed that the source of bleeding was from an arterio-venous fistula. Which of the following statements regarding post renal biopsy arterio-venous fistula is NOT true
- A) May be found in nearly 18% of biopsied patients
- B) May cause hypertension
- C) Recurrent hematuria may be a clue to the diagnosis

D) Absence of clots is a pointer that the source of bleeding is the arterio-venous fistula

11 Mr.S is a renal allograft recipient who developed cytomegalovirus (CMV) disease in the post-transplant period. He has fever, diarrhea and his viral load was high. Which of the following is most appropriate therapy?

A) Intravenous ganciclovir

- B) Oral Valganciclovir
- C) Oral Leflunomide
- D) Intravenous Foscarnet
- 12 Regarding atrial natriuretic peptide (ANP), which of the following statements is NOT true?
- A) Acts by dilating the afferent arteriole and constricting the efferent arteriole
- B) Reduces renin secretion

C) Increases aldosterone secretion

- D) Mainly produced in the cardiac atria
- 13 You have been called to the Emergency Room to see a 77 year old patient with severe diarrhea. Which of the following is in keeping with a diagnosis of SEVERE volume loss?

A) Peripheral cyanosis

- B) Reduced skin turgor
- C) Tachycardia with heart rate > 100/minute
- D) Postural drop in systolic blood pressure of 15 mmHg in standing position
- 14 Using Fractional Excretion of Sodium (FENa) may be useful in the management of patients with acute kidney injury. What is the formula for FENa?

A) [Urine Na x Plasma creatinine] / [Urine creatinine x Plasma Na] x 100

- B) [Urine creatinine x Plasma Na] / [Urine Na x Plasma creatinine] x 100
- C) [Urine Na x Plasma Na] / [Urine creatinine x plasma creatinine] x 100
- D) [Urine creatinine x Plasma creatinine] / [Urine Na x Plasma Na] x 100

- 15 Calcineurin inhibitors like Cyclosporine are useful in many glomerular diseases and in transplantation. Cycosporine may cause which of the following effects in kidney?
- A) Hypotension
- B) Hypokalemia

C) Phosphaturia

- D) Uricosuria
- 16 All the following are conditions of renal sodium retention and fluid volume expansion EXCEPT

A) Hypothyroidism

- B) Nephrotic syndrome
- C) Idiopathic edema
- D) Drug-induced edema
- 17 Mr.L is a patient of minimal change disease. He was put on furosemide for his edema. Which of the following side-effects are unlikely to occur
- A) Hypokalemia
- B) Hypomagnesemia

C) Hypouricemia

- D) Ototoxicity
- 18 Mr.S is a patient with primary focal and segmental glomerulosclerosis that has been resistant to therapy. He presents with severe edema despite being on Torsemide 40mg once daily. His estimated glomerular filtration rate is 25ml/min. His electrolytes are: Na 130mg%, K 2.9mg%, HCO3 26mg%. All the following may be now be attempted EXCEPT
- A) Salt restriction
- B) Increasing the frequency of Torsemide
- C) Addition of Spironolactone
- D) Addition of Chlorthalidone

(Question is deleted)

19 One of the homeostatic mechanisms employed in the human kidney is glomerular tubular balance. What is meant by glomerular tubular balance?

A) Proportionate to the Na⁺ delivered to a nephron segment, Na⁺ reabsorption will alter

- B) Proportionate to change in size of the glomerulus, the length of tubule will accordingly change
- C) Proportionate to changes in delivery of NaCl to the macula densa, the afferent arteriolar caliber will change
- D) Proportionate to changes in degree of ADH stimulation, the number of Aquaporins increase
- 20 The kidney is a site of several inherited disorders. A patient has increased expression of apical Na⁺ channels of the principal cells. What disorder is he likely to have?
- A) Gitelman syndrome

B) Liddle syndrome

- C) Bartter syndrome
- D) Pseudohypoaldosteronism type 1b
- 21 In patients with end stage renal disease on hemodialysis with severe secondary hyperparathyroidism, hypercalcemia and hyperphosphatemia, the treatment of choice you would consider first is

A) An oral calcimimetic

- B) Oral pulse calcitriol
- C) Intravenous pulses of calcitriol
- D) Parathyroidectomy at the earliest

- 22 Regarding acetazolamide use, which of the following statements is true?
- A) Acts by blocking the activity of Na⁺-H⁺ exchanger in distal tubule

B) Leads to hyperchloremic metabolic acidosis with prolonged use

- C) Impaired distal sodium absorption may lead to hyperkalemia
- D) Is a potent diuretic but under utilized due to lack of easy availability
- 23 Mr.K is a prospective renal transplant recipient who has come for counseling. He is worried about the risk of clinical recurrence of his native kidney disease. Which of the following is least likely to recur in his new kidney?
- A) Focal and segmental glomerulosclerosis

B) Anti-Glomerular Basement Membrane disease

- C) IgA nephropathy
- D) Hemolytic Uremic Syndrome
- 24 Regarding mannitol's action as a diuretic, which of the following statements is NOT true?
- A) It is freely filtered at the glomerulus but is poorly reabsorbed
- B) Diuretic action is by increasing osmotic pressure within the lumen of proximal tubule and loop of Henle

<u>C) Particularly useful as an adjunct to loop diuretics in patients with left ventricular systolic dysfunction</u>

- D) Useful to reduce cerebral edema and intraocular pressure
- 25 Urine specific gravity is part of urinalysis but is seldom looked at carefully. Which of the following statements is NOT true regarding urine specific gravity?
- A) It is measured using dipsticks by visualizing color changes from blue to blue green to yellow
- B) If the urinary pH is more than 6.5, it may leads to an under-estimation of the specific gravity
- C) If the urine specific gravity is more than 1.04, it indicates an added osmotic agent

D) The test is not influenced by proteinuria

26 Which of the following is the MOST potent stimulus for thirst

A) Hypertonicity

- B) Hypovolemia
- C) Hypotension
- D) Angiotensin II
- 27 If C-water is electrolyte free water, V is urinary flow volume, U-osm is Urinary osmolality, P-osm is Plasma osmolality, U-Na is urine spot sodium concentration and P-Na is Plasma sodium concentration, What is the formula for calculation of electrolyte free water?

A) C-water = V[1-(U-osm / P-osm)]

- B) C-water = V[1-(P-osm / U-osm)]
- C) C-water = V[1-(U-Na / P-Na)]
- D) C-water = V[1-(P-Na / U-Na)]
- 28 Which of the following drugs may be useful in the treatment of hepatorenal syndrome?
- A) Spironolactone

B) Terlipressin

- C) Torsemide
- D) Chlorthalidone

29 In the glomerulus, where do the afferent arterioles arise from?

- A) Main renal arteries
- B) Arcuate arteries
- C) Interlobar arteries

D) Interlobular arteries

- 30 Which of the following statements regarding pseudohyponatremia is NOT true?
- A) Occurs when the solid phase of plasma is increased by large increase in plasma lipids
- B) Occurs when the solid phase of plasma is increased by large increase in plasma proteins
- C) Occurs when the blood glucose levels are above 500mg%
- D) Not seen with the ion-selective potentiometry technique of sodium estimation
- 31 A renal allograft recipient has developed disseminated cryptococcosis and you have prescribed him intravenous amphotericin. Which of the following is NOT true?
- A) By binding to sterols in the cell membranes, Amphotericin forms pores that increase membrane permeability
- B) The deoxycholate in which amphotericin is suspended has a detergent effect on cell membranes
- C) <u>Liposomal amphotericin is preferred because it reduces the likelihood of acute kidney injury by</u> more than 90%
- D) Intravenous saline prior to amphotericin may decrease risk of worsening of renal function
- 32 Regarding salt-losing nephropathy, all the following are true EXCEPT
- A) May occur in advanced chronic kidney disease (GFR < 15ml/min) due to interstitial disease
- B) Chronic hyponatremia and hypovolemia are usual findings
- C) May occur in type 1 renal tubular acidosis
- D) May occur in type 2 renal tubular acidosis
- 33 An elderly gentleman presents with cough, hemoptysis and fatigue. There is no fever. He is normotensive with pallor and mild pedal edema. The laboratory parameters showed severe anemia (Hb 6.1g/dl), severe renal failure (creatine 12.7mg%). There was microscopic hematuria with erythrocyte casts on urinalysis. Which of the following is your best guess as to the etiology of kidney disease?
- A) Collapsing focal and segmental glomerulosclerosis
- B) Membranous nephropathy due to Hepatitis B virus infection
- C) Anti-Glomerular Membrane Disease
- D) Post-streptococcal glomerulonephritis
- 34 Which of the following is a side-effect of chronic Lithium therapy
- A) Drug induced vasculitis
- B) Nephrogenic diabetes insipidus
- C) Hypocalcemia
- D) Focal and segmental glomerulosclerosis
- 35 The kidney is the main route of elimination of which of the following beta-blockers?
- A) Carvedilol
- **B)** Atenolol
- C) Metoprolol
- D) Labetolol

- 36 Patients who present with chronic hyponatremia are at risk of osmotic demyelination. Which of the following is NOT a risk factor for osmotic demyelination
- A) Plasma [Na+] <105 mmol/L
- B) Alcoholics

C) Obese individuals

- D) Elderly women on thiazides for hypertension
- 37 In the differential diagnosis of enlarged kidneys, which of the following is the odd one out?
- A) Amyloidosis
- B) Renal vein thrombosis

C) Sickle cell nephropathy

- D) HIV associated collapsing glomerulopathy
- 38 Which of the following is a risk factor for new onset diabetes after solid organ transplantation?
- A) Azathioprine
- B) Age less than 18 years

C) Body Mass Index more than 30 kg/m²

- D) Human immunodeficiency virus infection
- 39 The therapeutic range of area under curve for Mycophenolate Mofetil recommended in kidney transplant recipients is
- A) 1-2 mg.h/L
- B) 10-30 mg.h/L
- C) 30-60 mg.h/L
- D) 60-80 mg.h/L
- 40 In a patient with membranous nephropathy, all the following drugs may be useful EXCEPT

A) Eculizumab

- B) Rituximab
- C) Cyclophosphamide
- D) Adrenocorticotropic Hormone
- 41 Eosinophils in urine are seen in all of the following except
- A) Chronic pyelonephritis
- B) Glomerulonephritis
- C) Cholesterol embolism
- D) Acute cellular rejection

(Question is deleted)

- 42 Negative nitrite stick test is seen with all of the following except
- A) Staphylococcus albus
- B) Enterococcus fecalis
- C) Staphylococcus saprophyticus

D) Proteus

- 43 Star shaped crystals are seen in
- A) Calcium oxalate bihydrate & amoxicillin

B) Calcium phosphate & ciprofloxacin

- C) Calcium oxalate monohydrate & Amoxcillin
- D) Calcium phosphate & indinavir

- 44 Regarding IgA nephropathy which of the following is true?
- A) Capillary loop Ig A deposit in renal biopsy is a good prognostic marker

B) plgA1 production is down regulated in the mucosa and up regulated in the bone marrow

- C) Animal models of IgA nephropathy have provided greater insights into mechanisms that underlie mesangial IgA deposition in humans
- D) Nephrotic syndrome occurs in 30% of IgA nephropathy and 5% of Henoch Schonlein purpura
- 45 Elemental calcium content per gram is least in which of the following salts
- A) Calcium Carbonate
- B) Calcium Chloride
- **C)** Calcium Gluconate
- D) Calcium Lactate
- 46 Hypophosphatemia is seen in all except
- A) Respiratory alkalosis
- **B)** Tumoral calcinosis
- C) Refeeding syndrome
- D) Oncogenic osteomalacia
- 47 Regarding Ethylene glycol poisoning, which of the following is TRUE?
- A) Initial effects of poisoning are cardiorespiratory
- B) Renal failure and oxalate crystals develop in first 12 to 24 hours
- C) Fatal dose is approximately 100 ml
- D) After 48 hours of poisoning white matter hemorrhages appear
- 48 Hyperkalemia and persistently low TTKG (Transtubular Potassium Gradient) after administration of fludrocortisone is seen with all of the following except
- A) Systemic Lupus Erythematosis
- **B)** Ketaconazole
- C) Calcineurin inhibitors
- D) Sickle cell disease
- 49 Liquorice is a potent inhibitor of
- A) 11 beta hydroxylase

B) 11 beta hydroxysteroid dehydrogenase

- C) 17 alpha hydroxylase
- D) Aldosterone synthase
- 50 Anti Retroviral Drugs that do not need dose adjustments in renal failure are all except

A) Emtricitabine

- B) Nevirapine
- C) Atazanavir
- D) Raltegravir
- 51 Hyponatremia, excess sodium chloride loss in sweat and recurrent lower respiratory tract infection is a feature of
- A) Pseudohypoaldosteronism type 2
- B) Autosomal dominant Pseudohypoaldosteronism type 1
- C) Autosomal recessive pseudohypoaldosteronism type 1

- D) Pseudohyperaldosteronism
- 52 Renal replacement therapy in HIV patients choose the incorrect statement
- A) Choice of dialysis modality has no impact on survival in HIV patients on ART
- B) There is no need for separate dialysis machines

C) <u>Human immune deficiency virus survives in peritoneal effluents at room temperature for up to 12 weeks</u>

- D) Risk of HIV seroconversion after a needle stick injury is estimated to be 0.3%
- 53 Both cortical and medullary nephrocalcinosis is seen in
- A) Tuberculosis
- B) Transplant rejection
- C) Oxalosis
- D) Hyperparathyroidism
- 54 Regarding Thrombotic Microangiopathy (TMA), which of the following is true?
- A) TMA associated with chemotherapeutic drugs is an idiosyncratic reaction

B) Antibiotics are indicated in neuraminidase associated HUS (Hemolytic Uremic Syndrome)

- C) Quinine induces autoantibody to ADAMTS 13
- D) Plasma exchange is ineffective for quinine induced TMA
- 55 Lead nephropathy is suggested by the triad of
- A) Gout, aminoaciduria, renal insufficiency

B) Gout, hypertension, renal insufficiency

- C) Hyperuricemia, hypertension, glycosuria
- D) Hyperphosphatemia, renal insufficiency, Hyperuricemia
- 56 Identify the incorrect statement about Peginesatide

A) Has a amino acid structure closely resembling native erythropoietin

- B) Dosing frequency of once a month
- C) Does not cross react with Anti EPO antibodies
- D) Stable at room temperature
- 57 Granular cells are located in
- A) Extraglomerular mesangium
- B) Proximal portion of afferent arteriole
- C) Intraglomerular mesangium

D) Afferent arteriole near its vascular pole

58 Molecular weight of Myoglobin is approximately

A) 17,000 DALTON

- B) 67,000 DALTON
- C) 12,000 DALTON
- **D) 1500 DALTON**
- 59 All are T cell depleting induction agents used in renal transplant recipients except

A) Daclizumab

- B) OKT3
- C) Alemtuzumab
- D) Antithymocyte globulin

- 60 A glomerular disease which predisposes to Goodpasture's disease is
- A) Membrano proliferative glomerulonephritis
- B) Minimal change disease
- C) Focal and Segmental Glomerulosclerosis
- D) Membranous nephropathy
- 61 Risk factors for NEW ONSET DIABETES AFTER TRANSPLANT are all except

A) Spouse donor transplant

- B) Presence of HLA B27 in recipient
- C) Use of sirolimus as immunosuppressant
- D) Male gender of recipient
- 62 1 CLIP 2 KIDNEY Hypertension model is seen in all of the following except
- A) Renal artery aneurysm
- B) Congenital arteriovenous fistula
- C) Atherosclerotic renal artery disease
- D) Vasculitis
- 63 Which of the following is not true regarding Alport's syndrome
- A) Hematuria and not proteinuria is the earliest finding in affected males

B) Anterior lenticonus occur in 50% of X linked Alport's syndrome

- C) Maculopathy is a common ocular manifestation
- D) Leiomyomatosis of thr trachea and esophagus is associated with Alport's syndrome
- 64 Fractional excretion of phosphate in non renal phosphate loss is
- A) < 20%
- B) < 15%
- C) < 10%
- <u>D) < 5%</u>
- 65 Drugs that decrease blood levels of calcineurin inhibitors are all except

A) Methyl prednisolone

- B) Caspofungin
- C) St. John's Wort
- D) Rifampin
- 66 Maltese cross appearance on urinalysis under polarized microscopy is produced by
- A) Neutral fat

B) Cholesteryl ester

- C) Triglycerides
- D) Lipid laden macrophages
- 67 Recurrent glomerular disease occuring post transplant that is commonly associated with graft loss is seen in

A) Type 1 MPGN (Membrane Proliferative Glomerulonephritis)

- B) Type 2 MPGN (Membrane Proliferative Glomerilonephritis)
- C) Type 1 Diabetes mellitus
- D) Ig A Nephropathy

68 Sulfonylurea preferred in renal failure

A) Glipizide

- B) Glimipiride
- C) Glibenclamide
- D) Gliburide
- 69 Pick out the wrong statement
- A) Measurement of Ph with Dipstick is not desirable for Ph values below 5.5 and above 7.5
- B) Bromocresol green is the indicator used to estimate specific gravity by Dipstick
- C) Urine in Hypermethionemia has fishy odour
- D) Hexokinase method is used for precise estimation of glucose in Urine
- 70 Risk factors for radio-contrast AKI are all except
- A) Age > 75 years
- B) Hematocrit < 30% for men
- C) Intra arterial injection of contrast
- D) Use of IODIXANOL as contrast agent
- 71 Morphological variant of Focal and Segmental Glomerulosclerosis (FSGS) seen commonly in secondary forms of FSGS
- A) Classic variant
- B) Cellular variant
- C) Perihilar variant
- D) Tip variant
- 72 A 35 year old man presents to the renal clinic with hematuria. On questioning, he reveals that a day prior to onset of hematuria, he began to have running nose and a sore throat. He is hypertensive and has renal impairment and sub-nephrotic proteinuria. What is his likely diagnosis
- A) Post-streptococcal glomerulonephritis
- B) Minimal Change Disease
- C) Membranous Nephropathy
- D) IgA Nephropathy
- 73 Regarding LUPUS NEPHRITIS which is true?
- A) Class V is the most commonly described lesion in post transplant recurrent of lupus nephritis
- B) Lupus podocytopathy shows class III changes in renal biopsy
- C) Complement levels are reliable markers of disease recurrent post transplant
- D) Asymptomatic tubular abnormalities are seen in 60 to 80% of patients with lupus
- 74 Renal biopsy findings in diabetic nephropathy are all except
- A) Mesangial matrix expansion is the most consistently associated feature with disease progression
- B) Diffuse glomerulosclerosis is more frequent than nodular glomerulosclerosis
- <u>C)</u> <u>Arteriolar hyalinosis characteristically involves only the afferent arteriole</u>
- D) Tubulointerstitial fibrosis is more frequent in type 2 than in type 1 diabetes
- 75 Toxin which causes a high osmolar gap without causing metabolic acidosis
- A) Ethylene glycol
- **B)** Isopropyl alcohol
- C) Propylene glycol

D) Methyl alcohol
76 In congenital membranous nephropathy antibody is directed against which antigen on podocytes?
A) Podocin B) Phospholipase A2 receptor C) Megalin D) Neutral endopeptidase
77 Familial hypomagnesemia with hypercalciuria, nephrocalcinosis and chorioretinitis is seen with mutation in
A) Claudin 16 B) Claudin 19 C) TRMP 6 D) Epidermal Growth Factor
78 Outer medullary blood flow is about
A) 2.5 ml/g/min B) 5 ml/g/min C) 0.5 ml/g/min D) 0.6 ml/g/min
79 Pick out the correct statement regarding Tumour Lysis Syndrome (TLS)
 A) High dose allopurinol is started on the day of chemotherapy B) Rasburicase is ineffective in patients with impaired renal function C) Rasburicase is safe in patients with G 6 PD deficiency D) Cairo Bishops clinical definition of TLS includes seizures and cardiac arrhythmia
80 Urinary CD80 level is increased in
 A) Minimal change disease B) Primary Amyloidosis C) Primary Focal and Segmental Glomerulosclerosis D) Primary Membranous Nephropathy
81 Ureteric bud induction is mediated by all except
A) Wnt 4 B) Pax 2 C) Glial Cell -Derived Neurotrophic Factor D) WT-1
82 1 ml of Baking Soda provides m EQ of sodium bicarbonate
A) 2 B) 7.7 C) 10 D) 12
83 Fetal kidney ascends to its adult position by
A) 9 th week B) 12 th week C) 20 th week D) 16 th week

- 84 Trigone of bladder is formed by
- A) Vesical part of urogenital sinus
- B) Pelvic part of urogenital sinus
- C) Caudal end of mesonephric duct
- D) Splanchnic mesenchyme
- 85 Volume of contrast for micturating cystourethrogram in a 8 year old child is
- A) 200 ml
- B) 120 ml
- C) 300 ml
- D) 150 ml
- 86 Nodules in renal biopsy are seen in all of the following except
- A) MPGN (Membrane Proliferative Glomerulonephritis)

B) IgA nephropathy

- C) Amyloidosis
- D) Light chain deposition disease
- 87 Expanded criteria donors are

<u>A) Deceased donors older than 50 years with serum creatinine > 1.5 mg/dl and pre-existing hypertension</u>

- B) Deceased donors older than 55 years of age
- C) Deceased donors older than 50 years with serum creatinine > 2 mg/dl and pre existing diabetes
- D) Spouse donors
- 88 Absolute contra indications to renal transplantation are all except
- A) Active drug dependence
- B) Sepsis

C) ABO incompatibility

- D) Uncontrolled psychosis
- 89 All of the following stain collagen in renal biopsy except
- A) Van Gieson stain

B) Grocott's stain

- C) Masson's trichrome stain
- D) Sirius red stain
- 90 Calcium absorption is maximum in which segment of nephron?

A) Proximal convoluted tubule

- B) Thick ascending limb of Henle's loop
- C) Distal convoluted tubule
- D) Proximal pars recta
- 91 Predominant histological subtype in patients with renal cell carcinoma who develop metastasis is
- A) Papillary cell carcinoma

B) Clear cell carcinoma

- C) Chromophobic cell carcinoma
- D) Bellini duct carcinoma

92 Pulmonary renal syndromes are all except

A) Fibrillary immunotactoid disease

- B) Cryoglobulinemia
- C) Henoch Schonlein purpura
- D) Microscopic polyangiitis
- 93 A 26 year old woman with established diagnosis of lupus nephritis for the past 4 years, on maintenance immuno suppression with mycophenolate mofetil (MMF), prednisolone and Hydroxychloroquine visits you for opinion regarding planning her pregnancy. On reviewing her records you find that her disease has been under remission for the past 12 months. All of the following are the appropriate steps to be taken except

A) Hydroxychloroquine should be withheld during pregnancy

- B) MMF should be stopped atleast 6 weeks before conception
- C) MMF should be replaced with Azathioprine
- D) Lupus anticoagulant should be tested before pregnancy
- 94 Choose the incorrect statement regarding treatment of fungal urinary tract infection
- A) Candida krusei species are resistant to fluconazole
- B) Echinocandins have minimal or no excretion into urine as active drug
- C) Fluconazole requires dose adjustment in renal failure

<u>D)</u> <u>Lipid formulations of amphotericin are recommended for treatment of fungal urinary tract infections</u>

- 95 Macroglossia, omphalocoele, hepatoblastoma, Wilms tumour, medullary cysts are a feature of
- A) Zellweger Syndrome
- B) Bardet Biedel Syndrome
- C) Mecket Gruber Syndrome

D) Beckwith Wiedemann Syndrome

- 96 Active histological lesions of lupus nephritis are all except
- A) Karryorhexis
- B) Hematoxylic bodies
- C) Hyaline thrombi

D) Extramembranous deposits

- 97 All of the following statement are true about hepatitis B virus (HBV) associated renal disease except
- A) Membranoproliferative glomerulonephritis type I is the most common lesion in Adult HBV carriers

B) HBV related membranous nephropathy rarely progresses to renal failure in adults

- C) HBV related polyarteritis nodosa is commonly seen in adult men with history of iv drug abuse
- D) Hypocomplementemia is seen in up to 50% of patients with HBV related membranous nephropathy
- 98 Anti hypertensive with potent PPAR γ agonist activity
- A) Perindopril
- B) Eprosartan
- C) Telmisartan
- D) Clinidipine

99 All are features of Hypokalemia except

- A) Rhabdomyolysis
- B) Renal cyst formation
- C) Increased renal vascular resistance

D) Suppresses ammoniagenesis in the proximal convoluted tubule

100 Which of the following statement is true about CKD mineral and bone disorders?

A) Fetuin A is protective against vascular calcification

- B) Hemodialysis is a risk factor for adynamic bone disease
- C) FGF 23 inversely correlates with Left Ventricular Hypertrophy and atherosclerosis in CKD patients
- D) Hyperphosphatemia increases the responsiveness of parathyroid gland to the actions of calcitriol

Note: This is the final key. No further queries or objections from the candidates will be entertained under any circumstances.