1. The first tributary to inferior vena cava is
   A) Lumbar vein
   B) Right gonadal vein
   C) **Middle sacral vein**
   D) Renal vein

2. Origin of genito femoral nerve
   A) Anterior Rami of L2 and L3
   B) **Anterior Rami of L1 and L2**
   C) Anterior Ramus of L1
   D) Anterior rami of L2 and L4

3. The extensions of renal cortex between the pyramids is known as
   A) Renal medulla
   B) Renal papilla
   C) Minor calyx
   D) **Columns of Bertin**

4. The Dartos layer is continuous with the following **except**
   A) Colle’s Fascia
   B) Dartos Fascia of Penis
   C) **Buck’s Fascia of Penis**
   D) Scarpa’s Fascia

5. The testes is enclosed in a tough capsule comprising the following **except**
   A) Visceral layer of Tunica vaginalis
   B) Tunica albuginea
   C) **Spermatic fascia**
   D) Tunica vasculosa

6. Peyronie’s disease is due to
   A) Fibrosis of tunica albuginea
   B) Fibrosis of Buck’s fascia
   C) Fibrosis of Dartos fascia
   D) **Fibrosis of corpora**

7. Glomerular hematuria is characterized by the following **except**
   A) Dysmorphic RBC
   B) RBC cast
   C) Proteinuria
   D) **Circular erythrocytes**

8. One of the major stimulus for ADH release is
   A) Hypo osmolarity
   B) Hyper volemia
   C) **Hyper osmolarity**
   D) Phenytoin
9. Main components of Renin-angiotensin aldosterone system (RAAS) are the following except

A) Renin  
B) Angiotensin Converting Enzyme (ACE)  
C) Erythropoietin  
D) Angiotensinogen

10. The preference isotope in Diuretic renography is

A) DTPA  
B) DMSA  
C) Radionuclide iodinated Hippuran  
D) $^{99m}$Tc – MAG$_3$

11. Contraindications to percutaneous endo pyelotomy are the following except

A) Development of calculi  
B) Long segment of obstruction (>2cm)  
C) Active infection  
D) Untreated coagulopathy

12. The only absolute contraindication for trans uretero-ureterostomy is

A) Presence of stones  
B) Retroperitoneal fibrosis  
C) Chronic pyelonephritis  
D) Insufficient length of donor ureter

13. In renal trauma, absolute indications for exploration are all of the following except

A) Hematuria  
B) Persistent renal bleed  
C) Expanding perirenal hematoma  
D) Pulsatile perirenal hematoma

14. Adrenal cortex develops from

A) Mesoderm  
B) Endoderm  
C) Neurectoderm  
D) Primitive germ cell

15. Hallmark of adrenal tumor with Hirsutism in women is

A) Elevated serum level of cortisol  
B) Elevated serum level of metanephrin and nor metanephrin  
C) Elevated serum level of testosterone & DHEA  
D) Decreased serum level of testosterone & DHEA

16. MullerianInhibiting substance (MIS) is produced by

A) Sertoli cell  
B) Leydig cell  
C) Prostate  
D) Ovaries
17 Nephron is derived from
A) Mesonephros
B) **Meta nephric mesenchyme**
C) Ureteric bud
D) Pronephros

18 Hemolytic uremic syndrome is a classic triad **except**
A) Jaundice
B) Hemolytic microangiopathic anemia
C) Thrombocytopenia
D) Renal insufficiency

19 Ask–Upmark kidney is described as
A) Form of congenital cystic disease of kidney
B) **Form of segmental hypoplasia of kidney**
C) Part of adult polycystic kidney
D) Part of Von Hippel Lindau disease

20 Autosomal dominant polycystic kidney (ADPK) is characterized by the following **except**
A) Gene defect in chromosome 16 & 4
B) Derived from entire nephron
C) Manifests at 3rd – 4th decades
D) **Derived from collecting duct**

21 Multicystic dysplastic kidney is
A) Part of Autosomal Dominant Polycystic Kidney
B) **Severe form of non genetic dysplasia**
C) Benign multilocular cyst
D) Acquired renal cystic disease

22 Precalyceal canalicular ectasia is
A) **Medullary sponge kidney**
B) Extra renal calyces
C) Megacalicosis
D) Calyceal diverticulum

23 The key study in the diagnosis of posterior urethral valve is
A) Ultrasonography
B) Radionuclide renal scan
C) **Voiding cystourethrography**
D) Urodynamics

24 Hematuria –Dysuria syndrome occurs as
A) Interstitial cystitis
B) **After gastrocystoplasty**
C) Radiation cystitis
D) Carcinoma In Situ of Bladder
25 Circumcision should not be performed in neonates in the following except

A) Hypospadias
B) Chordee without hypospadias
C) Webbed penis
D) Meatal stenosis

26 Aphallia results from

A) Failure of development of genital tubercle
B) Failure of gonadal descent
C) Absence of androgen receptors
D) Absence of Mullerian inhibitor Substance

27 The following are the Urachal anomalies except

A) Umbilical urachal sinus
B) Urachal cyst
C) Exstrophy bladder
D) Vesico-urachal diverticulum

28 Nephron consists of following except

A) Glomerulus
B) Proximal tubule
C) Loop of Henle
D) Ureteric Bud

29 Collecting system consists of the following except

A) Distal tubule
B) Collecting duct
C) Calyces
D) Pelvis

30 Paramesonephric duct gives rise to following except

A) Fallopian tube
B) Uterus
C) Upper 2/3 of vagina
D) Gartner duct cyst

31 Urine production in human kidney is known to begin about

A) 5 weeks of intra uterine life
B) 6-8 weeks of intra uterine life
C) 8-10 weeks of intra uterine life
D) 10-12 weeks of intra uterine life

32 The three layers of Lumbo –Dorsal Fasciae are the following except

A) Anterior
B) Middle
C) Posterior
D) Lateral
33 In male, the termination of ectopic ureter can be one of the following except

A) Posterior urethra  
**B) Anterior urethra**  
C) Seminal vesicle  
D) Ejaculatory duct

34 Columns of Bertin are

**A) Extension of renal cortex between the renal pyramids**  
B) Extension of renal medulla between the renal pyramids  
C) Extension of pyramids into the renal sinus  
D) Extension of renal papilla into minor calyx

35 One French scale is equal to

**A) 0.33 mm**  
B) 0.033 mm  
C) 0.33 cm  
D) 3.3 mm

36 Choice of investigation is emphysematous pyelonephritis is

A) Plain X-ray KUBU  
B) Doppler ultrasound  
**C) CT Scan**  
D) Radionuclide scan

37 Renal carbuncle is collection of purulent material

A) Confined to collecting system  
B) **Confined to renal parenchyma**  
C) Confined to renal capsule  
D) Confined to Gerota’s fascia

38 Reiter’s syndrome comprises the following except

A) Urethritis  
B) Arthritis  
C) Conjunctivitis  
**D) Stricture urethra**

39 In apoptosis all are true except

A) Programmed cell death  
B) Integrated with DNA repair and cell cycle  
C) Plays a vital role in normal development  
**D) Due to mutation**

40 The first virus linked human tumor formation is

A) Hepatitis B virus  
B) **Epstein Barr virus**  
C) Human papilloma virus  
D) Human T cell leukemia virus
41 All of the following biomaterials are used for genito urinary tissue engineering except

A) Collagen
B) Alginate
C) Polyesters
D) Silicone

42 LH and FSH are secreted by

A) Anterior pituitary
B) Posterior pituitary
C) Testes
D) Ovaries

43 Epididymal tubule length is

A) 3-4 millimeter
B) 3-4 centimeters
C) 3-4 meters
D) 3-4 micro millimeter

44 Entire spermatogenic process in human requires approximately

A) 90 days
B) 74 days
C) 64 days
D) 102 days

45 All the following are Premalignant penile lesions except

A) Bowen’s disease
B) Lichen sclerosus
C) Erythroplakia
D) Hirsute papilloma

46 In carcinoma penis partial penectomy needs tumor clearance of

A) 1.5 cm proximal to tumor
B) 2 cm proximal to tumor
C) 2.5 cm proximal to tumor
D) 1 cm proximal to tumor

47 Radical penectomy is

A) Penectomy with excision of corporal bodies
B) Penectomy without removal of corpora
C) Penectomy at the level of suspensory ligament
D) Penectomy with sufficient length of urethra for upright voiding

48 Distal urethral carcinoma in females - all are true except

A) Low staged
B) Cure rate up to 70-90%
C) Excision of distal urethra and anterior vaginal wall
D) Total urethrectomy with reconstruction
49 Syndrome of hypochloremic metabolic acidosis is seen with the following conduit **except**

A) Stomach  
B) Ileum  
C) Transverse colon  
D) Jejunum  

(Question is deleted)

50 Metabolic alkalosis is characterized by the following **except**

A) pH is high  
B) **pH is lower**  
C) High PCO2  
D) Paradoxical aciduria

51 In the treatment of retroperitoneal fibrosis following drugs are used **except**

A) Corticosteroids  
B) Tamoxifen  
C) Azathioprine  
D) **Methsergide**

52 Venous causes of ureteral obstruction are the following **except**

A) Puerperal ovarian vein thrombophlebitis  
B) Circum caval ureter  
C) Testicular vein thrombophlebitis  
D) **Renal vein thrombosis**

53 In pelviureteric junction obstruction (PUJO) the reconstructive surgeries are following **except**

A) Dismembered pyeloplasty  
B) Percutaneous ante grade endopyelotomy  
C) Laparoscopic pyeloplasty  
D) **Nephrectomy**

54 The role of **“Spiral CT angiography”** in Pelvi ureteric Junction obstruction (PUJO) is to rule out

A) Congenital anomalies of kidney  
B) Duplicated system  
C) **Crossing vessel**  
D) Obstructive mega ureter

55 In renal injuries, all the following are the non operative management modalities **except**

A) Endovascular stent  
B) Selective embolisation  
C) Internal stenting  
D) **Auto transplantation**

56 In lower ureteric injuries the following procedures are done **except**

A) Uretero neo cystostomy  
B) Boari flap  
C) Psoas Hitch  
D) **Uretero-useterostomy**
57. The basic criteria for a renal donor are the following except:
   A) Absence of renal disease
   B) Absence of active infection
   C) Absence of transmissible malignancy
   D) **Positive cross match**

58. The ideal deceased kidney donor are following except:
   A) Normal renal function
   B) No malignancy other than primary brain tumor
   C) No generalized viral infection
   D) **Positive assay for human T-lympho proliferative virus**

59. In development of male genitalia, all are present except:
   A) Presence of SRY protein
   B) Presence of sertoli cell
   C) Androgen production
   D) **Absence of MIS**

60. In children commonest cause of acute kidney injury is:
   A) Prerenal injury
   B) Congenital renal malformation
   C) Obstructive nephropathy
   D) Recurrent UTI

61. The histologic hallmark in renal dysplasia is:
   A) Presence of Blastemal cells
   B) Presence of cystic dilatation of distal tubule
   C) **Presence of primitive ducts**
   D) No renal elements

62. All the following statements about Robotic partial cystectomy are true except:
   A) It is technically feasible
   B) **Tested technology in the treatment of urachal carcinoma**
   C) Remains an untested technology in the treatment of transitional carcinoma
   D) Morbidity is limited

63. Indications for in utero urinary decompression include all the following except:
   A) Evidence of bladder outlet obstruction
   B) No associated other systemic anomalies
   C) **Abnormal Karyotyping**
   D) Non cystic kidneys

64. In pheochromocytoma all are true except:
   A) 10% Bilateral
   B) 10% Paediatric
   C) 10% Malignant
   D) **10% Hypertensive**
65. Oncofetal substance as tumor marker in testicular malignancy is

A) α Fetoprotein
B) Lactic acid dehydrogenase
C) Placental alkaline phosphatase
D) Gamma glutamyl transpeptidase

66. Which is not true regarding vasectomy

A) Technique employed for occlusion of vassal lumen determines the incidence of recanalsation
B) Adequate counseling
C) Any technique of Vasectomy is 100% effective in rendering the patient sterile
D) Hematoma is commonest complication

67. The main determinants of uric acid stone formation include all except

A) Low pH
B) Low urine volume
C) Hyperuricosuria
D) Low animal protein intake

68. Non metastatic hepatic dysfunction in renal cell carcinoma is represented by all except

A) Increased serumalkaline phosphatase
B) Increased prothrombin time
C) Thrombocytopenia
D) Irreversible in 60% - 70%

69. Emphysematous pyelonephritis is characteristic of following except

A) Usually in Diabetes Mellitus
B) Caused by gas forming organism
C) May be associated with obstruction
D) Mostly asymptomatic

70. Sexually transmitted diseases are all except

A) Chancroid
B) Syphilis
C) Molluscum contagiosum
D) Lichen planus

71. Most common cause of renal mass in infant is

A) Wilms tumor
B) Neuroblastoma
C) Nephroblastoma
D) Multicystic dysplasia

72. Acquired renal cystic disease is associated with the following except

A) Chronic renal failure
B) Long term hemodialysis
C) Long term ambulatory peritoneal dialysis
D) Renal cell carcinoma

(Question is deleted)
73 ‘Bacterial persistence’ refers to

A) **Recurrent UTI caused by same organism within the urinary tract**  
B) Recurrent UTI by different organism  
C) An unresolved infection  
D) Re infection from outside urinary tract

74 The following are true regarding Horse shoe kidney **except**

A) Occurs between 4-6 wks of gestation  
B) Associated with high ureteral insertions  
C) **Uncommon fusion anomaly**  
D) Isthmus may be functioning

75 Pseudo tumor of the kidney is

A) Infundibulo pelvic dysgenesis  
B) **Hypertrophied column of Bertin**  
C) Unipapillary kidney  
D) Extra renal calyces

76 The following are congenital anomalies of kidney **except**

A) Horse shoe kidney  
B) Infantile polycystic kidney  
C) **Congenital mega ureter**  
D) Crossed ectopia

77 All of the following are associated with the risk of Renal stones **Except**

A) Hyperuricemia  
B) **Hyperthyroidism**  
C) Hyper Parathyroidism  
D) Hyper Oxaluria

78 Opacities on a plain x ray KUB may be confused with renal calculus **except**

A) Calcified adrenal gland  
B) Calcified mesenteric lymph node  
C) **Vesical calculus**  
D) Calcified tuberculous lesion of kidney

79 Wilms tumor arises from

A) Renal tubular cells  
B) **Embryonic nephrogenic tissue**  
C) Transitional cell  
D) Squamous carcinoma of renal pelvis

80 Acute retention of urine can be due to the following drug

A) Anti-tuberculous drugs  
B) Antibiotics  
C) **Tricyclic anti depressants**  
D) Analgesics
81 All are non germ cell tumors of testis except

A) Leydig cell tumor  
B) Gonadoblastoma  
C) **Adenomatoid tumor**  
D) Granulosa cell tumor

82 Complications of bladder diverticulum are all except

A) Neoplasm  
B) Recurrent urinary infection  
C) **Renal failure**  
D) Retention of urine

83 Skene’s tubercles in female urethra are homologue of

A) **Prostate**  
B) Seminal vesicle  
C) Glans  
D) Ejaculatory duct

84 Circum caval ureter is

A) Mal development of ureter  
B) **Congenital abnormal development of inferior vena cava (IVC)**  
C) Congenital malformation of both IVC and ureter  
D) It is a misnomer

85 Immunosuppressive agents used in renal transplantation are the following except

A) Anti lymphocyte antibody  
B) Mycophenolate mofetil  
C) Tacrolimus  
D) **cyclophosphamide**

86 Orthotopic graft is

A) Graft placed in a different site  
B) **Graft placed in normal anatomic site**  
C) Graft performed between two different species  
D) Organ transplant from one individual to another

87 Fournier gangrene is

A) **Vascular disaster of infective origin**  
B) Idiopathic serosal oedema  
C) Non familial elephantiasis  
D) Filarial scrotum

88 One of the following is TRUE in Priapism

A) Painless pathological erection  
B) Normal physiological erection  
C) **Complication of sickle cell disease**  
D) Always involves glans and corpus spongiosum
89 Atypical presentation of left renal cell carcinoma are except

A) Nephrotic syndrome
B) Persistent pyrexia
C) Rapidly developing varicocele
D) Polycythemia

90 Carcinoma prostate mostly arises from

A) Central zone of prostate
B) Peripheral zone of prostate
C) Transitional zone of prostate
D) Pre prostatic sphincter zone

91 Sterile pyuria occurs in

A) Hypernephroma
B) Renal tuberculosis
C) Renal artery stenosis
D) Angiomyolipoma of kidney

92 Perineal mass in a female child can be following except

A) Imperforate hymen
B) Imperforate anus
C) Prolapsed ectopic ureterocele
D) Urethral prolapse

93 Definition of functional urinary incontinence is

A) Involuntary loss of urine due to failure of control of bladder sphincter
B) Involuntary loss of urine when intra vesical pressure exceeds bladder outlet resistance
C) Due to incomplete relaxation of pelvic floor musculature
D) Leakage of urine in a faulty decompensated system

94 All are facts about Mullerian inhibiting substance except

A) Secreted by fetal Leydig cells
B) Responsible for regression of mullerian duct
C) One of the factors in testicular descent
D) Peak level at 4-12 months

95 46 XY complete (Pure) gonadal dysgenesis is characterized by the following except

A) Well developed mullerian structure
B) Bilateral streak gonads
C) Non mosaic karyotype
D) Normal male genitalia

96 Oliguria is defined as

A) Excretion of urine less than 300 ml/24 hrs
B) Excretion of urine less than 50 ml/hr
C) Excretion of urine less than 1000 ml/24 hrs
D) Complete absence of urine production
97 Treatment of carcinoma prostate includes the following except

A) Medical castration
B) **Radical cystoprostatectomy**
C) Radical prostatectomy
D) Bilateral orchidectomy

98 Vasoconstrictors of renal artery are the following except

A) Norepinephrine
B) Endothelin
C) **Prostaglandin E₂**
D) Angiotensin II

99 Vasodilator substances control renal artery tone except

A) Endothelin
B) Nitric oxide
C) Prostaglandin E₂
D) Glucocorticoids

100 Drugs to be avoided during surgery for pheochromocytoma are the following except

A) Propofol
B) Propranolol
C) Halothane
D) Tubocurarine

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