

## Anatomy, Histology and Embryology

- 1- Which causes GFR to increase – decreased plasma proteins
- 2- In the presence of ADH, tubular fluid becomes isotonic to plasma in – cortical collecting duct
- 3- Which causes renal K excretion to decrease – decreased Na reabsorption in principal cells
- 4- With ADH, most of water is reabsorbed from – PCT
- 5- Wrong about the kidney – peritoneum reflects from inferior surface of liver to cover the kidney from its upper pole to its lower pole
- 6- A child with ruptured penile urethra, urine extravasation won't reach – thigh
- 7- Not cut in mediolateral episiotomy – levator ani
- 8- Wrong about epididymis and seminal vesicles – they need dihydrotestosterone for their differentiation and growth
- 9- Wrong about spermatic cord – can contain the sac of direct inguinal hernia
- 10- Wrong about renal development – in men, the mesonephric duct forms the ureteric bud then the rest disappears
- 11- Wrong combination – PKD affecting all segments – renal failure in infancy
- 12- Wrong about cervix of ureter – kept in position by uterosacral ligament
- 13- Uterine carcinoma can reach labia majora through lymphatics around – round ligament of uterus
- 14- Wrong combination – greater vestibular gland – deep perineal pouch
- 15- Wrong about secondary follicles – has a secondary oocyte
- 16- True about prostate – its venous plexus freely communicates with that of the vertebral column
- 17- Wrong about the breast – its carcinoma spreads to anterior and posterior axillary lymph nodes but not to central and lateral groups
- 18- True about uterus – lower uterine segment is part of the cervix
- 19- Wrong about Sertoli and Leydig cell – FSH induces Sertoli cell to produce a factor that induces apoptosis of spermatogonia
- 20- Wrong about seminiferous tubule – spermatogonia are separated from blood by the blood-testis barrier
- 21- Wrong about spermiogenesis – Sertoli cell phagocytoses a part of spermatid cytoplasm that includes Golgi apparatus
- 22- True about days 5-14 of the menstrual cycle – growth of ovarian follicles

## Physiology

- 23- Which causes hyperkalemia – exercise
- 24- True about renal blood flow – filtration fraction equals inulin clearance/PAH clearance
- 25- Which has the highest clearance – inulin
- 26- Which has its clearance not related to its plasma concentration – inulin
- 27- Blood test showed creatinine level at 1 mg/dl, and a after few weeks the level reached 2 mg/dl, which is true – creatinine renal excretion remained constant
- 28- At glucose concentrations greater than its T<sub>max</sub> for reabsorption, which is true – glucose excretion increases with its concentration
- 29- Phosphate is a good buffer for tubular fluid and inside cells because – its pK<sub>a</sub> is close to medium pH

- 30- If a substance's clearance were greater than inulin's, it is – secreted in the proximal or distal tubules
- 31- In normal physiology, not involved in the regulation of GFR – arterial pressure
- 32- Which decreases Ca clearance – use of Chlorothiazide
- 33- Which doesn't participate in maximally concentrating urine – NaCl reabsorption in the PCT
- 34- Doesn't increase in diabetic ketoacidosis – arterial PCO<sub>2</sub>

#### Microbiology

- 35- Wrong about *T. vaginalis* – endodyogeny
- 36- Not caused by *Shistosoma* species – myositis
- 37- Doesn't cause hemorrhagic cystitis – herpes viruses (maybe)
- 38- Not typically tested for in antenatal screening – parvovirus B19
- 39- TORCH stands for – Toxoplasma, Rubella, CMV, HSV
- 40- Wrong about Rubella – highest risk after 16 weeks of pregnancy

#### Pathology

- 41- Not a cause of nephrotic syndrome – postinfectious GN
- 42- Shows negative IF – FSGS
- 43- A boy with edema, buffy eyes, heavy proteinuria most likely shows in histology – effaced podocyte foot processes
- 44- Wrong combination – adult type PKD – fibrocystin 1
- 45- Wrong about nephronophthisis-medullary cystic disease complex – associated with hereditary hepatic fibrosis
- 46- Most common kidney stone in children – oxalate stone (mostly)
- 47- Most common cause of acute pyelonephritis – *E. coli*
- 48- Wrong about acute drug-induced TIN – dose related allergy
- 49- Wrong about benign nephrosclerosis – associated with arterial fibrinoid material, or is highly associated with renal failure
- 50- A tumor marker not elevated – papillary bladder tumor – PSA (mostly)

#### Lab

- 51- Picture of kidneys, 1 on right kidney hepatic surface, 2 on left kidney splenic surface – which is true – 1 is separated from the liver by the greater sac
- 52- Section of cortex, pointing on macula densa – which is true – none
- 53- IVU showing enlarged pelvis and calyces – which is true – all
- 54- Picture of vagina – what is wrong – perineal body separates it from rectum
- 55- Picture of base of bladder pointing at ampulla of vas, seminal vesicle and prostate – which is true – prostate is lying on UG diaphragm
- 56- Picture of ovary – which is true – a and b (connected to pelvic wall by infundibulopelvic ligament and to broad ligament by mesovarium)
- 57- Section of medulla pointing at collecting tubule and Henle thin segment – which is true – both are involved in concentrating urine
- 58- Section showing a primary multilaminar follicle – the structure responds to – a and b (FSH and OMIF)

- 59- Section showing a secondary follicle – which is not a content – secondary oocyte
- 60- Picture of uterus – which is true – all
- 61- Picture of uterus – which is true – ligation of broad ligament from its two ends cuts uterine blood supply
- 62- Section of prostate pointing at large and small glands – which is true – none
- 63- Section of epididymis – which is wrong – has cilia that help spermatozoa in movement
- 64- Section of seminiferous tubule – you don't see – secondary spermatocytes
- 65- Section of clear cell RCC – this tumor is associated with – polycythemia