UGS
Midterm

Coronary batch

Questions collected in total:

Theory: 35/35

Note: Questions labeled by (numbers) are from the first session. Questions labeled by (*) are from the second session. Many of the second session questions in this file are inaccurate or missing. Please check the link below for most of the second session questions:
[https://t.me/coronarymcqgc/5847]

The questions are written and collected by many students, which means the answers are not official or confirmed yet by their professors.
If they are, this file will be updated, so check the updated version on our drive, which is on the last page of this file. Some questions or answers or options may not be accurate.

Last version updated (2): 14/5/2025

Anatomy

(1) Which of the following form the lateral wall of ischioanal fossa:
(A) Obturator internus muscle
(B) Levator ani
(C) Perineal body
(D) Anococcygeal body
(E) Anal canal

(2) Which of the following truly represents a correct relation between the different structures in the kidney:
(A) The renal columns are superficial to the kidneys pyramids
(B) The renal vein is anterior to the renal artery
(C) The ureter is anterior to gonadal artery
(D) The renal facia is deep to the perirenal fat

(3) Which of the following relations is correct regarding the male reproductive system:
(A) The epididymis sinus is medial to the epididymis
(B) The Buck's facia is superficial to the tunica albuginea
(C) The dartos facia is deep to the Colles' facia
(D) The corpus spongiosum is dorsal to the corpus cavernosum

(4) Which of the following is correct regarding the podocytes:
(A) They surround the glomerulus capsule
(B) They cover the glomerulus
(C) They form the extraglomerular mesangial cells
(D) They form the macula densa

(5) Which of the following layer is a highly vascularized layer:
(A) Internal myometrium
(B) Middle myometrium
(C) Stratum basale
(D) Stratum functionalis

(6) Which of the following is considered to be one of the contents of the deep perineal pouch:
(A) Sphincter urethrae
(B) Superficial perineal muscle
(C) Bulbospongiosus muscle
(D) Ischiocavernosus muscle

(7) Which of the following structures can be accessed through the posterior vaginal fornix:
(A) Uterovesical pouch
(B) Perineal body
(C) Rectouterine pouch
(D) Bladder

(8) Which of the following arteries becomes a ligament in adults:
(A) Umbilical
(B) Obturator
(C) Uterine
(D) Vesical
(E) Rectal

(9) Which of the following cells of the seminieferous tubule is the closest to leydig cells:
(A) Spermatogonia cell
(B) Myoid cell
(C) Sertoli cell
(D) Spermatid
(E) Spermatocyte

(*) Which of the following is considered to be one of the contents of the deep perineal pouch:
(A)Bulbourethral glands
(B) Superficial perineal muscle
(C) Bulbospongiosus muscle
(D) Ischiocavernosus muscle

(*) A question about Colles' facia and its attachment posteriorly/ or its relation posteriorly:
Perineal body

(*) The internal pudendal artery will give:
Inferior rectal branch

(*) A question about the most superior structure located in regarding to the lateral fornix:
Uterine tube

(*) A question about which layer is the most superficial in regarding to the follicle:
Theca interna

(*) A question about which is the most lateral located in the pelvis:
Sacral plexus

(*) A question about the histology of the prostatic urethra:
?

(*) A question about the vas deference:
?

(*) A question about the apex of the bladder:
?

Pharmacology

(10) Which of the following is best indicated for treating hypertension with coexisted osteoporosis:
(A) Hydrochlorothiazide
(B) Furosemide
(C) Spironolactone
(D) Acetazolamide
(E) Triamterene

(11) Which of the following is the most effective/potent diuretic:
(A) Hydrochlorothiazide
(B) Furosemide
(C) Spironolactone
(D) Acetazolamide
(E) Triamterene

(12) Which of the following causes hyperkalemia as a side effect:
(A) Hydrochlorothiazide
(B) Furosemide
(C) Spironolactone
(D) Acetazolamide
(E) Ethacrynic acid

(*) A question about mannitol:
Osmotic diuretics that is a mainstay of treatment for patients with Increased intracranial pressure

(*) A question about thiazides:
There are continued antihypertensive effects, resulting from reduced peripheral vascular resistance caused by relaxation of arteriolar smooth muscle

Microbiology

(13) Which of the following is not part of the schistosomes family:
(A) S. mansoni
(B) S. haematobium
(C) S. japonicum
(D) S. agypti
(E) S. mekongi

(14) Hyphae that look like sprouts which are called germ tubes, are produced by which of the following pathogens:
(A) Trichomonas vaginalis
(B) Neisseria gonorrhoeae
(C) Candida albicans
(D) Sarcoptes scabiei
(E) Phthirus pubis

(15) Which of the following medium agar is the most commonly used in culturing neisseria gonorrhoeae:
(A) Martin–Lewis agar
(B) Nutrient agar
(C) Sabouraud agar
(D) Macconkey agar

(16) Which of the following is incorrect regarding the phthiriasis and its manifestations:
(A) It is a parasite which spends its entire life on human hair and skin
(B) In the majority of infestations a characteristic grey-blue or slate coloration appears at the feeding site
(C) Pubic louse infestation is usually diagnosed by carefully examining pubic hair for nits, nymphs and adults
(D) Children are more frequently infested than adults
(E) If lice are detected in one family member, the entire family needs to be checked

(17) Which of the following is probably the major cause of recurrent bacteriuria in men:
(A) Chronic cystitis
(B) Chronic prostatitis
(C) Chronic urethritis
(D) Chronic pyelonephritis

(*) The infectious stage of Schistosoma haematobium is:
(A) The miracidium
(B) The cercariae
(C) The snail Bulinus trancatus
(D) The egg with terminal spine
(E) The egg with lateral spine

(*) One of the following -Urease-producing member- is associated with urinary stones:
(A) Proteus
(B) E.coli
(C) Pseudomonas
(D) Staph. saprophyticus

(*) Organisms causing PID include all of the following, EXCEPT:
(A) Anaerobes
(B) Chlamydia
(C) Trachomatis
(D) Gonococci
(E) ?

Pathology

(18) Renal glomerular endothelial cells are vulnerable in shiga toxin–mediated HUS because of:
Expression of globotriaosylceramide (Gb3) receptors on the endothelial cells

(19) Which of the following you would notice in a patient with goodpasture disease:
Hemoptysis and shortness of breath (not rash, and joint involvement)

(20) Which of the following glomerulopathies present primarily with isolated hematuria:
Thin basement membrane disease

(21) A patient with severe increased creatinine level within few days, and oligourea, this is best associated with:
Acute kidney injury (not ESRD, that is CKD-G5)

(22) Cystine stones form due to:
Genetically determined defect in the renal transport of certain amino acids

(23) Struvite stones form due to:
Alkaline urine resulting from UTIs, and particularly infections with urea-splitting bacteria

(24) Primary MN pathogenies due to:
Antibodies against the podocyte antigen phospholipase A2 receptor (PLA2R)

(25) Clear cell renal cell carcinomas (CCRCC) mutation:
VHL

(26) In a comparison between autosomal recessive polycystic kidney disease (ARPKD) and autosomal dominant polycystic kidney disease (ADPKD), which of the following is correct:
(A) In ARPKD involves the cortex of the kidneys while the ADPKD involves the medulla
(B) In ADPKD, the cysts origin from the collecting tubules, while in ARPKD where cysts can arise from any part of the nephron
(C) In ARPKD, the cysts have a uniform lining of cuboidal cells, reflecting their origin from the collecting tubules, unlike ADPKD where cysts can arise from any part of the nephron
(D) In ARPKD the involvement is unilateral while ADPKD is bilateral
(E) In ARPKD the kidney is enlarged more than in ADPKD

(*) A question about a correct statement regarding the ARPKD:
In almost all cases, multipte liver cysts and congenital hepatic fibrosis

(*) A question about Immune complex-mediated MPGN:
Followed by activation of the alternative complement pathway

(*) A question about Shiga toxin-mediated HUS (classic/typical HUS):
O157:H7 or Shigella dysenteriae; numerous other infections have also been associated with TMA

(*) A question about IgA nephropathy:
It is the most common primary glomerulonephritis worldwide

Physiology

(27) Which of the following is the renal blood flow:
(A) 180 L/day
(B) 20-22% of the cardiac output
(C) 2200 ml/min
(D) 125 ml/min
(E) 1-2 L/day

(28) Your patient has a liver failure, which makes him unable to produce albumin protein, which then result in increased GFR, this is because of:
(A) Increased bowman's colloid osmotic pressure, and so increased net filtration pressure (NFP)
(B) Decreased plasma oncotic pressure, and so increased net filtration pressure (NFP)
(C) Increased plasma oncotic pressure, and so decreased net filtration pressure (NFP)
(D) Increased plasma hydrostatic pressure, and so increased net filtration pressure (NFP)

(29) If a kidney filtration rate of a substance is 8 ml/sec, secretion is 4 ml/sec and the execration is 5 ml/sec, then the reabpsorbtion of that substance is:
(A) 12
(B) 13
(C) 7 (Execration (5) = Filtration (8) - Reabsorption (X) + Secretion (4))
(D) 3
(E) 9

(30) If a substance reabsorption rate equals to its filtration rate, then this substance is most likely:
(A) Sodium
(B) Glucose
(C) Organic acid
(D) Urea
(E) Potassium

(31) Which of the following is not one of the angiotensin II functions:
(A) Stimulates the adrenal cortex to secrete aldosterone
(B) Stimulate the reabsorption of Na from the proximal tubule by stimulating the Na+/H+ exchanger
(C) Stimulates the release of ADH which would increases water reabsorption and stimulate thirst
(D) Constrict the efferent arteriole
(E) Dilate the afferent arteriole (This function was indicated for ANP)

(32) Which of the following is incorrect regarding the countercurrent multiplier system: تم إعتماد الاجابتين
(A) The structure of the loop of Henle allows for a concentration gradient to be set up for the osmosis of water
(B) Salt is actively moved back into the lumen of the tubule via Na+/K+ pump
(C) The transport in the descending limb of the loop of henle is not permeable to water but it is permeable to salt
(D) In the ascending limb of loop of henle, the salt is pumped into the interstitial space via the Na, K, Cl transporter (NKCC2) protein

(33) Which of the following correctly describes the function of the vasa recta in the renal medulla:
Help create the countercurrent system because they take in salts in the descending region but lose them again in the ascending region

(34) Which of the following is incorrect regarding the estimated GFR (eGFR):
(A) It tells us how well the kidneys are filtering blood
(B) Reported in mL/min that is adjusted for average body surface area
(C) Main inputs for eGFR calculation are urine creatinine, age, sex, and race/ethnicity (Its supposed to be serum creatinine not the urine creatinine)
(D) MDRD formula is less accurate
(E) CKD-EPI formula is the most widely used today

(35) Which of the following is incorrect regarding the reabsorption of glucose in the nephron:
Decrease in the glucose plasma concentration increases the filtration rate/load

Thanks to those who collected the questions.
Written by [Momen Allala]

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