questions for digestion and urinary tract

1. Which of the following will increase acid secretion in the stomach?

A) Aspirin

B) Proton pump blocker

C) Gastrin

D) All of the above

E) Only A and C above

2. Resistin:

A) Secretion is increased in Type II diabetes due to excess fat accumulation

B) Decreases insulin signaling in muscle and other tissues

C) Causes insulin to bind tighter to the insulin receptor

D) All of the above

E) Only A and B above

3. Crohn’s disease differs from ulcerative colitis because:

A) Crohn’s disease can also affect in the small intestine

B) Crohn’s disease can skip areas and ulcerative colitis is usually continuous

C) Crohn’s disease is a chronic, progressive immune-related disease

D) All of the above

E) Only A and B above

4. Celiac sprue:

A) Is due to an autoimmune response to gluten

B) Can be triggered by eating certain grains that contain gluten

C) Can cause weight loss and diarrhea

D) All of the above

E) Only B and C above

5. If GFR goes down, then:

A) Renin release will be increased as compensation

B) Aldosterone secretion will increase eventually (indirectly)

C) Blood volume will increase due to increased water and sodium retention

D) All of the above

E) Only A and B above

6. If a loop diuretic drug blocks the reabsorption of Na+/K+/Cl- in the thick ascending loop, then:

A) Urine volume will decrease

B) Urine osmolality will decrease

C) Sodium retention in the body will increase

D) None of the above

7. The highest osmolality in the kidney is:

A) In the outer cortex

B) In the outer medulla

C) In the inner medulla

D) None of the above

8. Drugs that inhibit ADH will:

A) Cause the urine to be more concentrated

B) Increase urinary output

C) Increase the amount of aquaporins in the collecting tubule

D) None of the above

9. The juxtaglomerular (JG) cells can:

A) Measure blood pressure with mechano (stretch) receptors in the afferent arterioles since they are adjacent to the afferent arterioles

B) Secrete renin in response to high arteriole pressure

C) Secrete renin in response to parasympathetic stimulation

D) All of the above

E) Only A and C above

10. The higher the GFR, the:

A) Lower the amount of filtrate

B) Greater the blood pressure at the glomerulus

C) Greater the hydrostatic pressure at the glomerulus

D) All of the above

E) Only B and C above

11. Renin:

A) Can increase Angiotensin levels directly

B) Can increase AGII indirectly

C) Can increase Aldosterone indirectly

D) All of the above

E) Only A and C above

12. Colloid (osmotic) pressure in Bowman's capsule:

A) Is negative because the osmotic pressure of water is higher in the glomerular blood vessels

B) **Is positive because the large proteins filter out of the glomerulus into the intracapsular space**

C) Is more than the hydrostatic pressure into the capillary

D) All of the above

E) Only B and C

13. Which of the following events occurs in the duodenum?

A) Bile from the liver and gall bladder flow in to the duodenum from the sphincter of Oddi

B) Digestive enzymes from the pancreas enter the duodenum

C) Pepsin is activated in the duodenum

D) All of the above

E) Only A and B above

14. Which of the following is **NOT** the correct time for a solid bolus of food to move through the following organs?

A) Esophagus: 6-8 seconds

B) Stomach: 4-6 hours

C) Small intestine: 24-30 hours

D) Large intestine: 18-24 hours

E) Entire digestion process: 24-36 hours

15. Gastroparesis is delayed stomach emptying and can cause nausea and vomiting. The food stays longer in the stomach. Diabetes can lead to gastroparesis. Which of the following would be true in gastroparesis?

A) Increased overall secretion of acid in the stomach

B) Increased fatty foods would make gastroparesis worse

C) Carbohydrates, limited in Diabetics, would enhance movement out of the stomach

D) All of the above

16. A decrease in pancreatic secretions due to cystic fibrosis (thickened mucus partially blocking the secretions) can lead to:

A) Decreased fat digestion

B) Decreased protein digestion

C) Pancreatitis if the secretions back up into the pancreas

D) All of the above

E) Only A and C above

17. Which of the following is **true** about flow in theliver lobule?

A) Fluid flows out from the central vein to the portal vein

B) Bile flows out from the bile duct to the central vein

C) Fluid flows out from the portal arteriole to the central vein

D) None of the above is true

18. CCK (Cholecystokinin) causes:

A) The gallbladder to contract.

B) The Sphincter of Oddi to open

C) Increased acid secretion in the stomach

D) All of the above

E) Only A and B above

19. Gallstones that block the sphincter of Oddi (Hepatopancreatic sphincter) can:

A) Also block the pancreatic duct

B) Cause Jaundice

C) Block the flow of pepsinogen

D) All of the above

E) Only A and B above

20. Flatus (gas) is:

A) Produced primarily by bacterial action on carbohydrates

B) Produced by inadequate pepsin secretion

C) Enhanced by excess Trypsin secretion

D) All of the above

E) Only A and C above