Course No:DNTS2309	University of Palestine	Instructor Name: _____
Course Title: Physiology 1		Student No.: _____
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No. of Questions:	Midterm Exam	College Name: _____
Time: 1hours	2014/2015	Dep. / Specialist: _____
Using Calculator (No)	Total Grade:	Using Dictionary (No)

1- The contraction of gallbladder is stimulated by?

A- Fatty diet
B- Sympathetic system activation
C- Secretine release
D- High protein diet
E- None of the above

2- The transport of which of the following substances from the intestine to the liver is through the lymphatic system?

A- Carbohydrates
B- Vitamins
C- Fat
D- Glucose
E- Proteins

3- Which of the following substances is essential for Chylomecrone formation?

A- Fatty acids
B- Bile Salts
C- Amino Acids
D- Vitamin B 12
E- A and B

4- The portal Vein is formed from which of the following veins?

A- Inferior and superior gastric vein
B- Inferir messentric vein and superior gastric vein
C- Splenic vein and superior messenric vein
D- Hepatic and gastric Veins
E- Splenic vein and hepatic veins

5- The Parasympathetic Nervous system control of GIT leads to?

A- Decrease Blood flow
B- Decrease glandular secreation
C- direct enzym activation
D- has no effect on muscle layer contraction
E- increase in glandular secretion

6- Myenteric plexus controls which of the following ?

A- increase rhythmical contraction
B- decrease tonic contraction
C- decrease rate of contraction
D- has the main effect on intestinal secretion
E- has the main effect on intestinal absorption

7- The mediator of sympathetic nervous system is?

A- Norepinephrine
B- Dopamin
C- Gastrin
D- Acetylcholine
E- Secretin

8- What is the normal pH value for the blood?

A- 7.15-7.25
B- 7.35-7.45
C- 7.55- 7.65
D- 7.00-7.35
E- 6.5-7.5

9- A hematocrit measures percentage of?

A- white blood cells
B- red blood cells
C- plasma
D- platelets
E- water

10- The center of Sympathetic nervous system control of GIT is located in?

A- Trigeminal nerve
B- L4-5 lumbar spinal cord
C- T5- L2 spinal cord
D- S2- S 4 sacral segments
E- vagus nerve

11- Gastrin?

A- is secreted by I cells of the antrum of the stomach
B- is inhibited by gastric distention
C- stimulates the gastric acid secretion
D- inhibits the growth of gastric mucosa
E- stimulates Pancreatic secretion

12- CCK(cholecystokinin)

A- inhibits gallbladder contraction
B- Secreted by I cells in mucosa of duodenum and jejunum
C- inhibit stomach contraction
D- delay gallbladder emptying
E- Stimulated by protein diet

13- Which of the following is <u>not</u> true regarding Secretin?

A- promote pancreatic secretion of Hco3
B- strongly stimulate GIT motility
C- Stimulated by acidic gastric juice
D- strongly stimulate gallbladder contraction
E- Secreted by S cells in the mucosa of duodenum

14- which of the following factors inhibits the intestinal motility?

A - gastrin,
B -CCK,
C - motilin,
D -serotonin
E - glucagon

15- Which one of the following is <u>not</u> true regarding the chewing?

A - most of chewing muscles innervated by facial nerve
B - chewing breaks the indigestible cellulose membrane
C - chewing increases the total surface area exposed to digestive enzymes
D - softening of food to facilitate swallowing
E - lubricates the food by saliva

16- Pharyngeal stage of swallowing includes?

A - soft palate pulled upward to close the posterior nares
B - larynx pulled upward
C- enlargement in the opening of esophagus
D - upper esophageal sphincter relax
E - All of the above

17- Effects of the entrogastric reflexes on motility includes?

A - it is strongly inhibit the pyloric pump
B - decreases the tone of pyloric sphincter
C - increases gastric emptying
D - stimulates HCL secretion
E - has no effect on stomach

18- Factors that dose <u>not</u> affect the entrogastric reflexes?

A - degree of duodenal distention
B - duodenal irritation
C - acidity and osmolality of duodenal chyme
D - Stomach acidity (pH)
E - presence of fat and protein in duodenal chyme

19- the percentage of Total body water (TBW) to body weight is

A- 40%
B- 50%
C- 60%
D- 80%
E- 90%

20- Intracellular fluid (ICF) consists ?

A- 10% oftotal body water (TBW)
B- 30 % of total body water (TBW)
C- 50% of total body water (TBW)
D- 60 % of total body water (TBW) t
E- 90% of total body water (TBW)

21- The total number of particles in a kilogram of solution is ?

A- Osmolarity
B- Osmolality
C- Oncotic pressure
D- Concentration unit
E- Measured by mmol

22- the muscular layers of the GIT system?

A- There are three muscular layers throughout the GIT system
B- The meissners plexus is located between the longitudinal and circular muscles
C- The circular layer is Thiner and less powerful than longitudinal
D- Contraction of circular muscles reduces the diameter of the lumen and increases its length

23- meissners plexus?

A- Lie in submucosa
B- Controls function of the inner wall of the intestine
C- controls intestinal secretion,
D- control intestinal absorption,
E- has no effect on contraction of the sub-mucosal muscles

24- The Parasympathetic nervous system of the Enteric nervous system?

A- has no cranial centre
B- its center is only in the sacral spine
C- the vagus nerve is not part of it
D- 2^{nd} , 3^{rd}, 4^{th} sacral segments of spinal cord are part of its centre
E- Its centre is in the T5- L2

25- Regarding the enzymes involved in protein digestion

A- Pepsinogen is activated by Interensic factor
B- enzymes activators is not required
C- chymotripsin is directely activated by enterokinase
D- pancreatic trypsin acts better in alkaline media
E- HCL inactivates pepsin

26- Regarding the digestion of carbohydrates?

A- Starches hydrolysed to maltose and fructose polymers by amylase
B- Lactose hydrolysed to galactose and glucose, by lactase
C- Sucrose hydrolysed to fructose and glucose by sucrose
D- Starches hydrolysed to maltose and fructose polymers by ptyalin

27- Which of the following best describes the Pancreatic secretion?

A- Acini produces pancreatic enzymes and Ducts produces NaHco3 solution
B- Acini produces pancreatic enzymes and Ducts produces NaHco3 solution
C- Pancreatic duct empty alone into duodenum through papilla of vater
D- Secretion mostly in response to the chyme in the stomach

28- Which of the following leads to inhibition of gastric secretion?

A- reverse entrogastric reflex through sympathetic nerves
B- secretin
C- Vasoactive intestinal peptide (VIP)
D- Somatostatin
E- All of the above

29- Which of the following is best describes the biliary secretion

A- Hepatic ductules secrete bile acid, cholesterol and other organic material
B- Hepatocyte secrete NaHco3 solution
C- Water, Na, Cl and most electrolytes are not absorbed through gallbladder mucosa
D- gallbladder mucosa play vital role in contraction of bile

30- Factors that affect total body water (TBW) are?

A- Age
B- Gender
C- Fat
D- Water intake
E- All of the above

Mark the following statements with true or false?

31- Lipase hydrolyze cholesterol ester
32- Phospholipase hydrolyze phospholipid
33- pancreatic amylase digests Starches to maltose and glucose polymers
34- Pepsin initiate the process of digestion of protein collagen
35- CCK is Secreted in response to fat
36- secretin is Secreted in response to gastric acid
37- The digestion of fat starts at the mouth
38- Bile salts provides ferrying (carrying) function to fatty acids once only then degraded by the liver
39- In the liver, Bile salts used to perform a cholesterol
40- Muscularis mucosa contraction leads to decrease in surface area exposed to chyme