

COLLEGE OF OSTEOPATHIC MEDICINE OF THE PACIFIC
GASTROINTESTINAL - SECOND EXAM

May 6, 1996

#1

Choose the ONE BEST answer and darken the appropriate box on the Scantron form. There are 120 questions on this exam.

Lab Questions

1. Name the organ that this tissue was taken from.

- a. Duodenum
- b. Ileum
- c. Stomach
- d. Appendix
- e. Colon

2. Name the organ that this tissue was taken from.

- a. Duodenum
- b. Ileum
- c. Stomach
- d. Appendix
- e. Colon

3. Name the organ that this tissue was taken from.

- a. Parotid gland
- b. Pancreas
- c. Submandibular gland
- d. Sublingual Gland
- e. Glands of von Ebner

4. The pointer is in the lumen of what structure?

- a. Bile duct
- b. Bile canaliculus
- c. Lacteal
- d. Central vein
- e. Portal vein

Krick
Wing
Gilbert
Khan
Kuehn
Florinde
Rooks
Superstein
Haddad
Wiss
Jenkins
Dorrah

Dr. KHAN
- no peritonitis
or cecocolitis

5. Name the cells indicated by the pointer.

- a. External enamel epithelium
- b. Internal enamel epithelium
- c. Stellate reticulum
- d. Dental sac
- e. Dental lamina

6. The pointer is in the lumen of what structure?

- a. Crypt of Lieberkuhn
- b. Lacteal
- c. Portal vein
- d. Gastric pit
- e. None of the above

7. This is a gastric lesion from a patient who presented with melena. Microscopically, the layer closest to the lumen would be expected to show

- B
- a. fibrosis.
 - b. fibrinoid necrosis
 - c. chronic inflammatory cells.
 - d. granulomatous inflammation.
 - e. granulation tissue.

8. These slides are from a gastrectomy specimen which showed a thickened gastric wall. Your diagnosis:

- a. acute stress ulcer.
- b. benign gastric polyp.
- c. chronic peptic ulcer.
- d. gastric lymphoma.
- e. infiltrating adenocarcinoma.

9. A serious complication of this disease process is

- D
- a. malignant transformation.
 - b. amyloidosis.
 - c. parasitic infestation.
 - d. inflammation and perforation.
 - e. metastatic disease.

10. A serious complication of this disease is

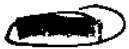
- a. amyloidosis.
- b. parasitic infestation.
- c. volvulus.
- d. intussusception.
- e. metastatic disease.

11. This disease is also known as

- a. chronic cholecystitis.
- b. strawberry gallbladder.
- c. acute cholecystitis.
- d. adenomyoma of the gallbladder.
- e. adenocarcinoma of the gallbladder.

12. The "structure" at the pointer is

- a. a cell exhibiting ballooning degeneration.
- b. fibrous tissue.
- c. a malignant cell.
- d. a "Councilman body".
- e. a cell exhibiting fatty change.



13. Aspirin is an irreversible inhibitor of

- a. lipooxygenase.
- b. cyclooxygenase.
- c. phospholipase A₁.
- d. phospholipase A₂.
- e. phospholipase C.

14. Failure to digest dietary lipids leads to steatorrhea. All of the following substances are required for digestion of dietary lipid EXCEPT

- A ✓ →
- a. bile pigments.
 - b. bile salts.
 - c. colipase.
 - d. pancreatic lipase.
 - e. pancreatic phospholipase.

15. Mutations involving this gene can result in an inability to activate lipoprotein lipase and lead to a clinical disorder that closely resembles lipoprotein lipase deficiency.

- a. Apoprotein A-I gene
- b. Apoprotein B-100/B-48 gene
- c. Apoprotein C-II gene
- d. Apoprotein E gene
- e. LDL receptor gene

16. Mutations of this gene lead to impaired ability to produce chylomicrons, VLDL and LDL, thereby leading to fat malabsorption, diarrhea, retinitis pigmentosa, cerebellar ataxia and acanthocytosis.

- a. Apoprotein A-I gene
- b. Apoprotein B-100/B-48 gene
- c. Apoprotein C-II gene
- d. Apoprotein E gene
- e. LDL receptor gene

For each given description of an enzyme (questions 17-20), select the correct letter from the accompanying diagram.

17. The enzyme catalyzing this reaction is allosterically inhibited by malonyl-CoA.

B

- a. U
- b. V
- c. W
- d. Y
- e. Z

18. The enzyme catalyzing this reaction is the primary site of regulation of *de novo* fatty acid synthesis.

- a. U
- b. V
- c. W
- d. Y
- e. Z

19. The enzyme catalyzing this reaction is the primary site of regulation of glycolysis.

A

- a. K
- b. L
- c. C
- d. D
- e. O

20. The enzyme catalyzing this reaction is the primary site of regulation of the Krebs cycle.

- a. P
- b. R
- c. S
- d. T
- e. X

21. Ursodial (Actigall) EXCEPT?

- a. is effective in dissolving gallstones in almost 100% of the patients.
- b. often causes diarrhea and hepatic dysfunction.
- c. is not associated with recurrence of gallstones after therapy.
- d. acts by decreasing cholesterol secretion into bile.
- e. a and d of the above.

22. Which of the following agents is/are effective for the treatment of SEVERE chemotherapy-induced emesis?

A

- a. Ondansetron (Zofran)
- b. scopolamine (Transderm-Scop)
- c. dronabinol (THC, marinol)
- d. meclizine (Antivert)
- e. a and d of the above

23. Which of the following anthelmintic agents is/are the DOC for schistosomiasis?

- a. mebendazole (Vermox)
- b. niclosamide (Nicloside)
- c. praziquantal (Biltricide)
- d. metronidazole (Flagyl)
- e. b and d of the above

24. Pyrantel pamoate (Antiminth) is an effective anthelmintic agent for intestinal nematodes and it acts

- a. by altering ion permeability of cell membrane resulting in hyperpolarization.
- b. as a depolarizing neuromuscular blocking agent and cholinesterase inhibitor.
- c. by inhibiting oxidative phosphorylation in mitochondria of the worm.
- d. by inhibiting glucose uptake and microtubule synthesis by the worm.
- e. by all of the above mechanisms.

25. Leukoplakia is

- a. a whitish, well-defined mucosal patch or plaque.
- b. associated with certain diets.
- c. not precancerous.
- d. mainly seen in the esophagus.
- e. associated with Plummer-Vinson syndrome.

26. A sliding hiatal hernia is

- a. associated with reflux.
- b. associated with a rolling hernia.
- c. usually precancerous.
- d. usually obstructive.
- e. usually associated with parasitic infections.

27. The Mallory-Weiss syndrome is

- a. dysphagia, glossitis, iron-deficiency anemia.
- b. associated with a Zenker's diverticulum.
- c. associated with a traction diverticulum.
- d. tears and/or lacerations of the esophagus.
- e. associated with cancer.

28. The most common cancer of the esophagus is

- a. squamous carcinoma.
- b. adenocarcinoma.
- c. adenosquamous carcinoma.
- d. leiomyosarcoma.
- e. liposarcoma.

29. Defensive forces that normally occur to prevent peptic ulcers include

- a. gastric activity.
- b. peptic activity.
- c. H. pylori infection.
- d. NSAIDs.
- e. surface mucus and bicarbonate secretion.

30. A major characteristic of Crohn's disease is

- a. usually starts in rectum.
- b. pseudopolyps common.
- c. transmural inflammation.
- d. crypt abscesses on microscopy.
- e. broad-based ulcers.

31. A major characteristic of ulcerative colitis is

- a. serpentine fissures.
- b. complicated by cancer.
- c. "skip" lesions.
- d. small intestinal involvement.
- e. granulomas.

32. Duke's Type B2 stage of carcinoma of the colon is defined as

- a. limited to mucosa.
- b. extending into muscularis propria but not penetrating through it with uninvolved nodes.
- c. through entire wall with uninvolved nodes.
- d. limited to the wall with involved nodes.
- e. through all layers of the wall with involved nodes.

33. Posthepatic causes of portal hypertension include

- a. portal vein thrombosis.
- b. severe right-sided heart failure.
- c. cirrhosis.
- d. schistosomiasis.
- e. massive fatty change.

34. Cytokines and toxins transform which one of the following cells into a fibroblast-like cell?

- a. Ito cell
- b. lymphocyte
- c. hepatocyte
- d. Kupffer cell
- e. endothelial cell

35. Gilbert's syndrome

- a. increase in bilirubin UGT activity
- b. decrease in bilirubin UGT activity
- c. no change in bilirubin UGT activity
- d. rare disease
- e. leads to cirrhosis

36. Hepatitis B

- a. is caused by a RNA virus.
- b. does not lead to fulminant hepatitis.
- c. does not lead to chronic hepatitis.
- d. persistent infection may lead to hepatocellular carcinoma.
- e. is mainly spread by the fecal-oral route.

37. Hepatitis A

- a. is caused by a DNA virus
- b. most cases lead to chronic hepatitis
- c. most cases lead to fulminant hepatitis
- d. most children are jaundiced
- e. transmitted by the fecal-oral route.

38. Alcoholic liver disease is associated with

- a. "Councilman bodies" - hepatitis (viral)
- b. "Mallory bodies"
- c. piecemeal necrosis of the limiting plates - hepatitis (viral)
- d. "ground glass" cytoplasmic changes
- e. formation of antibodies against hepatocytes

39. Sclerosing cholangitis

- a. is associated with Kayser-Fleischer rings.
- b. may be secondary to cirrhosis.
- c. does not lead to cirrhosis.
- d. patient cannot be transplanted
- e. is not associated with inflammatory bowel disease.

40. Acute fatty liver of pregnancy

- a. is usually in the first trimester.
- b. is usually in the second trimester.
- c. is usually in the third trimester.
- d. does not need a biopsy for diagnosis
- e. treatment of choice is bed rest.

41. The common "tumor marker" for hepatocellular carcinoma is

- a. CEA.
- b. erythropoietin.
- c. alpha-fetoprotein.
- d. S-100.
- e. vimentin.

42. Chronic cholecystitis

- a. may show Rokitansky-Aschoff sinuses on microscopy.
- b. is not related to stones.
- c. leads to gangrenous cholecystitis.
- d. has a thin wall.
- e. is usually seen in children.

43. The most common cause of chronic hepatitis in the United States is

- B-acute*
C-chronic
- a. Hepatitis A.
 - b. Hepatitis B.
 - c. Hepatitis C.
 - d. Hepatitis D.
 - e. Hepatitis E.

44. _____ is not found free in the serum of hepatitis B patients.

- a. HBcAg
- b. HBeAg
- c. HBsAg
- d. Anti HBe antibodies

45. The only antibodies present during the chronic carrier state in hepatitis B are

- a. Anti HBc.
- b. Anti HBe.
- c. Anti HBs
- d. Anti Delta antibodies.

46. The antibodies whose appearance is a good prognostic sign for the resolution of the chronic state is

- a. Anti HBc.
- b. Anti HBe.
- c. Anti HBs.
- ? d. Anti HBc and Anti HBe.

BB
47. The most common parasite in the central nervous system is

- a. Taenia saginata.
- b. Taenia solium.
- c. Hymenolepis nana.
- d. Diphylobothrium latum.

nanis
Cuppy
48. Creeping larva migrans can be caused by all of the following EXCEPT

- a. Hymenolepis nana.
- b. Ancylostoma caninum.
- c. Ancylostoma duodenale.
- d. Necator americanus.

49. Microcytic hypochromic anemia is seen in

- a. Ancylostoma duodenale.
- b. Taenia saginata.
- c. Taenia solium.
- d. Strongyloides stercoralis.

50. The most common cause of cysticercosis is

- a. Taenia saginata.
- b. Taenia solium.
- c. Hymenolepis nana.
- d. Diphylobothrium latum.

B
51. About Helicobacter pylori, which one of the following statements is NOT correct?

- a. It can be diagnosed by the breath test.
- b. In the United States, the incidence of this infection is increasing across the board.
- c. The organism causes chronic inflammation.
- d. It is present in all persons with "idiopathic" peptic ulcer disease.

52. About Clostridium difficile, which one of the following is NOT correct?

- a. mostly acquired in the hospital
- b. can be diagnosed by isolating the organisms from the stool
- c. in advanced cases of colitis, a pseudomembrane is present
- d. can be treated by antimicrobial agents

53. About infant botulism which one of the following statements is NOT correct?

- a. It is the most common form of botulism in the United States.
- b. More cases are reported in California than in any other state.
- c. It is usually transmitted through mother's milk
- d. Children below the age of 18 months should not be fed any honey.

54. The most reliable serological marker during the "window period" is

- a. HBs antigen.
- b. Anti HBs antibodies.
- c. Anti HBe antibodies.
- d. Anti HBc antibodies.

55. In a hybrid cross table dealing with only one gene (Aa x Aa), what is the chance of any single progeny expressing a dominant phenotype?

- a. 100%
- b. 75%
- c. 50%
- d. 25%
- e. 6.25%

56. Which of the following applies exclusively to inheritance of an X-linked dominant gene?

- a. the gene is seen in every generation
- b. the gene is found in every other generation
- c. mother never transmits it to sons
- d. father always transmits it to daughters
- e. the gene is primarily found in inbred families

57. Which of the following mechanisms can lead to a trisomy of an entire gene?

- a. ring chromosome
- b. inversion
- c. mosaicism
- d. terminal deletion
- e. normal sister chromatid exchange

58. Midline disorders, including cleft lip and palate, fusion of the frontal lobe, and colobomas, are common in

- a. Trisomy 13.
- b. Trisomy 9
- c. Trisomy 18
- d. Cri du Chat (5p- syndrome)
- e. Turner's syndrome (XO)

59. Secretions of the large intestine are largely a _____ (M, mucous; S, serous _____
(C, acidic; K, alkaline) fluid serving _____ (D, digestive; P, protective) functions.

- a. M,C,P
- b. M,K,D
- c. M,K,P
- d. S,C,P
- e. S,K,D

60. Voluntary control over defecation is largely exerted via the _____ (I, internal; E, external) anal sphincter, comprised of (S, striated; N, nonstriated) muscle.

- a. E,S
- b. E,N
- c. I,S
- d. I,N

61. Which of the following incorrectly pairs a disaccharide with its constituent monosaccharides (connected by a dashed line)?

- a. maltose: glucose-glucose
- b. sucrose: glucose-fructose
- c. isomaltose: glucose-glucose
- d. galactose: glucose-lactose
- e. none of the above, i.e., all are correctly paired.

62. Which of the following statements regarding digestion and/or absorption in the small intestine is TRUE?

- a. Peptides are hydrolyzed either intraluminally or by brush border enzymes, depending on the number and structure of the constituent amino acids.
- b. Peptides, like triglycerides and carbohydrates, must be digested to their constituent "building blocks" before entering the enterocyte.
- c. Disaccharides are digested intraluminally.
- d. Disaccharidases are highly specific, each showing activity for a single pair of monosaccharides.
- e. All of the above are true.

63. Which of the following is NOT typical of anorexia nervosa?

- a. self-induced vomiting
- b. misuse of laxatives
- c. weight loss to 85% of expected weight
- d. concern about weight loss with strong desire to change

64. Which of the following is NOT typical of bulimia nervosa?

- A
- a. periods of fasting and/or excessive exercise
 - b. denial of illness and lack of desire to change
 - c. self-induced vomiting after binges
 - d. guilt due to lack of control over eating during binges

65. In a managed-care setting, which of the following treatments for obesity would NOT be acceptable?

- a. self-help program
- b. nutritional counseling
- c. very low calorie diet
- d. psychoanalysis
- e. Phen-Fen diet

66. Which of the following statements concerning vomiting in anorexia nervosa is TRUE?

- a. Vomiting is a nuisance but not potentially dangerous.
- b. Vomiting may lead to hypokalemia.
- c. Patients should always brush their teeth after vomiting to prevent tooth decay from the gastric contents.
- d. Vomiting usually occurs only 1-2 times per week.

67. Which of the following statements best describes plain abdominal film findings?

- D
- a. paralytic ileus - dilated small and large bowel without air-fluid levels
 - b. adynamic ileus - dilated small and large bowel with air-fluid levels
 - c. mechanical ileus - dilated small bowel with air-fluid levels
 - d. reflux ileus - dilated large and small bowel without air-fluid levels
 - e. mechanical ileus - dilated large bowel with air-fluid levels

68. Malignant ulcers

- B, A
- a. are nodular with folds radiating up to the tumor and are eccentric.
 - b. are located within the lumen of the stomach, eccentrically placed, and on the greater curvature.
 - c. are often within the lumen of the stomach, are large, and are centrally located.
 - d. folds radiate up to the ulcer, located within the lumen of the stomach, and are irregular.
 - e. are regularly shaped, located within the lumen of the stomach, and smooth.

69. Diverticulosis does not

- C
- a. have an increased incidence in the elderly.
 - b. perforate.
 - c. involve the entire colon.
 - d. usually involve only the sigmoid.
 - e. retain barium.

70. For which of the following does granulomatous colitis meet all the listed criteria?

- a. longitudinal ulcers, skip lesions and an increased incidence of carcinoma
- b. toxic megacolon, skip lesions, and longitudinal ulcers
- c. longitudinal ulcers, rectum involved, and fistulae
- d. pseudo-polyposis, fistulae, and mucosal ulcerations
- e. longitudinal ulcers, fistulae, and spares the rectum

Mike is a 25-year-old student at COMP. He is 5'11" (180 cm) tall and weighs 165 lbs (75 kg). Because of his busy schedule, he pays little attention to his eating habits. On a typical day, he will eat the following:

<u>Breakfast</u>	<u>Lunch</u>	<u>Supper</u>	<u>Snack</u>
1.5 cups Cheerios	1 double cheeseburger	4 slices cheese pizza	2 cookies
1.5 cups 2% milk	medium fries	16 oz. lemonade	1 cup 2% milk
1 banana	12 oz. diet coke		

The following are the results of computerized nutritional analysis of the above foods:

Energy (kcal)	2200	Iron (mg)	18
Protein (g)	88	Zinc (mg)	15
Fat (g)	88	Calcium (mg)	1400
Saturated fat (g)	35	Vitamin C (mg)	120
Dietary fiber (g)	12.5	Folic acid (mcg)	150

Answer questions 71-75 about Mike's diet.

71. Compare Mike's actual food intake with the pattern recommend by the "Food Guide Pyramid". Mike's intake shows that he consumed the minimum number of servings from all the food groups EXCEPT

- a. bread, cereal, rice and pasta.
- b. fruit.
- c. vegetable.
- d. both b and c.
- e. all of the above.

72. The percent of kilocalories from fat:

- a. 25%
- b. 30%
- c. 36%
- d. 40%

73. Mike's saturated fat intake

- a. is higher than recommended.
- b. is lower than recommended.
- c. is OK.
- d. cannot be determined from above information.

74. Compared to Daily Values, Mike's dietary fiber intake is

- a. adequate.
- b. one-half what it should be.
- c. one-fourth what it should be.
- d. double what it should be.

75. Mike's Body Mass Index (BMI)*

- a. 19 kgm²
- b. 21 kgm²
- c. 23 kgm²
- d. 25 kgm²
- e. 27 kgm²

180
75.0

$$\begin{array}{r} 23 \\ 180 \overline{) 75.0} \\ \underline{360} \\ 900 \\ \underline{720} \\ 1800 \\ \underline{1800} \\ 0 \end{array}$$

76. The RDA tables could be used to determine all of the following EXCEPT

- a. RDA for vitamin A for a 65-year-old female.
- b. RDA for calcium for a 5-year-old child.
- c. RDA for iron for a 35-year-old male with a bleeding ulcer.
- d. RDA for vitamin C for a 60-year-old male.

77. Overweight individuals, when compared to normal weight individuals, tend to have

- a. higher resting metabolic rates.
- b. lower resting metabolic rates.
- c. more lean body mass.
- d. less lean body mass.
- e. both a and c.

78. Dietary fibers have been tested on their ability to reduce blood cholesterol levels. All of the following have been found to be effective EXCEPT

- a. oat bran.
- b. wheat bran.
- c. guar gum.
- d. pectin.

79. Short-chain fatty acids produced from the fermentation of soluble fibers may

- a. be utilized for energy by gut epithelial cells.
- b. be absorbed into the blood and utilized
- c. inhibit hepatic cholesterol biosynthesis.
- d. all of the above are correct.

80. The measure of the growth-promoting effect of dietary protein is the

- a. digestibility factor.
- b. amino acid score.
- c. protein efficiency ratio.
- d. recommended dietary allowance.

81. Which of the following is NOT a characteristic of children with kwashiorkor?
- a. They have low blood albumin levels.
 - b. They accumulate fat in their livers.
 - c. They develop edema.
 - d. They look like skin and bones.
82. Low levels of vitamin A in the diets of young children in some developing countries leads to
- a. xerophthalmia.
 - b. red cell hemolysis. - Vit E
 - c. osteomalacia.
 - d. rickets.
83. All of the following are correct associations of deficiency symptoms and vitamins EXCEPT
- a. scurvy and vitamin C.
 - b. beriberi and biotin. - thiamine
 - c. cheilosis and riboflavin.
 - d. pellagra and niacin.
 - e. rickets and vitamin D.
84. If a food label states that a serving of the food contains 10% of the Daily Value for fat, the serving would contain
- a. 5.0 grams of fat.
 - b. 6.5 grams of fat.
 - c. 10.0 grams of fat.
 - d. 20.0 grams of fat.
85. In order for a food to be called low calorie, it should contain
- a. zero calories per serving.
 - b. 5 calories or less per serving.
 - c. 40 calories or less per serving.
 - d. 100 calories or less per serving.
86. Which of the following statements is FALSE?
- a. People tend to over consume calories when given high fat diets.
 - b. The energy costs of converting dietary carbohydrate to body fat are far less than those of converting dietary fat to body fat.
 - c. Converting dietary fat to body fat requires 3% of the ingested calories.
 - d. Higher fat foods are perceived as being more palatable.

87. A 50-year-old male presents to the family physician's office with a chief complaint of heartburn, regurgitation, pyrosis and water brash. His symptoms were worse when lying down and improve dramatically when he elevates the head of his bed on 6-inch blocks. The addition of an H2 blocker totally alleviates his pain. The most likely diagnosis is

- a. acute cholecystitis.
- b. penetrating peptic ulcer disease.
- c. acute reflex esophagitis.
- d. achalasia.
- e. none of the above.

88. The most sensitive and specific diagnostic study to demonstrate gastroesophageal reflux disease is

- a. double contrast UGI.
- b. endoscopy in addition to biopsy.
- c. gastroesophageal scintiscan.
- d. Bernstein test.
- e. none of the above.

89. A 54-year-old white male presents to the emergency room complaining of chest pain and dysphagia. Complete cardiac evaluation was performed and was negative. Esophageal manometry reveals repetitive non-peristaltic contractions. Increased duration of contractions greater than 7.5 seconds and increased amplitude greater than 200 mm/Hg was also noted. Patient was given a trial of calcium channel blockers with reduction of his symptoms. The most likely diagnosis is

- a. diffuse esophageal spasm.
- b. achalasia.
- c. nutcracker esophagus.
- d. peptic ulcer disease.
- e. acute cholecystitis.

90. The classic primary motor disturbance of the esophagus characterized by aperistalsis, incomplete relaxation of the lower esophageal sphincter, and loss of the ganglion villi in Auerbach's plexus is

- a. nutcracker esophagus.
- b. diffuse esophageal spasm.
- c. non-specific motility disorder.
- d. achalasia.
- e. all of the above.

91. All of the following have been shown to be of benefit in peptic ulcer disease EXCEPT:
- a. Zantac (H2 blockade).
 - b. Carafate.
 - c. Non-steroidal drugs (NSAIDs).
 - d. antacids.
 - e. omeprazole
92. Which of the following is indicated in the treatment of Zollinger-Ellison syndrome and refractory reflux esophagitis and inhibits the Na⁺-K⁺ ATPase pump?
- a. Pepcid
 - b. Zantac
 - c. Cytotec
 - d. omeprazole
 - e. Carafate
93. Which of the following is a potential complication in peptic ulcer disease?
- a. bleeding
 - b. perforation
 - c. penetration
 - d. intractability
 - e. all of the above are potential complications
94. A 40-year-old obese female presents to the emergency room with a chief complaint of sudden onset of RUQ following a fatty meal. Nausea, vomiting and right shoulder pain were prominent. HIDA scan was positive. The most likely diagnosis is
- a. angina pectoris.
 - b. acute peptic ulcer disease.
 - c. acute cholecystitis.
 - d. acute hepatitis.
 - e. none of the above
95. The most cost effective, sensitive and specific study to detect gallstones is
- a. MRI.
 - b. CT scan.
 - c. HIDA scan.
 - d. ultrasound.
 - e. cholecystography.
96. Which of the following about gallstones is TRUE?
- a. more common in women than men
 - b. is the second most commonly performed surgery
 - c. 85% of all gallstones are cholesterol based
 - d. obesity, pregnancy and high fat diets are risk factors
 - e. all of the above are true

97. The most common form of familial unconjugated hyperbilirubinemia characterized by autosomal dominant transmission and reduced amount of UDP glucuronyl transferase with normal liver histology is
- Rotor's syndrome.
 - Gilbert's syndrome.
 - Duben-Johnson.
 - Coomb's positive hemolytic anemia.
 - sclerosing cholangitis.
98. A 72-year-old white male who presents to the emergency room with vague back pain, painless jaundice, 30 pound weight loss, SGOT 2x normal and alk phos 5X normal, dilated intrahepatic and extrahepatic ducts with a dilated gallbladder most likely suffers from which of the following diagnoses?
- acute hepatitis
 - fatty liver
 - cirrhosis
 - pancreatic carcinoma
 - alcoholic hepatitis
99. A 58-year-old female presents to her GP with a chief complaint pruritis and unexplained jaundice. Blood studies reveal alk phos 3x normal, elevated bilirubin and transaminases (SGOT, SGPT) 1 1/2x normal. The patient has a positive anti-mitochondrial antibody (AMA) and elevated IgM immunoglobulins. The most probable diagnosis is
- sclerosing cholangitis.
 - cholangiolar carcinoma.
 - primary biliary cirrhosis.
 - cirrhosis.
 - choledocholithiasis.
100. A 58-year-old male presents three months following a coronary artery bypass surgery with jaundice. He received multiple transfusions during the hospitalization. The most likely viral agent would be
- Hepatitis A.
 - Hepatitis B.
 - Hepatitis C.
 - Delta Hepatitis
 - Hepatitis E.
101. The most common appropriate therapy for post exposure prophylaxis for HBsAG-positive needlestick in whom the person (recipient) is anti-HBs negative is
- gamma globulin.
 - hepatitis vaccine.
 - hyperimmune globulin (HBIG).
 - HBIG + vaccine.
 - none of the above.

102. A 32-year-old white female presents with nausea, vomiting, RUQ pain and jaundice. SGOT and SGPT are 1200 and 1500, respectively. HBsAG is positive. HBcAb-IgM is positive. Anti HCV is negative. Anti-HAV-IgM is negative. Diagnostic studies support
- acute hepatitis A.
 - chronic hepatitis B.
 - acute hepatitis B.
 - acute hepatitis C.
 - acute delta hepatitis.
103. What best describes celiac sprue?
- vacuolated epithelial cells
 - PAS positive inclusions
 - shortened or absent villi
 - dilated lacteals and lymphatics
 - noncaseating granulomas
104. D-Xylose test is best used for
- protein absorption.
 - fat absorption.
 - carbohydrate absorption.
 - diabetes mellitus.
 - B-12 absorption.
105. Secretin test could be abnormal in which disease?
- Crohn's disease
 - celiac sprue
 - Whipple's disease
 - pancreatitis
 - intestinal lymphoma
106. Schilling test could be abnormal in all of the following EXCEPT
- pernicious anemia.
 - Crohn's disease.
 - bacterial overgrowth.
 - celiac sprue.
 - pancreatitis with pancreatic insufficiency.
107. Which of the following is NOT true about ulcerative colitis?
- a risk for colon cancer
 - fistula more common than in Crohn's
 - bleeding is a complication
 - toxic megacolon is a complication
 - continuous colon involvement

108. All of the following are true about Crohn's EXCEPT

- a. granulomas involved
- b. skipped lesions
- c. transmural inflammation
- d. bloody diarrhea usual presentation
- e. can involve the small intestine

109. Enterotoxin from E. coli causes

- a. osmotic diarrhea.
- b. secretory diarrhea.
- c. fatty acid diarrhea.
- d. steatorrhea.
- e. diarrhea stopped by fasting.

110. All of the following are true about lactase deficiency-intolerance EXCEPT

- a. abdominal pain and diarrhea are presentations.
- b. lactose tolerance test for diagnosis.
- c. more common in whites than blacks.
- d. lactase enzyme declines with age.
- e. low lactose diet is treatment.

111. Which of the following is FALSE?

- a. Bi-manual palpation of the ventral tongue area will detect more pathology than simple external palpation and may yield extremely useful diagnostic information concerning the patient's overall health status.
- b. Hard, bound down lymph nodes posterior to the sternocleidomastoid muscle is often indicative of intra-oral infection.
- c. Symmetry is best judged with observing directly from the mid-sagittal plane when examining the recumbent patient while looking inferiorly.
- d. Tongue blades are best wet on the mucosa prior to moving around the oral cavity and can be used to reflect light into hard-to-see areas.
- e. Removing a patient's denture is very important during a clinical screening examination and is best conducted in a private setting.

112. In matching the cervical node observation with possible diagnosis, which is INCORRECT?

Observe:

- a. small, universally nontender: normal
- b. enlarged unilaterally posterior to sternocleidomastoid (SCM), tender, soft, freely mobile: scalp infection
- c. enlarged bilaterally posterior to SCM, tender, soft, freely mobile: dental abscess
- d. enlarged unilaterally anterior to SCM, stony, bound down: malignancy
- e. enlarged bilaterally anterior to sternocleidomastoid (SCM), tender, soft, freely mobile: ear infection with congenital paracervical oncogene insufficiency

✓ 113. Which of the following statements is TRUE?

- a. An intra-oral stent should be inserted within minutes of admitting an oro-facial pediatric burn patient at the ER.
- b. Once several days have elapsed, hemorrhage following severe oral burns is extremely rare.
- c. Debridement of the burn site should commence immediately, then the site should be left completely undisturbed for complete healing.
- ✓ d. It is wise to examine the patient for "exit site" burns in cases of electrical arc injuries.
- e. Early plastic revision of lip burn injuries is easy because of the clear position of the various tissues involved.

✓ 114. You are assisting an oral/maxillofacial surgeon in the arch bar reduction of a compound fracture of the angle of the left mandible in the vicinity of the third molar ("wisdom tooth"). The surgeon says, "Place a ligature wire on the maxillary right canine; pull the tip 15 mm mesially, 9 mm labially." The tip of the wire would end up

- a. in area where Fordyce granules and Stenson's duct are most commonly found.
- b. in area where lingual varicosities are often seen.
- c. in area where one may observe the palatal torus.
- ✓ d. on the occlusal surface of the mandibular molar.
- e. anterior to the upper right central incisor in an area of loose areolar mucosa.

115. Which is TRUE?

- ✓ a. Dental injector carpules contain 5 cc of solution.
- b. Aspiration is unnecessary for most intraoral injection.
- ✓ c. If Penrose drain material is not available in the ER, washed sections of sterile gloves may be adapted.
- d. Modern topical anesthetic is completely effective in 15 seconds.
- e. EMLA, a eutectic mixture of local anesthetic in a special vehicle, is commonly used as a topical prior to intraoral infiltration in the buccal vestibule.

✓ 116. Which of the following is NOT associated with dental abscesses?

- ✓ a. meningitis, cavernous sinus abscess
- b. mediastinitis, cellulitis
- c. skin surface erythema
- d. compromised airway, peritonsillar abscess
- ✓ e. none of the above

117. A 57-year-old male with a history of one-pack-a-day smoking and two-hard-liquor-a-night alcohol drinking habit presents with filamentous hyperkeratinization on the right and left buccal mucosa. In the area of the upper right first premolar the hyperkeratinized area surrounds an indented area of erythema. You coat the area with toluidine blue dye and decolorize with acetic acid solution and see no area of deep coloration. You perform exfoliative cytological examination which the path lab returns as "WNL epithelium". Your proper clinical alternative at this point is

- a. refer for incisional biopsy. (J. Cochran: "If you feel it in your gut, you must cut.")
- b. treat for lichen planus with topical tretinoin.
- c. treat for oral candidiasis with clotrimazole troches.
- d. ask patient to return for observation in nine months.
- e. treat patient for aphthous stomatitis with Lactaid.

118. A 28-year-old medical student presents with severe oral pain, fetor oris, malaise. Oral examination reveals gingivae with obvious destruction of the interdental papillae. The most likely working diagnosis would be

- a. ANUG/trenchmouth.
- b. leukemia.
- c. agranulocytosis.
- d. lichen planus.
- e. AIDS

119. In performing a mandibular block injection, you observe a red color in the dental injector's capsule when pulling back on the ring. You should then

- a. perform CPR.
- b. withdraw and ask the patient to return at another time.
- c. move the needle to a different location and continue injecting with a very large bore needle.
- d. withdraw, change carpules, inject in a different location.
- e. continue injecting and place a Penrose drain.

120. When a patient presents with protracted slow hemorrhage from an extraction site, many modalities of treatment are available. You would probably choose the simplest approach first and then escalate your aggressiveness based on initial need and results of your first treatment. Which of the following hemorrhage control mechanisms is FALSE/INAPPROPRIATE?

- a. Place 3-0 silk sutures into the connective tissue and muscle areas, resorbable gut sutures into the superficial mucosa and Rx tetanus toxoid.
- b. Place oxidized cellulose, Gelfoam sponge and topical thrombin into the wound site.
- c. Use pressure with saline soaked gauze or a tea bag.
- d. Inject around wound using epinephrine-free anesthetics and start a drip of freeze dried platelets.
- e. a, b, and d are false.