



EXERCISES

Remember to check your answers carefully with the Answers to Exercises, page 178.

A Match the following digestive system structures with their meanings below.

anus	esophagus	liver
cecum	gallbladder	pancreas
colon	ileum	pharynx
duodenum	jejunum	sigmoid colon

1. large intestine _____
2. small sac under the liver; stores bile _____
3. first part of the large intestine _____
4. end of the digestive tract opening to the outside of the body _____
5. second part of the small intestine _____
6. tube connecting the throat to the stomach _____
7. third part of the small intestine _____
8. large organ located in the RUQ; secretes bile, stores sugar, produces blood proteins

9. throat _____
10. lower part of the colon _____
11. first part of the small intestine _____
12. organ under the stomach; produces insulin and digestive enzymes _____

B Circle the term that fits the given definition. You should be able to define the other terms as well!

1. **microscopic projections in the walls of the small intestine:**
papillae villi rugae
2. **salivary gland near the ear:**
submandibular sublingual parotid
3. **ring of muscle at the end of the stomach:**
pyloric sphincter uvula lower esophageal sphincter
4. **soft, inner section of a tooth:**
dentin enamel pulp
5. **chemical that speeds up reactions and helps digest foods:**
triglyceride amino acid enzyme

6. **pigment released with bile:**
glycogen bilirubin melena
7. **hormone produced by endocrine cells of the pancreas:**
insulin amylase lipase
8. **rhythm-like contraction of the muscles in the walls of the gastrointestinal tract:**
deglutition mastication peristalsis
9. **breakdown of large fat globules:**
absorption emulsification anabolism
10. **pointed, dog-like tooth medial to premolars:**
incisor canine molar

C Complete the following.

1. Labi/o and cheil/o both mean _____
2. Gloss/o and lingu/o both mean _____
3. Or/o and stomat/o both mean _____
4. Dent/i and odont/o both mean _____
5. Lapar/o and celi/o both mean _____
6. Gluc/o and glyc/o both mean _____
7. Lip/o, steat/o, and adip/o all mean _____
8. The suffixes -iasis and -osis both mean _____
9. Chol/e and bil/i both mean _____
10. Resection and -ectomy both mean _____

D Build medical terms based on the given definitions.

1. removal of a salivary gland _____
2. pertaining to the throat _____
3. hernia of the rectum _____
4. enlargement of the liver _____
5. surgical repair of the roof of the mouth _____
6. after meals _____
7. visual examination of the anal and rectal region _____
8. study of the cause (of disease) _____
9. incision of the common bile duct _____
10. pertaining to teeth and cheek _____

11. disease condition of the small intestine _____
12. new opening between the common bile duct and the jejunum _____
13. pertaining to surrounding the anus _____
14. new opening from the colon to the outside of the body _____
15. under the lower jaw _____
16. pertaining to the face _____

E Match the following doctors or dentists with their specialties.

colorectal surgeon
endodontist
gastroenterologist

nephrologist
oral surgeon
orthodontist

periodontist
proctologist
urologist

1. treats disorders of the anus and rectum _____
2. operates on the organs of the urinary tract _____
3. straightens teeth _____
4. performs root canal therapy _____
5. operates on the mouth and teeth _____
6. treats kidney disorders _____
7. diagnoses and treats gastrointestinal disorders _____
8. treats gum disease _____
9. operates on the intestinal tract _____

F Build medical terms to describe the following inflammations.

1. inflammation of the appendix _____
2. inflammation of the large intestine _____
3. inflammation of the passageway from the throat to the stomach _____
4. inflammation of the membrane surrounding the abdomen _____
5. inflammation of the gallbladder _____
6. inflammation of the third part of the small intestine _____
7. inflammation of the pancreas _____
8. inflammation of the gums _____
9. inflammation of the liver _____
10. inflammation of the mouth _____
11. inflammation of the salivary gland _____
12. inflammation of the small and large intestines _____

G Match the following terms with their meanings below.

anastomosis
biliary
defecation
cheilitis

gluconeogenesis
glycogenolysis
hyperbilirubinemia
hyperglycemia

mesentery
mucosa
parenteral
portal vein

1. high level of blood sugar _____
2. inflammation of the lip _____
3. pertaining to administration of medicines and fluid other than by mouth _____
4. mucous membrane _____
5. expulsion of feces from the body through the anus _____
6. breakdown (conversion) of starch to sugar _____
7. fan-like membrane that connects the small intestine to the abdominal wall _____
8. large vessel that takes blood to the liver from the intestines _____
9. new surgical connection between structures or organs _____
10. pertaining to bile ducts _____
11. process of forming new sugar from proteins and fats _____
12. high levels of a bile pigment in the bloodstream _____

H Give the names of the following gastrointestinal signs or symptoms based on their descriptions.

1. passage of bright red blood from the rectum _____
2. lack of appetite _____
3. fat in the feces _____
4. black, tarry stools; feces containing digested blood _____
5. abnormal accumulation of fluid in the abdomen _____
6. rumbling noise produced by gas in the GI tract _____
7. gas expelled through the anus _____
8. an unpleasant sensation in the stomach and a tendency to vomit _____
9. loose, watery stools _____
10. difficulty in passing stools (feces) _____
11. difficulty in swallowing _____

I Write short answers for the following questions.

1. What is jaundice? _____

2. List three ways in which a patient can become jaundiced

- a. _____
- b. _____
- c. _____

3. What does it mean when a disease is described as *idiopathic*? _____

5

J Select from the list of pathologic conditions to make a diagnosis.

achalasia

anal fistula

aphthous stomatitis

colonic polyps

colorectal cancer

Crohn disease (Crohn's)

dental caries

esophageal cancer

herpetic stomatitis

oral leukoplakia

pancreatic cancer

periodontal disease

1. Mr. Jones, a smoker and heavy drinker, complained of dysphagia in recent months. A longstanding condition of Barrett esophagus resulted in his malignant condition.
 Diagnosis: _____.
2. An abnormal tube-like passageway near his anus caused Mr. Rosen's proctalgia. His doctor performed surgery to close off the abnormality. Diagnosis: _____.
3. Carol's dentist informed her that the enamel of three teeth was damaged by bacteria-producing acid. Diagnosis: _____.
4. Paola's symptoms of chronic diarrhea, abdominal cramps, and fever led her doctor to suspect that she suffered from an inflammatory bowel disease affecting the distal portion of her ileum. The doctor prescribed steroid drugs to heal her condition. Diagnosis: _____.
5. Mr. Hart learned that his colonoscopy showed the presence of small benign growths protruding from the mucous membrane of his large intestine. Diagnosis: _____.
6. During a routine dental checkup, Dr. Friedman discovered white plaques on Mr. Longo's buccal mucosa. He advised Mr. Longo, who was a chronic smoker and heavy drinker, to have these precancerous lesions removed. Diagnosis: _____.
7. Every time Carl had a stressful time at work, he developed a fever blister (cold sore) on his lip, resulting from reactivation of a previous viral infection. His doctor told him that there was no treatment 100% effective in preventing the reappearance of these lesions.
 Diagnosis: _____.
8. Mr. Green had a biopsy of a neoplastic lesion in his descending colon. The pathology report indicated a malignancy. A partial colectomy was necessary. Diagnosis: _____.
9. Small ulcers (canker sores) appeared on Diane's gums. They were painful and annoying.
 Diagnosis: _____.
10. Sharon's failure to floss her teeth and remove dental plaque regularly led to development of gingivitis. Her dentist advised consulting a specialist who could treat her condition.
 Diagnosis: _____.

11. Imaging tests revealed a tumor in a section of Mr. Smith's pancreas. His physician told him that since it had not spread, he could hope for a cure with surgery. He had a pancreatoduodenectomy (Whipple procedure), which was successful. Diagnosis: _____.
12. Mr. Clark complained of pain during swallowing. His physician explained that the pain was caused by a failure of muscles in his lower esophagus to relax during swallowing.
Diagnosis: _____.

K Match the following pathologic diagnoses with their definitions.

cholecystolithiasis (gallstones)	hemorrhoids	pancreatitis
cirrhosis	hiatal hernia	peptic ulcer
diverticulosis	ileus	ulcerative colitis
dysentery	intussusception	viral hepatitis
esophageal varices	irritable bowel syndrome	volvulus

- protrusion of the upper part of the stomach through the diaphragm _____
- painful, inflamed intestines caused by bacterial infection _____
- swollen, twisted veins in the rectal region _____
- open sore or lesion of the mucous membrane of the stomach or duodenum

- loss of peristalsis _____
- twisting of the intestine on itself _____
- swollen, varicose veins on the surface of the distal portion of the esophagus

- a condition of abnormal outpouchings in the intestinal wall _____
- chronic inflammation of the colon with destruction of its inner surface _____
- telescoping of the intestines _____
- inflammation of the liver caused by type A, type B, or type C virus _____
- inflammation of the pancreas _____
- calculi in the sac that stores bile _____
- chronic degenerative liver disease with scarring resulting from alcoholism or infectious hepatitis _____
- symptoms (diarrhea or constipation, abdominal pain, bloating) associated with stress and tension, but without inflammation of the intestine _____