

**LABORATORY EXERCISE 43
DIGESTIVE ORGANS**

Figure Labels

FIG. 43.1

- | | |
|----------------|--------------------|
| 1. Lip | 5. Palatine tonsil |
| 2. Hard palate | 6. Tongue |
| 3. Soft palate | 7. Vestibule |
| 4. Uvula | |

FIG. 43.2

- | | |
|--------------------|------------------------|
| 1. Parotid gland | 4. Sublingual gland |
| 2. Masseter muscle | 5. Submandibular gland |
| 3. Tongue | |

FIG. 43.3

- | | |
|-----------|---------------|
| 1. Enamel | 4. Crown |
| 2. Dentin | 5. Gingiva |
| 3. Root | 6. Root canal |

FIG. 43.5

- | | |
|---|--------------------|
| 1. Pharyngeal tonsils (adenoids) | 5. Oropharynx |
| 2. Opening of auditory tube (Eustachian tube) | 6. Lingual tonsils |
| 3. Nasopharynx | 7. Epiglottis |
| 4. Palatine tonsils | 8. Laryngopharynx |

FIG. 43.7

- | | |
|---|-----------|
| 1. Esophagus | 6. Fundus |
| 2. Gastric folds (rugae) | 7. Cardia |
| 3. Pyloric sphincter | 8. Body |
| 4. Duodenum | |
| 5. Lower esophageal sphincter (cardiac sphincter) | |

FIG. 43.8

- | | |
|---|---|
| 4 | 1 |
| 2 | 3 |
| 5 | 7 |
| 6 | |

FIG. 43.10

- | | |
|--------------------------|---|
| 1. Cystic duct | 5. Bile duct |
| 2. Gallbladder | 6. Pancreatic duct |
| 3. Duodenum | 7. Hepatopancreatic sphincter (sphincter of Oddi) |
| 4. Hepatic duct (common) | |

FIG. 43.11

- | | |
|----|---|
| 10 | 2 |
| 4 | 6 |
| 1 | 9 |
| 3 | 8 |
| 7 | 5 |



Critical Thinking Application Answers

The small intestine, which is much longer than the large intestine and contains villi, provides more surface area for absorption than the large intestine.

Laboratory Report Answers

PART A

- | | | | |
|------|------|------|-------|
| 1. b | 4. f | 7. h | 10. d |
| 2. i | 5. g | 8. c | 11. a |
| 3. e | 6. j | 9. k | |

PART B

- | | |
|-------------------|---|
| 1. Nasopharynx | 5. The esophagus provides a passageway for food from the pharynx to the stomach |
| 2. Oropharynx | |
| 3. Laryngopharynx | |
| 4. Mucus | |

PART C

- | | |
|---|---|
| 1. Cardia, fundus, body, and pylorus (pyloric part) | 5. Chyme |
| 2. Chief cells | 6. The stomach receives food from the esophagus, mixes it with gastric juice, initiates the digestion of protein, does limited amount of absorption, and moves food (chyme) into the small intestine. |
| 3. Parietal cells | |
| 4. Pepsin | |

PART D

(sketch)

PART E

- | | |
|---|--|
| 1. Duodenum, jejunum, ileum | 4. Ileocecal sphincter (valve) |
| 2. A mesentery supports and suspends organs. It contains blood vessels, lymphatic vessels, and nerves that supply the organs. | 5. The small intestine receives secretions from the pancreas and liver, completes digestion of nutrients, absorbs the products of digestion, and transports the residues to the large intestine. |
| 3. Peptidases, sucrase, maltase, lactase, intestinal lipase, enterokinase (only 5 of 6 needed to answer the question) | 6. The large intestine absorbs water and electrolytes, and forms and stores feces. |