Gastrointestinal Pathophysiology

Laboratory Assignment #4

NAME:

Recommended reading:
1. Lecture notes on pancreatic physiology and pancreatitis

Additional optional reading:

Fill in the blanks:

- Centroacinar and intralobular duct cells secrete _______________ and _______________.
- Interlobular and main duct cells secrete _______________ and _______________.
- Acetylcholine acts through _______________ as the second messenger and stimulates secretion by the _______________ cells.
- Secretin acts through _______________ as the second messenger and stimulates ductal _______________ secretion.
- _______________ inhibits CCK and secretin release.
- Pancreatic trypsinogen is converted to trypsin in the duodenum by the action of _______________.
- _______________ and _______________ are the two leading causes of acute pancreatitis.
- Ranson's criteria for prognosis of acute pancreatitis at admission include:
  1. Age > _________ years
  2. _________ > 200 mg/dl
  3. AST > _________ U/L
  4. WBC > __________
  5. _________ > 350 IU/L
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Case 1:
The microscopic slide GI-14 is from an emergency operation on a 52-year-old alcoholic man who presented with a precipitous drop in hematocrit, shock, and markedly elevated amylase and lipase. What is the most appropriate description for this slide?
— Acute pancreatitis
— Chronic pancreatitis
— Acute hemorrhagic pancreatitis superimposed on chronic pancreatitis
— Pancreatic adenocarcinoma

Case 2:
The microscopic slide GI-15 is from an elective operation (to relieve back pain) on a 48-year-old alcoholic man who has had bouts of steatorrhea and back pain for many years. What is the most appropriate description for this slide?
— Acute pancreatitis
— Chronic pancreatitis
— Acute hemorrhagic pancreatitis superimposed on chronic pancreatitis
— Pancreatic adenocarcinoma

Case 3:
The microscopic slide GI-16 is from a pancreatic resection in a 54-year-old man with weight loss and abdominal pain. What is the most appropriate description for this slide?
— Acute pancreatitis
— Chronic pancreatitis
— Acute hemorrhagic pancreatitis superimposed on chronic pancreatitis
— Pancreatic adenocarcinoma

Case 4:
The microscopic slide GI-17 is from a cholecystectomy specimen in a 46-year-old woman with chronic right upper quadrant pain. Are there any Rochitansky-Aschoff sinuses in this gallbladder?