# Leaving Certificate Digestion Practice Test (Sample)

## Study Guide


**Everything you need from our exam experts!**

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# Introduction

**Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.**

**This guide was designed to help you do exactly that.**

**Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.**

**The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:**

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

**We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.**

**Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.**

**Let's begin.**

# How to Use This Guide

**This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:**

### 1. Start with a Diagnostic Review

**Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.**

### 2. Study in Short, Focused Sessions

**Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.**

### 3. Learn from the Explanations

**After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.**

### 4. Track Your Progress

**Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.**

### 5. Simulate the Real Exam

**Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.**

### 6. Repeat and Review

**Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.**

**There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!**

# Questions

**1. What is the function of pepsin and what triggers its activation?**

**A. A protease that digests proteins; activated from pepsinogen by stomach acid.**

**B. A lipase that digests fats.**

**C. A carbohydrase that digests carbohydrates.**

**D. A nuclease that digests nucleic acids.**

**2. Constipation may result from reabsorbing too much of which liquid into the bloodstream?**

**A. Water**

**B. Blood**

**C. Saliva**

**D. Plasma**

**3. True or False: The liver produces bile.**

**A. False**

**B. Not sure**

**C. Depends on meal**

**D. True**

**4. Which term correctly describes the process of moving digestion products into the bloodstream?**

**A. Ingestion**

**B. Absorption**

**C. Digestion**

**D. Egestion**

**5. How are vitamins B12 and folate absorbed differently?**

**A. Both absorbed exclusively in stomach**

**B. Folate is absorbed in the duodenum mostly via active transport**

**C. B12 absorption occurs in the ileum with intrinsic factor; folate absorbed mainly in proximal small intestine via active transport**

**D. Folate requires intrinsic factor; B12 does not**

**6. Name the enzymes released by the pancreas that digest proteins, carbohydrates, and fats.**

- **A. Proteases for proteins; pancreatic amylase for carbohydrates; pancreatic lipase for fats.**
- **B. Lipase for proteins; proteases for carbohydrates; amylase for fats.**
- **C. Amylase for proteins; lipase for carbohydrates; proteases for fats.**
- **D. Nucleases for proteins; proteases for carbohydrates; lipase for fats.**

**7. Through which transporter is glucose absorbed in the small intestine?**

- **A. SGLT1 (sodium-glucose co-transporter 1) on the apical membrane**
- **B. GLUT2 on the apical membrane**
- **C. SGLT2 on the basolateral membrane**
- **D. GLUT4 on the basolateral membrane**

**8. What are the major digestive enzymes produced by the pancreas and their substrates?**

- **A. Amylase (carbohydrates), Lipase (fats), Nucleases (nucleic acids)**
- **B. Nucleases only**
- **C. Amylase only**
- **D. Amylase (carbohydrates), Lipase (fats), Proteases such as trypsin, chymotrypsin, and carboxypeptidase (proteins); nucleases also present**

**9. Which vessel carries nutrient-rich blood from the gut to the liver?**

- **A. Aorta**
- **B. Renal vein**
- **C. Hepatic artery**
- **D. Hepatic portal vein**

**10. The process of taking food into the body through the mouth is known as ...**

**A. Ingestion**

**B. Digestion**

**C. Absorption**

**D. Excretion**

# Answers

1. A
2. A
3. D
4. B
5. C
6. A
7. A
8. D
9. D
10. A

# Explanations

## 1. What is the function of pepsin and what triggers its activation?

**A. A protease that digests proteins; activated from pepsinogen by stomach acid.**

**B. A lipase that digests fats.**

**C. A carbohydrase that digests carbohydrates.**

**D. A nuclease that digests nucleic acids.**

**Pepsin is the stomach's protease, meaning its job is to break proteins into smaller pieces. It's produced and released as an inactive precursor called pepsinogen. Activation happens in the stomach when hydrochloric acid from the stomach lining lowers the pH; this acidic environment triggers pepsinogen to be converted into active pepsin by proteolytic cleavage. Once active, pepsin works best in these very acidic conditions to digest proteins. The other enzymes described in the options—lipase for fats, carbohydrase for carbohydrates, and nuclease for nucleic acids—do not match pepsin's function or activation.**

## 2. Constipation may result from reabsorbing too much of which liquid into the bloodstream?

**A. Water**

**B. Blood**

**C. Saliva**

**D. Plasma**

**The key idea is how water balance in the digestive tract affects stool consistency. In the large intestine, water is reabsorbed from the digested material back into the bloodstream. If too much water is reabsorbed, the stool becomes dry and hard, making it difficult to pass and leading to constipation. Water is the liquid involved in this process of stool hydration, whereas saliva is produced in the mouth, and blood and plasma are parts of the circulatory system, not the material being formed into stool. So reabsorbing excess water into the bloodstream is what tends to cause constipation.**

## 3. True or False: The liver produces bile.

**A. False**

**B. Not sure**

**C. Depends on meal**

**D. True**

**Bile production is a continuous function of the liver. Liver cells (hepatocytes) manufacture bile all the time and drain it into bile ducts. The bile is then stored in the gallbladder and, when you eat a fatty meal, hormones trigger its release into the small intestine to help digest fats. So the statement is true: the liver does produce bile, with release into the gut increasing after meals. Options suggesting it depends on the meal or that it isn't produced are not accurate, since production occurs continuously even though its release is meal-stimulated.**

## 4. Which term correctly describes the process of moving digestion products into the bloodstream?

A. Ingestion

B. Absorption

C. Digestion

D. Egestion

**Absorption is the process by which nutrients produced by digestion cross the lining of the gut into the bloodstream (and, for fats, into the lymphatic system before joining the blood). In the small intestine, the villi provide a large surface area so nutrients like glucose, amino acids, vitamins, and minerals can cross into capillaries by diffusion or active transport. Fats are mainly absorbed as part of chylomicrons into the lymph, then eventually reach the bloodstream. Ingestion is simply taking food into the mouth, digestion is the breakdown of food into smaller molecules, and egestion is the removal of indigestible waste from the body.**

## 5. How are vitamins B12 and folate absorbed differently?

A. Both absorbed exclusively in stomach

B. Folate is absorbed in the duodenum mostly via active transport

C. B12 absorption occurs in the ileum with intrinsic factor; folate absorbed mainly in proximal small intestine via active transport

D. Folate requires intrinsic factor; B12 does not

**Vitamins B12 and folate are absorbed in different parts of the gut and by different mechanisms, which is why their handling in the intestine is distinct. B12 absorption hinges on intrinsic factor, a protein produced by stomach cells. The B12-intrinsic factor complex travels to the ileum, where it binds to specific receptors and is taken into the enterocytes. This makes its absorption strongly dependent on intrinsic factor and localized to the distal small intestine. Folate is absorbed predominantly earlier in the small intestine, in the proximal portion (duodenum and jejunum), mainly through active transport using folate-specific transporters such as the proton-coupled folate transporter. It does not require intrinsic factor, though at very high concentrations some folate can be absorbed by passive diffusion. So the correct idea is that B12 is absorbed in the ileum with intrinsic factor, while folate is absorbed mainly in the proximal small intestine via active transport. The other statements misstate either the sites or the need for intrinsic factor.**

## 6. Name the enzymes released by the pancreas that digest proteins, carbohydrates, and fats.

**A. Proteases for proteins; pancreatic amylase for carbohydrates; pancreatic lipase for fats.**

**B. Lipase for proteins; proteases for carbohydrates; amylase for fats.**

**C. Amylase for proteins; lipase for carbohydrates; proteases for fats.**

**D. Nucleases for proteins; proteases for carbohydrates; lipase for fats.**

**Pancreatic enzymes are released into the small intestine to target the three main nutrient types. Proteases break down proteins into smaller peptides and amino acids. Pancreatic amylase specializes in carbohydrates, converting starches into smaller sugars like maltose. Pancreatic lipase targets fats, breaking triglycerides into fatty acids and monoglycerides. This combination—proteases for proteins, pancreatic amylase for carbohydrates, and pancreatic lipase for fats—best fits how the pancreas digests these macronutrients. The other options mix up which enzymes act on which substrates (lipase isn't for proteins, proteases don't digest carbohydrates, and amylase doesn't digest fats; nucleases would act on nucleic acids instead).**

## 7. Through which transporter is glucose absorbed in the small intestine?

**A. SGLT1 (sodium-glucose co-transporter 1) on the apical membrane**

**B. GLUT2 on the apical membrane**

**C. SGLT2 on the basolateral membrane**

**D. GLUT4 on the basolateral membrane**

**Glucose entry from the intestinal lumen into the enterocytes is driven by a sodium-glucose co-transport mechanism on the apical (lumen-facing) surface. This transporter brings glucose into the cell together with Na+ by using the sodium gradient. That gradient is kept steep by the Na+/K+ ATPase on the basolateral membrane, which pumps sodium out of the cell and powers the uptake of glucose. Once inside the cell, glucose exits into the bloodstream via a facilitated glucose transporter on the basolateral side, typically GLUT2, which moves glucose down its concentration gradient without using sodium. Other transporters listed aren't arranged for this uptake: SGLT2 is a kidney transporter, GLUT4 is insulin-responsive mainly in muscle and fat, and GLUT2 on the apical membrane isn't the standard route for intestinal absorption. The apical sodium-glucose co-transporter is the key transporter for absorbing glucose from the small intestine.**

## 8. What are the major digestive enzymes produced by the pancreas and their substrates?

**A. Amylase (carbohydrates), Lipase (fats), Nucleases (nucleic acids)**

**B. Nucleases only**

**C. Amylase only**

**D. Amylase (carbohydrates), Lipase (fats), Proteases such as trypsin, chymotrypsin, and carboxypeptidase (proteins); nucleases also present**

**Think about what the pancreas does best: supply enzymes that tackle the four major types of dietary macromolecules. The pancreas releases enzymes into the small intestine that are matched to those targets. Pancreatic amylase handles carbohydrates, especially starch, breaking it down into smaller sugars. Pancreatic lipase digests fats (triglycerides), producing fatty acids and monoglycerides. Proteases such as trypsin, chymotrypsin, and carboxypeptidase chew up proteins, cutting peptide bonds to form peptides and amino acids. Nucleases present in pancreatic juice break down nucleic acids (DNA and RNA) into nucleotides. It's also useful to note that these proteases are secreted as inactive precursors and activated in the intestine to prevent damage to the pancreas itself. That combination—amylase for carbohydrates, lipase for fats, proteases for proteins, and nucleases for nucleic acids—covers the major pancreatic enzymes and their substrates, which is why this option is the best fit. The other choices omit one or more of these key enzyme groups, making them incomplete.**

## 9. Which vessel carries nutrient-rich blood from the gut to the liver?

**A. Aorta**

**B. Renal vein**

**C. Hepatic artery**

**D. Hepatic portal vein**

**The key idea is how nutrient-filled blood from the digestive tract reaches the liver through a special circulation. After nutrients are absorbed in the gut, the blood travels through the hepatic portal system and is carried to the liver by the hepatic portal vein. This vessel brings nutrient-rich (and relatively low in oxygen) blood from the digestive organs to the liver, where nutrients can be processed, stored, or detoxified before the blood joins the general circulation. The hepatic artery, by contrast, supplies oxygen-rich blood directly to the liver but does not transport gut nutrients. The aorta carries systemic blood away from the heart, and the renal vein drains the kidney. So the hepatic portal vein is the route that delivers gut-derived nutrients to the liver.**

## 10. The process of taking food into the body through the mouth is known as ...

**A. Ingestion**

**B. Digestion**

**C. Absorption**

**D. Excretion**

**Ingestion is the act of taking food into the body through the mouth. It marks the start of the digestive process, when you bite, chew, and mix food with saliva to prepare it for digestion. Digestion refers to the subsequent breakdown of food inside the digestive tract, both mechanically and chemically. Absorption is the process by which nutrients pass from the gut into the bloodstream, mostly in the small intestine. Excretion is the elimination of waste products from the body. So the term that specifically names the act of bringing food in through the mouth is ingestion.**

# Next Steps

**Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.**

**As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.**

**If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.**

**Or visit your dedicated course page for more study tools and resources:**

**https://leavingcertdigestion.examzify.com**

**We wish you the very best on your exam journey. You've got this!**