COMPREHENSIVE BIOLOGY AND HUMAN BODY SYSTEMS FOR STUDENTS PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://compbiohumanbodysys.examzify.com

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright 1

Table of Contents 2

Introduction 3

How to Use This Guide 4

Questions 5

Answers 8

Explanations 10

Next Steps 15

SAMPLE

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.

SAMPLE

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!

SAMPLE

Questions

SAMPLE

1. What system in the human body is responsible for protecting against germs?

A. Nervous system

B. Circulatory system

C. Immune system

D. Respiratory system

2. What is the primary function of DNA?

A. To provide energy to cells

B. To store and transmit genetic information

C. To assist in digestion

D. To form cellular structures

3. What type of joint allows for rotation, like the shoulder joint?

A. Hinge joint

B. Ball and socket joint

C. Pivot joint

D. Immovable joint

4. What is the main function of hemoglobin in the body?

A. Transport nutrients

B. Regulate temperature

C. Pick up oxygen in the lungs

D. Form blood clots

5. What is the role of the esophagus in the digestive system?

A. Takes in nutrients from food

B. Pumps blood through the body

C. Puses food down to the stomach using muscle movements

D. Produces digestive enzymes

6. What is the primary function of the skeletal system?

A. Produce blood cells

B. Support and protect the body

C. Facilitate movement

D. Store calcium and minerals

SAMPLE

7. What carries urine out of the body in both males and females?

A. Urethra

B. Vagina

C. Uterus

D. Fallopian Tubes

8. What is the primary role of the anus within the digestive system?

A. To absorb nutrients

B. To filter waste from blood

C. To release waste from the body

D. To churn food into a liquid mixture

9. Which organ is responsible for making bile and cleaning blood?

A. Gallbladder

B. Liver

C. Pancreas

D. Stomach

10. What does the pH scale measure?

A. The concentration of hydrogen ions in a solution

B. The amount of dissolved oxygen in water

C. The temperature of a substance

D. The mass of microorganisms present

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What system in the human body is responsible for protecting against germs?

A. Nervous system

B. Circulatory system

C. Immune system

D. Respiratory system

The immune system is the primary defense mechanism in the human body against pathogens such as bacteria, viruses, fungi, and parasites. It consists of a network of cells, tissues, and organs that work together to identify and neutralize foreign invaders. Key components of the immune system include white blood cells, antibodies, and various signaling molecules that coordinate responses to infections and diseases. The immune system operates through various processes, including the recognition of pathogens by immune cells, the production of antibodies to target specific invaders, and the activation of inflammatory responses that help contain and eliminate infections. This system is vital for maintaining health and preventing illnesses. In contrast, the nervous system is primarily responsible for coordinating movements and processing sensory information, while the circulatory system focuses on the transportation of blood, nutrients, gases, and waste products throughout the body. The respiratory system's main role is to facilitate breathing and gas exchange, bringing oxygen into the body and expelling carbon dioxide. These systems, while essential for overall bodily function, do not specifically target germs or provide immunity in the way that the immune system does.

2. What is the primary function of DNA?

A. To provide energy to cells

B. To store and transmit genetic information

C. To assist in digestion

D. To form cellular structures

The primary function of DNA is to store and transmit genetic information. DNA, or deoxyribonucleic acid, consists of two long strands that coil around each other to form a double helix, which houses the genetic blueprint for the development, functioning, and reproduction of all living organisms. It contains specific sequences of nucleotides that correspond to genes, which are then expressed as proteins and play crucial roles in various biological processes. This genetic information is passed down from parents to offspring during reproduction, ensuring that traits can be inherited. Additionally, DNA is involved in the replication process, whereby it copies itself to provide an identical set of genetic information to each new cell. This ability to store and convey genetic instructions is fundamental to the continuity of life and evolution.

SAMPLE

3. What type of joint allows for rotation, like the shoulder joint?

A. Hinge joint

B. Ball and socket joint

C. Pivot joint

D. Immovable joint

The type of joint that allows for rotation, similar to the shoulder joint, is the ball and socket joint. This type of joint is characterized by a spherical head of one bone fitting into a cup-like socket of another bone, allowing for a wide range of movement in multiple directions, including rotation. In a ball and socket joint, such as the shoulder, the spherical shape of the humeral head enables it to spin within the glenoid cavity of the scapula. This design facilitates not only rotation but also flexion, extension, abduction, and adduction, allowing for a greater degree of mobility compared to other joint types. Other joint types do not provide the same range of motion as the ball and socket joint. Hinge joints, for example, primarily allow for movement in one plane, like the opening and closing of a door, limiting rotation. Pivot joints permit rotational movements around a single axis, but are more restricted than ball and socket joints, as seen in the joint between the first and second cervical vertebrae that allows the head to rotate side to side. Immovable joints, on the other hand, do not allow any movement at all, providing stability rather than flexibility.

4. What is the main function of hemoglobin in the body?

A. Transport nutrients

B. Regulate temperature

C. Pick up oxygen in the lungs

D. Form blood clots

Hemoglobin's main function in the body is to pick up oxygen in the lungs and transport it to the tissues and organs throughout the body. It is a protein found in red blood cells that has a high affinity for oxygen. When blood passes through the lungs, hemoglobin binds to oxygen molecules that are inhaled, creating oxyhemoglobin. This process is crucial because oxygen is essential for cellular respiration, which provides energy to the body's cells. Once in the tissues, hemoglobin releases the oxygen, allowing it to be utilized by cells for metabolic processes. The other options relate to different physiological functions that do not pertain directly to hemoglobin. For instance, while nutrients are indeed transported in the blood, it is primarily the role of plasma proteins and other components rather than hemoglobin. The regulation of temperature is achieved through mechanisms in the circulatory and nervous systems and is not a function of hemoglobin. Similarly, blood clotting involves platelets and clotting factors, not hemoglobin. Thus, the primary role of hemoglobin specifically pertains to its ability to carry oxygen, making it essential for oxygen delivery in the body.

5. What is the role of the esophagus in the digestive system?

A. Takes in nutrients from food

B. Pumps blood through the body

C. Puses food down to the stomach using muscle movements

D. Produces digestive enzymes

The esophagus plays a vital role in the digestive system by transporting food from the mouth to the stomach. This process occurs through a series of coordinated muscle movements known as peristalsis. Peristalsis involves rhythmic contractions of the esophageal muscles, which push the food bolus downwards. This action is crucial because it ensures that food travels efficiently and quickly from the oral cavity, where digestion begins, to the stomach, where further chemical and mechanical digestion occurs. The esophagus itself does not engage in nutrient absorption, blood circulation, or enzyme production, as these functions are managed by other organs in the body.

SAMPLE

6. What is the primary function of the skeletal system?

A. Produce blood cells

B. Support and protect the body

C. Facilitate movement

D. Store calcium and minerals

The primary function of the skeletal system is to support and protect the body. It provides a rigid framework that maintains the shape and structure of the body, allowing organisms to stand upright and facilitating overall body organization. Additionally, the skeletal system serves to encase and protect vital organs, such as the brain within the skull and the heart and lungs within the ribcage. This protective role is crucial for safeguarding these organs from physical damage. While the skeletal system indeed plays important roles in producing blood cells, facilitating movement, and storing calcium and minerals, these functions are secondary to its essential role of providing structural support and protection. The bones serve as leverage points for muscles, aiding in movement also, but without the foundational support and protection that the skeletal system provides, those functions would be compromised. Therefore, the key function that underscores the importance of the skeletal system is its role in maintaining body integrity and protecting internal structures.

7. What carries urine out of the body in both males and females?

A. Urethra

B. Vagina

C. Uterus

D. Fallopian Tubes

The urethra is the structure responsible for carrying urine out of the body in both males and females. It is a thin tube that connects the urinary bladder to the external environment, providing a channel for urine to be expelled. In males, the urethra also serves as the passage for semen during ejaculation, making it a dual-purpose tube. In females, the urethra is solely dedicated to the passage of urine. In both sexes, its primary function remains the same. The other options refer to reproductive structures that do not play a role in urine transport. The vagina is part of the female reproductive system, the uterus is where fetal development occurs, and the fallopian tubes are involved in the transportation of eggs from the ovaries to the uterus. None of these are involved in the excretion of urine, which clearly distinguishes the urethra as the correct answer.

8. What is the primary role of the anus within the digestive system?

A. To absorb nutrients

B. To filter waste from blood

C. To release waste from the body

D. To churn food into a liquid mixture

The primary role of the anus within the digestive system is to release waste from the body. This structure serves as the final part of the gastrointestinal tract, where undigested food and waste products, known as feces, are expelled. The anus is equipped with sphincter muscles that control the passage of these waste materials, allowing the body to eliminate substances that are no longer needed after digestion has occurred. Other options describe functions that are associated with different parts of the digestive system or processes not directly related to the anus. For instance, nutrient absorption primarily takes place in the small intestine, and filtering waste from the blood is a key function of the kidneys rather than the anus. Churning food into a liquid mixture is a function more accurately attributed to the stomach. Therefore, the anus plays a specific and crucial role in the expulsion of waste, marking the end of the digestive process.

SAMPLE

9. Which organ is responsible for making bile and cleaning blood?

A. Gallbladder

B. Liver

C. Pancreas

D. Stomach

The liver is the organ that plays a crucial role in making bile and cleaning the blood. Bile is a digestive fluid produced by the liver, essential for breaking down fats in the food we eat. It is stored in the gallbladder and released into the small intestine when needed to aid digestion. Additionally, the liver performs vital functions in purifying the blood by filtering out toxins, drugs, and metabolic wastes. It processes nutrients absorbed from the digestive tract, helps in regulating blood sugar levels, and produces proteins essential for blood clotting and immune function. This dual role of producing bile and detoxifying the blood highlights the liver's importance in maintaining overall health and homeostasis within the body.

10. What does the pH scale measure?

A. The concentration of hydrogen ions in a solution

B. The amount of dissolved oxygen in water

C. The temperature of a substance

D. The mass of microorganisms present

The pH scale specifically measures the concentration of hydrogen ions (H+) in a solution, which indicates how acidic or basic that solution is. A lower pH value corresponds to a higher concentration of hydrogen ions, making the solution more acidic, while a higher pH value indicates a lower concentration of hydrogen ions, making the solution more basic (or alkaline). This scale typically ranges from 0 to 14, with 7 being neutral. Understanding pH is fundamental in various biological and chemical processes, as it can affect enzymatic reactions, nutrient availability, and overall organism health. Other options, while related to different aspects of water chemistry or biological activity, do not correspond to the measurement provided by the pH scale.

SAMPLE

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://compbiohumanbodysys.examzify.com

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

SAMPLE