Skeletal System A&P 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 tissue covers bone with a double-layered structure that nourishes bone tissue?

A. Periosteum

B. Endosteum

C. Epimysium

D. Perichondrium

2. In infants, what is the soft membranous spot between the skull bones called?

A. Fontanelle

B. Sutures

C. Foramen

D. Fissure

3. Which cartilage connects the sternum to the ends of the ribs?

A. Hyaline cartilage

B. Costal cartilage

C. Articular cartilage

D. Fibrocartilage

4. Which term means raising a body part?

A. Elevation

B. Flexion

C. External rotation

D. Epiphysis

5. What is the growth plate near the ends of long bones called?

A. Epiphyseal Plate

B. Diaphysis

C. Medullary Cavity

D. Periosteum

6. Hard, dense bone tissue, usually found around the outer portion of bones is called?

A. Compact Bone

B. Spongy Bone

C. Bone Marrow

D. Vascular

7. The term for the vertebrae of the neck is ...

A. Cervical

B. Thoracic

C. Lumbar

D. Sacral

8. Which suture connects the Parietal bones to the Occipital bone?

A. Coronal suture

B. Sagittal suture

C. Squamous suture

D. Lambdoid suture

9. Bones of the skull, vertebral column, and rib cage belong to which skeleton?

A. Axial Skeleton

B. Appendicular Skeleton

C. Compact Bone

D. Medullary Cavity

10. Which bone is found at the back and base of the skull?

A. Occipital bone

B. Temporal bone

C. Parietal bone

D. Frontal bone

Answers

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

Explanations

1. What tissue covers bone with a double-layered structure that nourishes bone tissue?

A. Periosteum

B. Endosteum

C. Epimysium

D. Perichondrium

The periosteum is the tissue that covers bone with a double-layered structure and nourishes bone tissue. Its outer fibrous layer provides protection and attachment to the bone, while the inner osteogenic (or cambial) layer contains osteoblasts and osteoprogenitor cells that can form new bone and help in repair. Blood vessels and nerves run through the periosteum, delivering nutrients to the bone matrix and the bone cells. The endosteum lines the inner surfaces of bone and is thinner and not described as having this distinct double-layered structure, while perichondrium covers cartilage and epimysium surrounds muscle. So the nourishing, double-layered covering is the periosteum.

2. In infants, what is the soft membranous spot between the skull bones called?

A. Fontanelle

B. Sutures

C. Foramen

D. Fissure

Infants have soft spots on the skull where the bones haven't yet fused. These are called fontanelles. They're soft and membranous because the skull bones are still separated by flexible membranes during early life, which allows room for brain growth and helps the head pass through the birth canal. Sutures are the fibrous joints between skull bones, but they're not the soft spots themselves; they're the boundaries that will ossify over time. Foramen and fissure are openings or slits in bone for nerves, vessels, or anatomy of the skull—not soft membranous gaps. So the soft membranous spot between the skull bones is the fontanelle. The main ones are the anterior fontanelle (between the frontal and parietal bones) and the posterior fontanelle (between the parietal and occipital bones), which gradually close as the child grows.

3. Which cartilage connects the sternum to the ends of the ribs?

A. Hyaline cartilage

B. Costal cartilage

C. Articular cartilage

D. Fibrocartilage

Connecting the sternum to the ends of the ribs is done by costal cartilage. These bridges are made of hyaline cartilage, which provides a smooth, flexible link that allows the rib cage to expand and contract during breathing. Costal cartilage directly attaches the true ribs to the sternum (or to the cartilage above, in the case of some false ribs), enabling the chest wall's mobility. Hythe cartilage refers to the tissue type present in costal cartilage, but the specific connector in this context is costal cartilage. Articular cartilage lines joint surfaces, such as at synovial joints; fibrocartilage is a tougher type found in discs and other structures requiring more support.

4. Which term means raising a body part?

A. Elevation

B. Flexion

C. External rotation

D. Epiphysis

Elevation is the term for raising a body part. It describes lifting something vertically, such as shrugging the shoulders or raising the jaw. This is different from flexion, which bends a joint to decrease the angle between bones; extension, which straightens a joint to increase that angle; and external rotation, which turns a limb outward away from the midline. Epiphysis is a structural term referring to the end part of a long bone, not a movement. So elevation best fits the idea of lifting a body part.

5. What is the growth plate near the ends of long bones called?

A. Epiphyseal Plate

B. Diaphysis

C. Medullary Cavity

D. Periosteum

Growth plates are thin layers of cartilage at the ends of long bones that allow the bone to grow in length. The growth plate near the ends is the epiphyseal plate. It sits between the end part (epiphysis) and the region next to the shaft (metaphysis), and cartilage cells divide and are gradually replaced by bone, driving lengthwise growth through endochondral ossification. Once growth stops in adulthood, the cartilage ossifies to form an epiphyseal line, signaling that longitudinal growth has ended. The other terms refer to different structures: the diaphysis is the shaft of the bone, the medullary cavity contains bone marrow within the shaft, and the periosteum is the outer covering of the bone.

6. Hard, dense bone tissue, usually found around the outer portion of bones is called?

A. Compact Bone

B. Spongy Bone

C. Bone Marrow

D. Vascular

The hard, dense bone tissue around the outside of bones is compact bone. This dense outer shell, also called cortical bone, gives bones most of their strength and weight-bearing capacity. It's organized into tightly packed units called osteons, with a central canal for blood vessels and nerves, which helps support the body under stress. Spongy bone, in contrast, is a lighter, porous network found mainly inside the ends of long bones and in flat bones. Bone marrow sits inside the medullary cavity, not in the dense outer layer. Vascular refers to blood vessels, not a bone tissue type.

7. The term for the vertebrae of the neck is ...

A. Cervical

B. Thoracic

C. Lumbar

D. Sacral

The neck region of the spine is named the cervical region because those vertebrae form the neck portion of the column. There are seven cervical vertebrae, forming the top section C1–C7, and they support head movement while protecting the spinal cord as it passes upward from the brain. The term cervical comes from Latin cervix, meaning neck. This is distinct from the thoracic region, which corresponds to the chest and connects with the ribs; the lumbar region is the lower back; and the sacral region is the fused bones at the base of the spine.

8. Which suture connects the Parietal bones to the Occipital bone?

A. Coronal suture

B. Sagittal suture

C. Squamous suture

D. Lambdoid suture

Understanding skull sutures helps you see how the bones fit together. The suture that connects the occipital bone to the parietal bones is the lambdoid suture. It sits at the back of the skull and forms a curved, lambda-like line where the occipital bone meets the two parietal bones. By contrast, the coronal suture runs across the top between the frontal bone and the parietal bones, the sagittal suture runs along the midline between the two parietal bones, and the squamous sutures link the parietal bones to the temporal bones on the sides. So the lambdoid suture is the one that ties the parietals to the occipital bone.

9. Bones of the skull, vertebral column, and rib cage belong to which skeleton?

A. Axial Skeleton

B. Appendicular Skeleton

C. Compact Bone

D. Medullary Cavity

The central-axis bones—the skull, vertebral column, and rib cage—form the axial skeleton. This part of the skeleton supports the body's main axis andProtects vital organs: the brain and spinal cord in the skull and spine, and the heart and lungs in the rib cage. In contrast, the appendicular skeleton includes the limbs and their girdles. Terms like compact bone and medullary cavity refer to bone tissue and internal structures, not to a major skeletal division, so they aren't appropriate names for a skeleton group.

10. Which bone is found at the back and base of the skull?

A. Occipital bone

B. Temporal bone

C. Parietal bone

D. Frontal bone

The skull’s back and base are formed mainly by the occipital bone. It makes up the posterior aspect of the skull and extends into the base of the skull, surrounding the foramen magnum—the large opening where the brainstem passes to become the spinal cord. It also carries the occipital condyles, which rest on the first cervical vertebra to help with head movement. In contrast, the temporal bones sit at the sides near the ears, the parietal bones cover the top and sides of the skull, and the frontal bone forms the forehead and anterior part of the skull. So the bone that matches being at the back and base is the occipital bone.

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://skeletalsysaandp.examzify.com

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