ADAA X-Ray Practice Exam (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. Which radiograph would you choose to visualize only the anterior region of a single arch?

A. Anterior PA

B. Posterior PA

C. Bitewing

D. Panorex

2. What tooth number is the star on?

A. 18

B. 3

C. 9

D. 21

3. What arches are seen in a Bitewing radiograph?

A. One Arch

B. Both Arches

C. Maxillary Arch

D. Mandibular Arch

4. Radiation being absorbed by the body is called what?

A. Exposure

B. Scattering

C. Reflection

D. Attenuation

5. What tooth number is the upper left second bicuspid?

A. 13

B. 12

C. 14

D. 23

6. Which star-marked tooth number is the second smallest?

A. 4

B. 10

C. 18

D. 31

7. Which kind of x-ray is described as Full Mouth Series (FMX)?

A. Periapical (PA)

B. Full Mouth Series (FMX)

C. Panorex (PANO)

D. Bitewings (BW)

8. Scattered radiation occurs when an x-ray beam is absorbed by the sensor/film.

A. True

B. False

C. Not sure

D. Sometimes

9. Bitewing X-rays are most commonly positioned in which orientation?

A. Horizontally

B. Vertically

C. Diagonally

D. Circular

10. In an Anterior PA radiograph, how many arches are visible?

A. One Arch

B. Two Arches

C. All Arches

D. No Arches

Answers

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

Explanations

1. Which radiograph would you choose to visualize only the anterior region of a single arch?

A. Anterior PA

B. Posterior PA

C. Bitewing

D. Panorex

Focusing on the front teeth requires a projection that limits the view to the anterior region. The anterior periapical radiograph is designed to capture the front teeth and the surrounding supporting tissues, providing a confined field of view that isolates the anterior portion of a single arch. Other options broaden the view: a posterior periapical would include the back teeth, not just the front; bitewings primarily show the crowns and interproximal areas of posterior teeth and don't isolate the anterior region; a panoramic image covers the entire arch of both jaws. So for visualizing only the anterior region, the anterior periapical radiograph is the correct choice.

2. What tooth number is the star on?

A. 18

B. 3

C. 9

D. 21

The star is in a position that points to the upper left central incisor. In the universal numbering system, you start at the upper right third molar and move across the upper arch to the upper left third molar, counting from 1 to 16. The upper left central incisor is the ninth tooth in that sequence. So the star's location corresponds to tooth nine. The other numbers would place the star on different teeth (such as a molar on the upper right or teeth on the lower arch), which wouldn't match the star's position.

3. What arches are seen in a Bitewing radiograph?

A. One Arch

B. Both Arches

C. Maxillary Arch

D. Mandibular Arch

Bitewing radiographs are designed to show the crowns and interproximal contact areas of the posterior teeth in both jaws, so you can assess caries between contact points and the bone height around those teeth. The technique places the film or sensor in a way that captures the upper and lower posterior teeth together in one view, allowing you to see how the arches relate to each other in a single image. If you image only one arch, you'd miss the proximal relationships and bone information from the other arch, which bitewings are specifically meant to provide.

4. Radiation being absorbed by the body is called what?

A. Exposure

B. Scattering

C. Reflection

D. Attenuation

When X-rays pass through the body, the tissue is subjected to radiation and energy is absorbed by the atoms in the tissues. This interaction—the body being exposed to radiation—defines exposure. It describes the condition of the body receiving and absorbing the X-ray energy, which is what forms the image. Scattering is photons changing direction after interacting with matter, not the absorption itself. Reflection isn't a primary factor in diagnostic radiology, and attenuation is the overall reduction in beam intensity due to both absorption and scattering, a broader concept than the absorption alone.

5. What tooth number is the upper left second bicuspid?

A. 13

B. 12

C. 14

D. 23

The idea being tested is how to identify a specific tooth using the universal numbering system. In this system, the upper left quadrant is numbered from 9 to 16, starting with the central incisor and moving toward the back. The order in that quadrant is: central incisor, lateral incisor, canine, first premolar, second premolar, first molar, second molar, third molar. The second premolar (second bicuspid) in the upper left is the one after the first premolar, which corresponds to the number 13. So the upper left second bicuspid is tooth number 13. The other options would refer to different teeth in that quadrant or to teeth in other quadrants, not the upper left second premolar.

6. Which star-marked tooth number is the second smallest?

A. 4

B. 10

C. 18

D. 31

Focus on ordering numbers from smallest to largest to find the second position. When the options are arranged in ascending order, they are 4, 10, 18, 31. The star-marked tooth corresponds to the number that sits in the second position in this sequence, which is 10. Therefore, it is the second smallest. The remaining numbers are either the smallest (4) or larger than the second smallest (18 and 31), so they're not the correct second smallest.

7. Which kind of x-ray is described as Full Mouth Series (FMX)?

A. Periapical (PA)

B. Full Mouth Series (FMX)

C. Panorex (PANO)

D. Bitewings (BW)

The main idea here is that FMX stands for a complete set of dental radiographs that documents all teeth and the surrounding bone. It isn't a single view like a periapical or a bitewing, and it isn't one broad image like a panoramic. A full mouth series combines multiple periapical radiographs—covering each tooth and its apex and surrounding bone—with bitewing images to show interproximal surfaces and bone levels. This comprehensive set provides a full picture of the dentition and supporting structures, which is why it's described as a full mouth series. The other options describe individual types of images that only show part of the mouth: periapical focuses on roots and surrounding bone for a few teeth, a panoramic is a single wide view of both arches, and bitewings show interproximal surfaces but not the entire dentition.

8. Scattered radiation occurs when an x-ray beam is absorbed by the sensor/film.

A. True

B. False

C. Not sure

D. Sometimes

Scattered radiation is produced when x-ray photons interact with matter and change direction through processes like Compton and Rayleigh scattering. This scattering occurs within the object or surrounding environment before the photons reach the detector or film. The film's job is to absorb photons to create the image, not to generate scatter. So the idea that scattering happens because the beam is absorbed by the sensor/film is not correct. In fact, some scattered photons may arrive at the film and degrade image contrast, but the origin of scatter is the interaction in matter, not the film absorbing the beam.

9. Bitewing X-rays are most commonly positioned in which orientation?

A. Horizontally

B. Vertically

C. Diagonally

D. Circular

Bitewing radiographs are typically performed with a horizontal orientation because this layout best shows the crowns of the posterior teeth and the contact areas between them in a single image. That arrangement captures multiple adjacent teeth and their interproximal spaces, which is where early decay often hides and where bone levels are assessed. While vertical bitewings are used in some periodontal cases to evaluate bone height over a longer vertical span, the standard practice for routine bitewings is horizontal because it maximizes diagnostic information per exposure and aligns with the way the dental arch is arranged. Circular or diagonal orientations aren't used because they don't efficiently reveal the necessary interproximal details or arch-wide view.

10. In an Anterior PA radiograph, how many arches are visible?

A. One Arch

B. Two Arches

C. All Arches

D. No Arches

In an anterior periapical radiograph, the setup is aimed at capturing the front portion of a single dental arch—either the maxillary or the mandibular anterior teeth. The field of view and projection are focused so that one arch fits within the image, with the other arch outside the area being imaged. That's why only one arch is visible in this view. If you need both arches in one image, you'd use a different projection or take separate anterior periapicals for each arch.

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://adaaxray.examzify.com

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