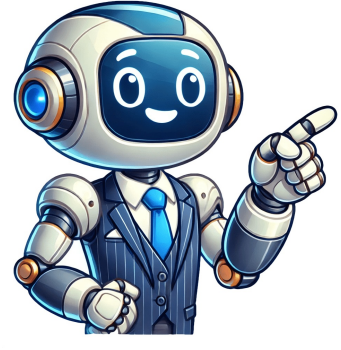


I'm not a robot



Rhs practice questions

Correct Answer Explanation Intraoral film is the correct answer because it refers to the dental film that is placed inside the mouth to examine the teeth and supporting structures. This type of film is commonly used in dental clinics for various diagnostic procedures such as detecting cavities, evaluating bone levels, and assessing the overall oral health of a patient. Duplicating film is used to create copies of radiographs, while extraoral film is used for imaging outside of the mouth, such as panoramic or cephalometric X-rays. Therefore, the correct term for the film used inside the mouth is intraoral film. Correct Answer Explanation An extraoral film is a type of dental film that is placed outside the mouth during x-ray exposure. It is used to capture images of the entire dental arch, including the teeth, jaws, and surrounding structures. This type of film is commonly used for panoramic radiographs, cephalometric radiographs, and cone beam computed tomography (CBCT) scans. In contrast, intraoral films are placed inside the mouth to capture detailed images of individual teeth and specific areas of the oral cavity. Duplicating film is used to make copies of radiographs, and periapical film is used to capture images of a specific tooth and its surrounding structures. Explanation Dental radiographs are a valuable tool in illustrating changes secondary to caries, periodontal disease, and trauma. Caries, or tooth decay, can be detected on radiographs by showing areas of demineralization or cavities. Periodontal disease, which affects the supporting structures of the teeth, can be visualized by radiographs showing bone loss or changes in the density of the alveolar bone. Trauma, such as fractures or dislocations, can also be seen on dental radiographs. Therefore, it is true that dental radiographs can be used to illustrate these changes. Correct Answer Explanation All of the factors listed (total dose, dose rate, cell sensitivity, and age) contribute to radiation injury. The total dose refers to the amount of radiation received, while the dose rate is the rate at which the radiation is delivered. Cell sensitivity refers to the susceptibility of cells to radiation damage, with some cells being more sensitive than others. Age also plays a role, as younger individuals are generally more sensitive to radiation compared to older individuals. Therefore, all of these factors contribute to the occurrence and severity of radiation injury. Correct Answer Explanation A collimator is a device that restricts the size and shape of an x-ray beam. It is used to control the direction and spread of the x-ray beam, ensuring that it only targets the desired area and reduces unnecessary exposure to surrounding tissues. This helps to improve image quality and reduce radiation dose to the patient. Filters, barriers, and film badges are not specifically designed to restrict the size and shape of the x-ray beam, making them incorrect options. Explanation Size 2 is known as the standard film size because it is the most commonly used film size in the industry. It is widely available and compatible with most cameras and projectors. Size 0 and size 1 are smaller film sizes typically used for specialized purposes, while size 3 is a larger format used for panoramic or wide-angle shots. Therefore, size 2 is considered the standard film size due to its widespread use and compatibility. Correct Answer A. As low as reasonably achievable Explanation ALARA stands for "as low as reasonably achievable." This acronym is commonly used in fields such as radiation safety and environmental protection to emphasize the importance of minimizing exposure to potential hazards. It implies that efforts should be made to keep radiation or other risks as low as possible, taking into account technological and economic considerations. This principle helps guide decision-making processes and encourages the adoption of measures that effectively reduce risks to a level that is both practical and achievable. Correct Answer Explanation The amount of radiation exposure an individual receives can vary depending on several factors. Film speed refers to the sensitivity of the film used, with faster films requiring less exposure time and therefore reducing radiation exposure. Collimation refers to the restriction of the x-ray beam to only the area of interest, minimizing exposure to surrounding tissues. Technique refers to the proper positioning and use of equipment, which can affect the amount of radiation received. Exposure factors are the settings chosen by the radiographer, such as kVp and mAs, which directly impact the amount of radiation exposure. Therefore, all of these factors can contribute to the variation in radiation exposure for an individual. Correct Answer Explanation The recommended size of the beam at the patient's face is 2.75 in. This size is likely determined based on various factors such as the desired level of precision, the specific medical procedure being performed, and the comfort and safety of the patient. It is important to have a beam size that is appropriate for the specific application to ensure accurate and effective treatment or examination of the patient. Explanation Film fogging occurs when the film is exposed to light before or after it is developed. This can happen if the film is exposed to improper safe lighting conditions. Safe lighting is necessary to prevent the film from being exposed to light, which can cause fogging and ruin the image. Therefore, the statement "film fogging results from improper safe lighting" is true. Correct Answer Explanation A portion of a processed radiograph that appears light or white is termed as radiopaque. Radiopaque refers to an area on the radiograph that is dense and does not allow the passage of X-rays, resulting in a white appearance. This can be caused by materials such as metal or bone, which absorb X-rays and prevent them from reaching the film or detector. Explanation Size 4 is the largest intraoral film size. Intraoral films are used in dental radiography to capture images of the teeth and surrounding structures. The film size refers to the physical dimensions of the film. Size 4 is larger than size 3, size 2, and size 1, making it the largest option. A larger film size allows for a wider area to be captured in a single image, which can be useful for capturing a full mouth or a panoramic view. Correct Answer Explanation The first step in manual film processing is development. This involves placing the exposed film into a developer solution, which initiates a chemical reaction that converts the latent image on the film into a visible image. Development is crucial as it determines the overall contrast and density of the final image. Once the film has been developed, it can then proceed to the subsequent steps of rinsing, fixation, washing, and drying. Explanation In manual film processing, the optimal temperature for the developer solution is 68° F. This temperature is considered ideal because it allows for proper chemical reactions to occur, resulting in accurate and high-quality film development. Higher temperatures can cause the developer solution to work too quickly, leading to overdevelopment and loss of detail. On the other hand, lower temperatures can slow down the development process, resulting in underdevelopment and poor image quality. Therefore, maintaining the developer solution at 68° F ensures optimal results in manual film processing. Correct Answer Explanation Oxidation refers to the breakdown of chemicals in the processing solution that occurs due to exposure to air. When certain substances in the solution react with oxygen, they undergo oxidation, resulting in a chemical change. This process can lead to the formation of new compounds or the alteration of existing ones. In this case, oxidation is the correct answer as it accurately describes the phenomenon of chemical breakdown caused by air exposure. Correct Answer A. Radiation that has been deflected from its path by interaction with matter Explanation Scatter radiation refers to the radiation that has been deflected from its original path by interacting with matter. When X-rays pass through the patient's body, they can be scattered in different directions due to interactions with tissues and other objects. This scatter radiation can be harmful and can contribute to radiation exposure for both the patient and the healthcare provider. Therefore, it is important to take precautions to minimize scatter radiation during X-ray procedures. Correct Answer Explanation A critical organ refers to an organ that, if damaged, significantly reduces the overall quality of life for an individual. This implies that the function of this organ is vital for the normal functioning and well-being of the individual. Damage to a critical organ can lead to severe health complications and limitations in daily activities, ultimately impacting the individual's overall quality of life. Correct Answer A. Protect film from backscattered radiation Explanation The purpose of a lead foil sheet in the film packet is to protect the film from backscattered radiation. Backscattered radiation refers to the radiation that is deflected or scattered back towards the film after interacting with the patient's body tissues. This can cause fogging or blurring of the image, reducing its clarity and diagnostic value. By placing a lead foil sheet in the film packet, it acts as a barrier, absorbing or blocking the backscattered radiation, thus protecting the film and ensuring a clear and accurate image. Correct Answer Explanation All of the options listed (bone, enamel, dentin) are examples of radiopaque structures that can be seen on dental x-rays. Radiopaque structures appear white or light gray on the x-ray image because they absorb more x-ray radiation. Bone, enamel, and dentin are all dense structures that have a high degree of radiopacity, making them easily visible on dental x-rays. Correct Answer Explanation Magnification refers to a geometric characteristic in radiographic imaging where the image appears larger than its actual size. This can occur due to factors such as the distance between the object and the image receptor or the focal spot size. Magnification can affect the accuracy and clarity of the image, making it important to minimize it for accurate diagnosis and measurements. Correct Answer Explanation Unopened boxes of radiographic film should not be stored in the darkroom because there are multiple potential risks. Chemical fumes from processing solutions may fog the film, continued exposure to the safelight is not recommended, the box may have a tear that may expose the film, and processing solutions could splash onto the film boxes. Therefore, it is best to avoid storing unopened boxes of radiographic film in the darkroom to prevent any potential damage or contamination. Correct Answer same lingual opposite buccal Explanation S.L.O.B. stands for "same lingual opposite buccal." This acronym is used in the field of dentistry and orthodontics to describe the positioning of teeth. "Same lingual" refers to teeth that are on the same side of the tongue, while "opposite buccal" refers to teeth that are on opposite sides of the cheeks. This terminology is used to describe the relationship between specific teeth in the mouth. Correct Answer Explanation A radiolucent portion of a processed radiograph refers to an area that appears dark or black. This indicates that X-rays are able to pass through this area easily, suggesting that it is less dense or transparent to X-rays. Correct Answer Explanation A rectangular PID (Position-Indicating Device) is the most effective in reducing patient exposure. This is because the rectangular shape allows for better collimation and focusing of the X-ray beam, resulting in a more precise and targeted exposure area. The conical and round PIDs may scatter the X-ray beam, increasing the risk of unnecessary radiation exposure to the patient. Therefore, the rectangular PID is the preferred choice for minimizing patient exposure. Correct Answer A. Reduces low-energy waves Explanation Filtration is a process used in radiology to reduce low-energy waves, also known as soft radiation, from the X-ray beam. This is done by passing the X-ray beam through a filter made of a material that absorbs these low-energy waves. By reducing the amount of low-energy waves, filtration helps to improve image quality by reducing scatter radiation and increasing image contrast. It also helps to protect the patient from unnecessary radiation exposure. Correct Answer Explanation Density refers to the overall blackness or darkness of a dental radiograph. It is determined by the amount of radiation that reaches the film or sensor and is influenced by factors such as exposure time and kilovoltage settings. Higher density indicates a darker image, while lower density indicates a lighter image. Density is an important factor in determining the diagnostic quality of a radiograph as it affects the visibility and clarity of anatomical structures and pathologies. Correct Answer Explanation Incorrect horizontal angulation refers to the incorrect positioning of the x-ray tube in relation to the object being imaged. This can result in overlapping of structures in the image, where different objects or anatomical features appear to be merged together. Therefore, the correct answer is "overlapped". Correct Answer A. X-radiation is not harmful to living tissues Explanation The statement "x-radiation is not harmful to living tissues" is incorrect because x-radiation can indeed be harmful to living tissues. X-rays are a form of ionizing radiation, which means that they have enough energy to remove tightly bound electrons from atoms, causing damage to cells and DNA. While dental radiographs can provide benefits in terms of disease detection, it is important to recognize that there is still a risk associated with exposure to x-radiation. Therefore, it is essential to only prescribe radiography when the benefits outweigh the potential risks. Correct Answer Explanation The identification dot on the intraoral film is significant because it serves multiple purposes. Firstly, it indicates whether the film is placed on the patient's right or left side, which is crucial for accurate diagnosis and treatment planning. Secondly, the dot determines the correct orientation of the film, ensuring that the image is correctly aligned with the patient's anatomy. Lastly, the dot plays a vital role in film mounting, allowing the radiographs to be organized and interpreted properly. Therefore, all of the above statements are true. Correct Answer Explanation Air space appears most radiolucent on a radiograph because it allows the X-rays to pass through easily, resulting in a darker area on the image. In contrast, bone, enamel, and dentin are denser and absorb more X-rays, appearing more radiopaque on the radiograph. Explanation The Radiation Control for Health & Safety Act was established in 1968. This act was implemented to increase the voltage in a high-voltage circuit. It works by having more turns in the secondary coil than in the primary coil, which results in an increase in voltage. This is useful in various applications such as power transmission, where high voltage is required to minimize power loss over long distances. Explanation The quality of the x-ray beam in dental radiography is controlled by kVp. kVp stands for kilovolt peak and refers to the peak voltage applied to the x-ray tube. It determines the energy level of the x-ray photons produced. Higher kVp values result in higher energy x-ray photons, which can penetrate the tissues more effectively and produce a better image quality. Therefore, adjusting the kVp allows the radiographer to control the contrast and penetration of the x-ray beam. Correct Answer Explanation Radiation produced with high kilovoltage results in short wavelengths. This is because high kilovoltage leads to high energy levels in the radiation. According to the wave-particle duality of radiation, higher energy levels correspond to shorter wavelengths. Therefore, high kilovoltage produces radiation with short wavelengths. Correct Answer Explanation Density refers to the overall blackness or darkness of an image. It is a measure of how much light is absorbed by an object or film. In the context of photography or radiography, density determines the visibility and clarity of details within an image. A higher density indicates a darker image, while a lower density indicates a lighter image. Therefore, density is the correct term to describe the overall blackness or darkness of an image. Explanation Screen films are commonly used in radiography to capture images of internal structures of the body. These films are designed to be more sensitive to fluorescent light emitted by intensifying screens, which are used to amplify the x-ray signal, than to direct exposure to x-rays. The intensifying screens emit light when struck by x-rays, and this light exposes the screen film, resulting in the formation of an image. Therefore, the statement that screen films are more sensitive to fluorescent light than to direct exposure to x-rays is true. Correct Answer size 2, size 2 receptor. 2 Explanation The correct answer is size 2 receptor. The posterior XCP instrument is designed to be used with a specific size of receptor, and in this case, it is size 2. This size is appropriate for capturing images of the posterior teeth, which are located towards the back of the mouth. Using the correct size receptor ensures that the image quality is optimal and that the entire area of interest is captured. Correct Answer A. X-rays travel at the speed of sound Explanation X-rays travel at the speed of light, not at the speed of sound. Sound waves require a medium to travel through, such as air, water, or solids, while X-rays are a form of electromagnetic radiation that can travel through a vacuum. Therefore, it is incorrect to say that X-rays travel at the speed of sound. Correct Answer Explanation The milliamperage range for dental radiography is typically between 7 to 15 mA. This range is necessary to produce enough radiation to capture clear and detailed images of the teeth and surrounding structures. Milliamperage is an important factor in determining the amount of radiation exposure, and this range ensures that the images are of high quality while minimizing the risk of excessive radiation exposure to the patient. Correct Answer Explanation The sensitivity of tissues to radiation is determined by all of the above factors. Mitotic activity refers to the rate at which cells divide, and tissues with higher mitotic activity are more sensitive to radiation. Cell differentiation refers to the specialization of cells into specific types, and undifferentiated cells are generally more sensitive to radiation. Cell metabolism refers to the chemical processes that occur within cells, and tissues with higher metabolic rates are more sensitive to radiation. Therefore, all of these factors contribute to the sensitivity of tissues to radiation. Correct Answer A. The larger the crystals, faster the film speed Explanation The size of the silver halide crystals in the emulsion determines the speed of a film. Larger crystals allow more light to be captured, resulting in a faster film speed. This is because larger crystals have a greater surface area, allowing them to react more quickly to light. Therefore, the statement "the larger the crystals, faster the film speed" is true. Explanation A thyroid collar or thyroid apron should be used during panoramic X-rays (panoramic radiographs) to protect the thyroid gland from radiation exposure. Correct Answer Explanation The electron carries a negative charge because it has a surplus of negatively charged particles called electrons. These electrons are attracted to positively charged particles and repel other negatively charged particles, indicating that the electron itself has a negative charge. Explanation The statement is false because dental radiography does not require holding a receptor in the patient's mouth. Instead, dental radiography uses X-ray machines to capture images of the teeth and jaw. The patient bites down on a small film or sensor placed outside the mouth to capture the X-ray image. This method is commonly used in dental clinics to diagnose dental issues and assess oral health. Quiz Review Timeline (Updated): Feb 6, 2025 + Our quizzes are rigorously reviewed, monitored and continuously updated by our expert board to maintain accuracy, relevance, and timeliness. Feb 06, 2025 Quiz Edited byProProfs Editorial Team The Dental Assisting National Board (DANB) offers the Radiation Health and Safety (RHS) Exam as a quiz for candidates to demonstrate their expertise in the proper safety procedures for taking X-rays. Many states require the certification in order for a dental assistant to provide this service but even in states that don't require it, having it will give you a distinct advantage over other applicants and potentially qualify you to earn a higher salary.Click "Start Test" above to take a free RHS practice test!RHS Exam OutlineThe Radiation Health and Safety exam contains 75 multiple-choice questions, and you will be given 1 hour to complete the exam.The questions are split into three domains:I. Purpose and Technique (50%)The questions in this domain assess your knowledge in the following areas: Anatomical landmarks, conditions, and materials observed on imagesApical pathologyCariesDental implantsDentulous archesLocalization of impacted teeth and foreign objectsPeriodontal conditionsSinus areasTemporomandibular joint Purpose of dental imagesPeriapicalBite-wingFull mouth seriesFull mouth surveyOcclusalPanoramicCephalometricCone-beam computed tomography (CBCT) Technique to acquire dental imagesReview patient medical and dental histories for contraindications, including medicationsIntraoral techniquesExtraoral techniquesTechnique modifications based on anatomical variations and clinical conditionsError correctionPurpose and maintenance of radiographic equipmentPatient management techniquesImage viewing and mountingLegal requirements for maintaining dental images II. Radiation Protection (25%)The questions in this domain test your knowledge in the following areas: Radiation physicsFactors affecting x-ray productionRadiation characteristicsRadiation physics Radiation biologyCell and tissue radiation sensitivityType of exposureBiological effect periodsBiological effectsUnits of radiation measurement Radiation protectionOral healthcare provider exposure to radiationPatient exposure to radiationCauses of unnecessary radiation exposureFactors affecting radiation protectionPatient concerns about exposure to radiationInformed consent or patient refusal of exposure to radiationProtocol for suspected x-ray unit malfunctions III. Infection Prevention and Control (25%)The questions in this domain test your knowledge in the following areas: Standard precautions for equipment and supplies according to ADA, CDC and OSHABreakdown and setup of treatment roomBarriersPosition indicating and beam alignment devicesClinical contact surfacesCritical and semi-critical instrument sterilization Standard precautions for patients and operators according to ADA, CDC and OSHAHand hygienePersonal Protective Equipment (PPE)Cross contamination Check Out Mometrix's RHS Study GuideGet practice questions, video tutorials, and detailed study lessons Get Your Study Guide RegistrationBefore you register for the exam, you should decide whether or not you want to take the exam in-person at a testing center or remotely via an online proctor. The differences between these testing options will be outlined below.You can apply for the exam online, or by mail or fax if you are taking the in-person test. When you send in your application, you will also need to send in the nonrefundable \$75 application fee. Once you have sent in your application, it generally takes about 2-4 weeks for be processed by DANB.Once your application is approved, you will be sent a confirmation email with a link to schedule your exam. You must schedule your appointment within 60 days of receiving the authorization to test. When you schedule your exam, you will need to pay the \$270 exam fee.DANB RHS Online Prep CourseIf you want to be fully prepared, Mometrix offers an online DANB RHS prep course designed to give you everything you need to succeed!Here's what you'll find in the DANB RHS course:304 + Review Lessons Covering Every TopicOver 200 DANB RHS Practice Questions300+ Digital FlashcardsMoney-back GuaranteeMobile AccessEveryone learns differently, so we've tailored the DANB RHS online prep course to ensure every learner has what they need to prepare for the DANB RHS exam.Click below to check it out!Start Your DANB RHS Online Course Test DayTest day will look different depending on your testing method of choice.In-person TestingYou should arrive at the testing center 15-30 minutes early. Once you arrive, you will be asked to provide a valid photo ID, and you may be asked to scan your fingerprint and/or palm for identification purposes.Before you enter the testing room, you will be asked to leave all personal items in a secure locker outside the room. Personal items include things like your phone, bags, food, notes, books, pencils, and any electronic devices.Once you begin the exam, you will only be able to leave the testing room to use the restroom, but the timer will not be stopped during your break.Remote TestingYou should log in to your account 15-30 minutes before the scheduled exam time to ensure there is enough time to finish the check-in process. The check-in process involves providing a valid photo ID, scanning your room with your webcam, run and pass the OnVUE system check, and sign a non-disclosure agreement (NDA). Once the NDA has been signed, the exam will begin.Note that you are not allowed to wear a jacket during the exam, no other person is allowed in your room, and the following items are prohibited:BagsNotesMobile electronic devices (your cell phone is allowed but must be placed at a considerable distance from your testing area)Pens and pencilsFoodWeaponsBooksHow the Test is ScoredThis exam is computer-adaptive, so depending on your performance, the difficulty of your test will increase or decrease as you go on.Here's a look at how it works: The first question is judged to be of medium difficulty, and depending on your performance, the next question may be easier or harder. If you do well in the first question, the second question will be harder; conversely, if you do poorly on the first question, the second question will be easy.The questions on the exam are rated on a scale of 100-999. The higher a question is rated, the harder the question is (e.g., a question marked as 740 will be more difficult than a question marked 355).To pass the exam, your final question must be on or above the 400 mark. If your final question is below this mark, you will not pass the exam, even if you have answered some questions above the 400 mark at some point during the exam. This is because the computer has rated the difficulty of your final question based on how you answered the previous questions.If you passed, your official exam results are provided by DANB within one to three weeks after taking the exam by mail. Your score report is uploaded to your online account if you did not pass.Check Out Mometrix's RHS FlashcardsGet complex subjects broken down into easily understandable concepts Get Your Flashcards Study TipsHow to Study EffectivelyYour success on Radiation Health and Safety test day depends not only on how many hours you put into preparing but also on whether you prepared the right way. It's good to check along the way to see whether your studying is paying off. One of the most effective ways to do this is by taking Radiation Health and Safety practice tests to evaluate your progress. Practice tests are useful because they show exactly where you need to improve. Every time you take a free Radiation Health and Safety exam practice test, pay special attention to these three groups of questions:The questions you got wrongThe ones you had to guess on, even if you guessed rightThe ones you found difficult or slow to work throughThis will show you exactly what your weak areas are and where you need to devote more study time. Ask yourself why each of these questions gave you trouble. Was it because you didn't understand the material? Was it because you didn't remember the vocabulary? Do you need more repetitions on this type of question to build speed and confidence? Dig into those questions and figure out how you can strengthen your weak areas as you go back to review the material.Answer ExplanationsAdditionally, many DANB RHS practice tests have a section explaining the answer choices. It can be tempting to read the explanation and think that you now have a good understanding of the concept. However, an explanation likely only covers part of the question's broader context. Even if the explanation makes sense, go back and investigate every concept related to the question until you're positive you have a thorough understanding.Comprehend Each TopicAs you go along, keep in mind that the DANB RHS practice test is just that: practice. Memorizing these questions and answers will not be very helpful on the actual test because it is unlikely to have any of the same exact questions. If you only know the right answers to the sample questions, you won't be prepared for the real thing. Study the concepts until you understand them fully, and then you'll be able to answer any question that shows up on the test.Strategy for RHS PracticeWhen you're ready to start taking practice tests, follow this strategy.Remove Limitations. Take the first test with no time constraints and with your notes and RHS study guide handy. Take your time and focus on applying the strategies you've learned.Time Yourself. Take the second practice test "open book" as well, but set a timer and practice pacing yourself to finish in time.Simulate Test Day. Take any other practice tests as if it were test day. Set a timer and put away your study materials. Sit at a table or desk in a quiet room, imagine yourself at the testing center, and answer questions as quickly and accurately as possible.Keep Practicing. Keep taking practice tests on a regular basis until you run out of practice tests or it's time for the actual test. Your mind will be ready for the schedule and stress of test day, and you'll be able to focus on recalling the material you've learned.FAQs