

# Healthcare

## NCMA-RPS

NCMA Registered Phlebotomy Specialist (RPS)

For More Information – Visit link below:

<https://www.examsempire.com/>

**Product Version**

1. Up to Date products, reliable and verified.
2. Questions and Answers in PDF Format.



<https://examsempire.com/>

Visit us at: <https://www.examsempire.com/ncma-rps>

# Latest Version: 6.0

## Question: 1

The document that details how to prep a patient and collect a quality sample is which of the following?

- A. Delta manual
- B. collection manual
- C. examination manual
- D. Physician's Desk Reference

**Answer: B**

Explanation:

The document specifically designed for detailing the procedures for preparing a patient and collecting a quality sample is known as the "collection manual." This manual is crucial in clinical settings, particularly in laboratories and medical facilities where precise and accurate sample collection is essential for subsequent analysis and diagnosis.

The collection manual serves as a comprehensive guide that outlines the steps and protocols necessary to ensure that samples are collected in a manner that maintains their integrity and usability for medical tests. These instructions include but are not limited to, the type of sample required (e.g., blood, urine, tissue), the appropriate collection containers and preservatives to use, the volume of the sample needed, and the specific handling and storage procedures to prevent contamination or degradation of the sample.

In contrast, other documents such as the "Delta manual" or the "Physician's Desk Reference" serve different purposes. The term "Delta manual" is mentioned, but it is important to clarify that typically, there is no standard manual by this name in medical practice. The concept of "delta checks" in medicine refers to a quality control measure where current patient test results are compared with previous ones to identify any significant changes that could indicate an error in testing or a significant change in the patient's condition.

The "Physician's Desk Reference" (PDR) is another well-known publication, but it focuses on providing information about pharmaceuticals, including drug interactions, side effects, and indications for use. It does not cover the procedures for patient preparation and sample collection.

Therefore, when the question asks for the document that details how to prep a patient and collect a quality sample, the correct answer is the "collection manual." This manual is specifically tailored to guide healthcare professionals in the critical task of sample collection, which is foundational to achieving reliable and accurate diagnostic results.

## Question: 2

The four elements of malpractice include all of the following EXCEPT:

- A. duty
- B. breach of duty

- C. defense
- D. injury

**Answer: C**

Explanation:

In the context of malpractice, understanding the elements required to establish a case is crucial. This explanation aims to clarify why "defense" is not one of the four elements of malpractice, as opposed to duty, breach of duty, injury, and direct cause.

To start with, malpractice is a specific type of negligence that is often associated with professionals such as doctors, lawyers, and accountants. When these professionals fail to perform their duties to the standard required by their profession, and this failure results in harm to their clients or patients, malpractice may have occurred.

The first element, **duty**, refers to the obligation the professional has towards their client or patient. This duty is typically a standard of care that is recognized by the profession as being appropriate and necessary. For instance, a doctor has a duty to provide medical care that meets the standards accepted in the medical community.

The second element, **breach of duty**, occurs when the professional fails to fulfill their duty. This could be through an act of omission (failing to do something necessary) or commission (doing something improperly). For example, if a surgeon leaves a surgical tool inside a patient, this would be a breach of their duty to perform surgeries with reasonable skill and care.

The third element, **injury**, means that the plaintiff must have suffered some form of harm. This harm can be physical, financial, emotional, or otherwise. The injury must be a direct result of the breach of duty. If there is no harm, then there is no basis for a claim, even if the professional clearly violated their duty.

The fourth element, **direct cause**, links the breach of duty directly to the injury suffered. This means it must be shown that the harm was directly caused by the professional's failure to meet their duty. This causation must be proven for the malpractice claim to be valid.

In contrast, **defense** is not an element that the plaintiff needs to prove but rather is used by the defendant in a malpractice lawsuit. Defense strategies may include proving that one or more of the four elements of malpractice are not met, or demonstrating that external factors contributed to or were responsible for the injury. Common defenses in malpractice cases include arguing that the injury was a known risk of the procedure and that the patient had been adequately informed (consent), or that the injury was caused by underlying conditions not related to the professional's actions.

Thus, when asked about the elements of malpractice, "defense" is not correct because it is not something the plaintiff needs to establish to prove their case. Instead, it is a strategy used by the defending party to counter the claims of malpractice. This understanding is essential for anyone involved in or studying legal matters related to professional practice and liability.

### Question: 3

The protein which activates fibrinogen to form fibrin is which of the following?

- A. thymosin
- B. reticulocyte
- C. plasmin
- D. thrombin

**Answer: C**

Explanation:

The question you've posed asks to identify the protein which activates fibrinogen to form fibrin. The correct answer is thrombin. Here is an expanded explanation of the process and the role of thrombin: Thrombin is a crucial enzyme in the coagulation cascade, which is the process that leads to blood clot formation at the site of a wound. Its primary role is to convert fibrinogen, a soluble plasma protein produced by the liver, into fibrin. Fibrinogen itself does not possess any inherent capability to form clots; it must first be activated.

Upon activation by thrombin, fibrinogen molecules are converted into fibrin monomers, which then polymerize to form long, sticky chains of fibrin. These fibrin strands weave through the clot, forming a meshwork that stabilizes the platelet plug at the site of a wound. The mesh acts like a net, capturing red blood cells, additional platelets, and other components of blood to help form a more solid clot that prevents further bleeding.

The formation of fibrin by thrombin is not only crucial for blood clotting but also for the subsequent healing process. The fibrin network serves as a temporary framework for cellular components involved in tissue repair. Over time, this network will be degraded and replaced by new tissue as part of the healing process.

In summary, thrombin's role in activating fibrinogen to form fibrin is central to the body's ability to respond quickly to vascular injury, preventing excessive blood loss and initiating the healing process. Without the action of thrombin, the efficient sealing and healing of wounds would be compromised, highlighting its importance in physiological processes.

### Question: 4

Lymphatic fluid is derived from the fluid between cells. This fluid is which of the following?

- A. synovial fluid
- B. disseminated fluid
- C. interstitial fluid
- D. terminal lymphatic fluid

**Answer: C**

Explanation:

The correct answer to the question "Lymphatic fluid is derived from the fluid between cells. This fluid is which of the following?" is interstitial fluid. To understand why this is the case, it is important to first comprehend the nature of interstitial fluid and its role in the body.

Interstitial fluid, also known as tissue fluid, occupies the spaces between body cells. It is primarily derived from blood plasma. Blood plasma, the liquid component of blood, is filtered through capillary walls due to blood pressure—a process known as filtration. This filtration allows water and dissolved substances to exit the capillaries, leaving behind blood cells and larger proteins, which are generally too large to pass through the capillary walls.

The resulting interstitial fluid provides the cells of the tissues with nutrients and a means of waste removal. It is essentially a dilute fluid that bathes the cells in a nutrient-rich environment, which

facilitates the exchange of materials such as oxygen, carbon dioxide, and small metabolites between cells and the bloodstream.

After serving its purpose in the tissue spaces, most of the interstitial fluid returns to the bloodstream. However, a portion of this fluid enters the lymphatic system, becoming what is known as lymph fluid. The lymphatic system, a network of lymphatic vessels that extends throughout the body, functions as a secondary circulation system. It plays a crucial role in immune function and facilitates the removal of excess fluid from body tissues.

Lymph fluid, therefore, is directly derived from interstitial fluid. As it travels through the lymphatic system, it is filtered through lymph nodes, where immune responses can be triggered if pathogens are detected. Ultimately, lymph fluid is returned to the bloodstream, helping to maintain fluid balance in the body by ensuring that the fluid that leaves the blood and enters the tissues is eventually returned.

In summary, interstitial fluid is the correct answer because it is the fluid that directly feeds into the lymphatic system to become lymph. This fluid plays a critical role in both nourishment and detoxification at the cellular level, making it essential for maintaining tissue health and overall physiological balance.

### Question: 5

Fecal specimens are most commonly analyzed for the presence of which of the following?

- A. ova and parasites
- B. respiratory pathogens
- C. electrolytes
- D. all of the above

**Answer: A**

Explanation:

The correct answer to the question regarding what fecal specimens are most commonly analyzed for is "ova and parasites."

Fecal analysis, a common laboratory test, is primarily conducted to detect the presence of ova (eggs) and parasites in stool samples. This type of testing is crucial for diagnosing infections caused by parasites such as *Giardia lamblia*, *Cryptosporidium*, *Entamoeba histolytica*, and various helminths (worms). The presence of these organisms can lead to a variety of gastrointestinal symptoms including diarrhea, abdominal pain, and weight loss.

The analysis for ova and parasites, often abbreviated as O&P, involves collecting stool samples which may be done at home by the patient using a special kit. The collected samples are then transported to a laboratory where they are processed and examined under a microscope. Technicians look for the characteristic eggs or larvae that indicate a parasitic infection.

Besides O&P, fecal specimens may also be tested for the presence of occult blood. This test, known as the fecal occult blood test (FOBT), is used to find hidden (occult) blood in the stool, which can be an early sign of colorectal cancer or other conditions like ulcers or polyps.

It is important to note that while fecal tests can also assess other elements such as respiratory pathogens and electrolytes, these are not typically what fecal specimens are most commonly analyzed for. Respiratory pathogens are generally tested in respiratory specimens like throat swabs, and electrolytes are more commonly measured in blood or urine samples. Therefore, the analysis of fecal specimens is most frequently targeted towards ova and parasites, as well as occult blood testing.

## Question: 6

Which of the following analytes is NOT affected by diurnal variation?

- A. cholesterol
- B. corticosteroids
- C. hormones
- D. glucose

**Answer: A**

Explanation:

The correct answer to the question of which analyte is not affected by diurnal variation is cholesterol. Diurnal variation refers to fluctuations in biological markers that occur as part of the normal 24-hour cycle of the human body. These fluctuations can be influenced by factors such as hormone levels, metabolism, and physical activity, which vary at different times of the day.

Cholesterol levels, unlike some other analytes, generally do not exhibit significant diurnal variation. This means that the concentration of cholesterol in the blood remains relatively stable throughout the day, regardless of the time it is measured. This stability makes cholesterol a reliable marker for assessing lipid metabolism and cardiovascular risk at any given time.

In contrast, other analytes such as corticosteroids, hormones, and glucose are known to show diurnal variation. For example, cortisol, a type of corticosteroid, typically peaks in the early morning hours and declines throughout the day. Similarly, certain hormones like growth hormone and melatonin have specific patterns of secretion tied to the sleep-wake cycle. Glucose levels can also fluctuate based on meal timing, fasting, and the body's insulin response.

Additional examples of analytes that are influenced by diurnal rhythms include serum iron, which can vary depending on the timing of iron intake and metabolism; white blood cell count, which may fluctuate due to various physiological processes over the day; and eosinophil count, which can change in response to allergic reactions and other immune responses that vary by time.

Understanding which biological markers are affected by diurnal variations is crucial for accurate diagnosis and treatment. It ensures that sample collection is timed appropriately to avoid misinterpretation of lab results due to natural fluctuations in the levels of these substances. Therefore, being aware that cholesterol levels are stable throughout the day provides a significant advantage in both clinical and research settings.

## Question: 7

In terms of health hazard on the hazard emblem, a number 2 would indicate which of the following?

- A. normal material
- B. slightly hazardous
- C. hazardous
- D. deadly

**Answer: C**

**Explanation:**

When discussing health hazards as indicated on hazard emblems, it is essential to understand what the numbers represent. These numbers, which range from 0 to 4, are part of the National Fire Protection Association (NFPA) 704 standard. This system is used primarily in the United States to identify the hazards associated with materials to help emergency responders, such as firefighters, quickly determine what precautions they need to take when dealing with emergencies involving hazardous materials. In the NFPA 704 system, each hazard is categorized under health, flammability, and instability, and is rated on a scale of 0 to 4. Each category has a specific color associated with it: health (blue), flammability (red), and instability (yellow). Additional special hazards are identified with specific symbols like W (denoting no water) or OX (indicating that the material is an oxidizer).

A rating of 0 in any category means that the material poses minimal hazard. For example, under the health category, a rating of 0 indicates that exposure to the substance under fire conditions would offer little or no hazard beyond that of ordinary combustible materials. At the other end of the spectrum, a rating of 4 indicates a severe hazard. In the health category, this means that very short exposure could cause death or major residual injury even though prompt medical attention was given.

A rating of 2 in the health category, which was the focus of the question, indicates that the material is hazardous. More specifically, it implies that intense or continued exposure could result in temporary incapacitation or possible residual injury unless prompt medical attention is given. It is less severe than a rating of 3, which denotes serious or permanent injury, and far less severe than a rating of 4, which could be lethal.

Therefore, when you see a number 2 on the blue quadrant of an NFPA label, it is a warning that the material is hazardous to health, requiring precautions to avoid prolonged or repeated exposure. This system helps ensure safety by informing responders and workers about the potential risks associated with the materials they might encounter.

## Question: 8

The skin of the body is known as which of the following systems?

- A. integumentary
- B. dermal
- C. endocrine
- D. epidermal

**Answer: A**

**Explanation:**

The correct answer to the question regarding the system that the skin of the body is known as is the integumentary system. This system encompasses not only the skin but also includes hair, nails, and exocrine glands. The integumentary system plays a crucial role in maintaining the body's homeostasis and providing an anatomical barrier between the internal environment and the external environment. One of the primary functions of the integumentary system is protection. It serves as a barrier against mechanical impacts, pathogens, and harmful chemicals, while also providing a shield from the ultraviolet radiation of the sun. Additionally, the skin secretes antimicrobial substances that prevent infection.

Another significant function of the integumentary system is the regulation of body temperature. Through the processes of sweating and vasodilation, the skin can prevent the body from overheating. Conversely, by reducing sweat production and constricting blood vessels (vasoconstriction), it can help retain heat in colder conditions.

The integumentary system is also involved in the synthesis of vitamin D, which is crucial for the regulation of calcium and phosphate in the body. This process begins when the skin is exposed to sunlight, specifically ultraviolet B radiation, which helps convert a precursor molecule into an inactive form of vitamin D. This molecule then undergoes further transformations in the liver and kidneys to become active vitamin D.

Furthermore, the skin is equipped with a vast network of nerve endings that make it a sensory organ capable of detecting temperature, pressure, touch, and pain. This sensory feedback is critical for protective reactions and interactions with the environment.

The skin also functions as a storage center for lipids and water, and it has a limited capacity to absorb certain drugs and chemicals, which can be utilized in medical treatments, such as topical medications or transdermal patches.

In summary, the integumentary system, often simply called the skin, is a complex array of tissues that protect the body, regulate temperature, synthesize important compounds, provide sensory information, and perform several other critical functions for human survival and health.

## Question: 9

A fecal specimen for detection of blood in the stool is which of the following?

- A. hematocrit
- B. 72-hour stool specimen
- C. occult blood specimen
- D. blood smear

**Answer: C**

Explanation:

An occult blood specimen, also known as a fecal occult blood test (FOBT), is a type of fecal sample specifically collected to test for the presence of hidden (occult) blood in the stool. Occult blood is not visible to the naked eye and can indicate various conditions, most commonly gastrointestinal disorders such as colorectal cancer, polyps, ulcers, or inflammatory bowel disease.

The reason patients are advised to follow a meat-free diet for three days prior to collecting an occult blood specimen is to avoid false positives. Certain components in red meat can lead to the presence of blood in the stool that is not related to any disease process. By eliminating meat from the diet temporarily, doctors can ensure that the test results are due to endogenous blood related to a potential health issue rather than dietary influences.

The test itself is simple and non-invasive. Patients are typically provided with a test kit to use at home. This kit includes instructions on how to collect the stool sample and a special card or container for the sample. Once the sample is collected, it is either tested at home using a developer solution provided in the kit, which will change color if blood is detected, or sent to a laboratory for analysis.

Detecting occult blood in the stool is an important diagnostic tool. Although a positive result does not necessarily mean that a person has cancer or another serious condition, it warrants further

investigation, typically via more diagnostic procedures like a colonoscopy, to determine the exact cause of bleeding.

It is important to note that while fecal occult blood tests are valuable screening tools, they are not perfect. False negatives can occur, meaning that blood in the stool is not detected even though a condition exists. Similarly, false positives can result from factors other than meat consumption, such as certain medications or foods. Thus, the results of an FOBT must be considered in conjunction with other diagnostic procedures and the patient's overall clinical picture.

## Question: 10

When using verbal communication which of the following is least likely to be effective?

- A. asking as many questions as you can while you have the person's attention and then letting him or her answer them
- B. speaking clearly, slowly and distinctly
- C. facing the person
- D. controlling the loudness and tone of your voice

**Answer: A**

Explanation:

When using verbal communication, the effectiveness of the interaction largely depends on how the communication is structured and delivered. Among various methods, asking as many questions as you can while you have the person's attention and then letting him or her answer them is considered the least effective. This approach can overwhelm the listener and create confusion, as it bombards them with too much information at once without giving them adequate time to process each question and respond thoughtfully.

Effective communication should involve a balance and consideration for the listener's ability to absorb and reflect on the information being shared. When too many questions are posed consecutively without pauses, it can lead to cognitive overload. This means the person being questioned might not remember all the questions asked or might feel pressured, which can result in less thoughtful or incomplete answers. It also reduces the interactive nature of a conversation, as it does not allow for natural pauses where the listener can ask clarifying questions or contribute their thoughts.

On the other hand, other methods such as speaking clearly, slowly, and distinctly; facing the person; and controlling the loudness and tone of your voice are all effective verbal communication techniques.

These methods help ensure that the message is delivered clearly and respectfully, making it easier for the receiver to understand and engage with the content of the conversation. Speaking clearly and at a moderate pace helps the listener process the spoken words, facing the person shows engagement and respect, and controlling the loudness and tone of your voice helps maintain an appropriate and comfortable auditory environment for the conversation.

Therefore, to foster effective communication, it is advisable to ask one question at a time and wait for an answer before moving on to the next question. This approach not only helps in maintaining the clarity and focus of the conversation but also shows respect for the person's input and encourages a more meaningful and reciprocal dialogue. This method of questioning allows for pauses that enable both parties to reflect and engage more deeply, promoting a better understanding and a more productive communication experience.

**Thank You for Trying Our Product**  
**Special 16 USD Discount Coupon: NSZUBG3X**

**Email:** [support@examsempire.com](mailto:support@examsempire.com)

**Check our Customer Testimonials and ratings  
available on every product page.**

**Visit our website.**

**<https://examsempire.com/>**