Keamanan Jaringan
(Knowledge Check 3&4)

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1 D4 – IT B LJ

PROGRAM STUDI TEKNIK INFORMATIKA
DEPARTEMEN TEKNIK INFORMATIKA DAN KOMPUTER
POLITEKNIK ELEKTRONIKA NEGERI SURABAYA

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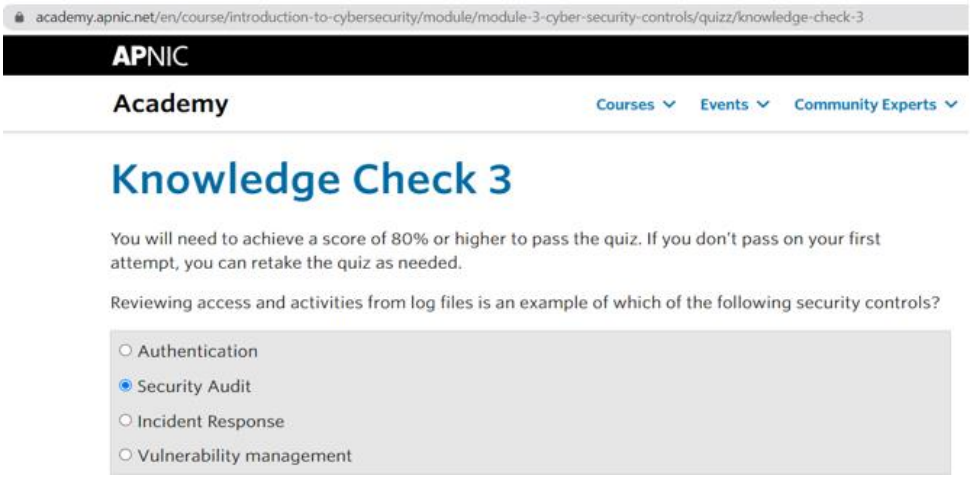
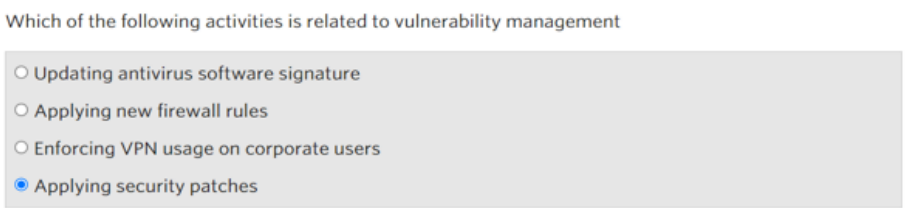
Knowledge Check 3

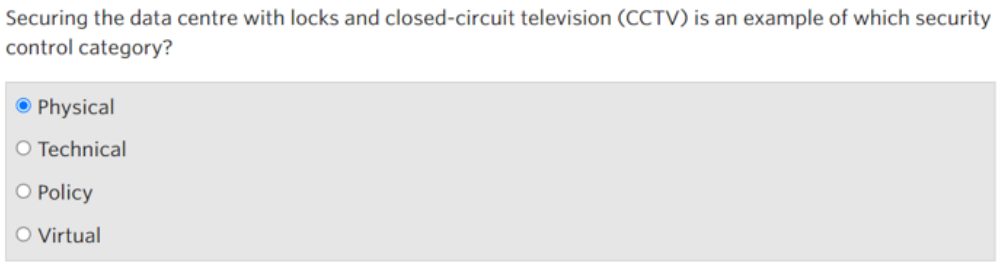
1. **Answers : Security Audit**
   Reason : A security audit is a measurable technical assessment of a system or application. Analyzing physical access to the systems. Designed to ensure that system activity is logged, audited, and monitored in order to detect and respond to security incidents. By regularly reviewing access and activities from log files, organizations can detect any unauthorized access or suspicious activity and take appropriate actions to prevent or mitigate security incidents.



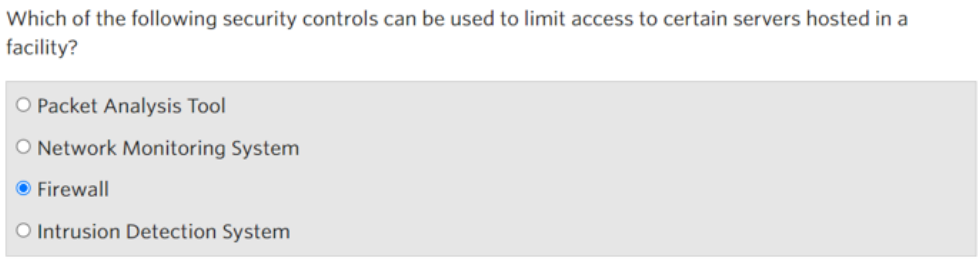
2. **Answers : Applying security patches**
   Reason : Vulnerability management includes applying security fixes. The process of locating, evaluating, prioritizing, and addressing vulnerabilities in a company's network or information systems is known as vulnerability management. Applying security patches, which are updates to programs or operating systems that address known security flaws, is one of the most important approaches to reduce risks. When software or operating systems are produced, they may have vulnerabilities that can be exploited by attackers. Software providers release security patches to address these flaws and enhance the safety of their products. Organizations can lessen the likelihood that attackers will take advantage of known vulnerabilities by installing security fixes.



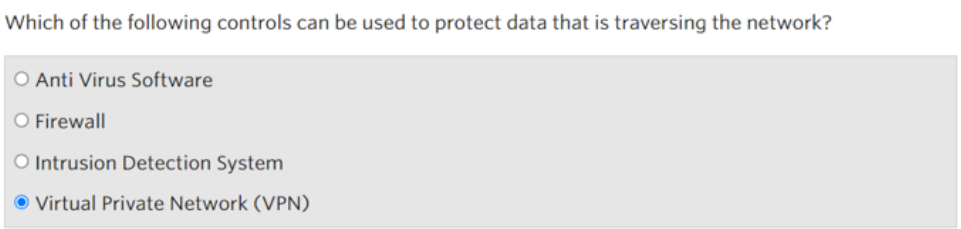
3. **Answers : Physical**
   Reason : Physical security is a type of security control that is concerned with preventing unauthorized access to physical assets, such as people, hardware, software, and data, as well as the theft, damage, or destruction of those assets. Physical security measures are employed to thwart physical threats and safeguard the availability, confidentiality, and integrity of data. CCTV cameras can be used to monitor and record activity in and around the data center, while locks can be used to restrict access to the data center and deter unlawful entry.



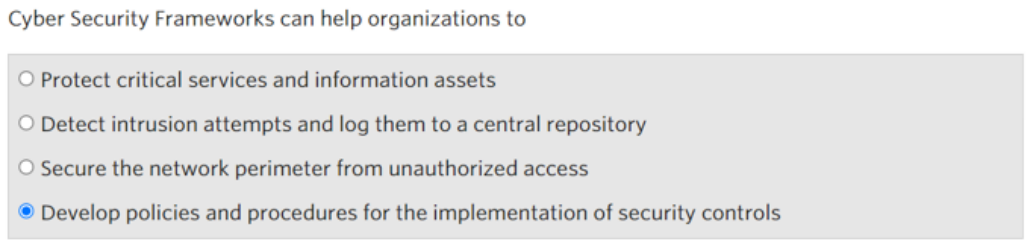
4. **Answers : Firewall**
   Reason : An access control measure known as a firewall can be used to restrict access to particular servers housed at a facility. Firewalls prevent unauthorized to a computer or network. A firewall is a piece of network security equipment that keeps an eye on and manages incoming and outgoing network traffic in accordance with pre-established security rules.



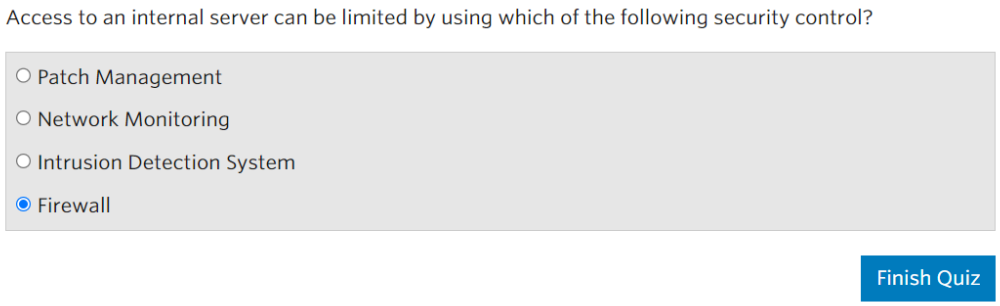
5. **Answers : Virtual Private Network (VPN)**
   Reason : Virtual Private Network (VPN) is a security control that can be used to protect data that is traversing the network. By encrypting data as it travels via the network, VPNs are frequently used to shield information from unauthorized access and interception by attackers.

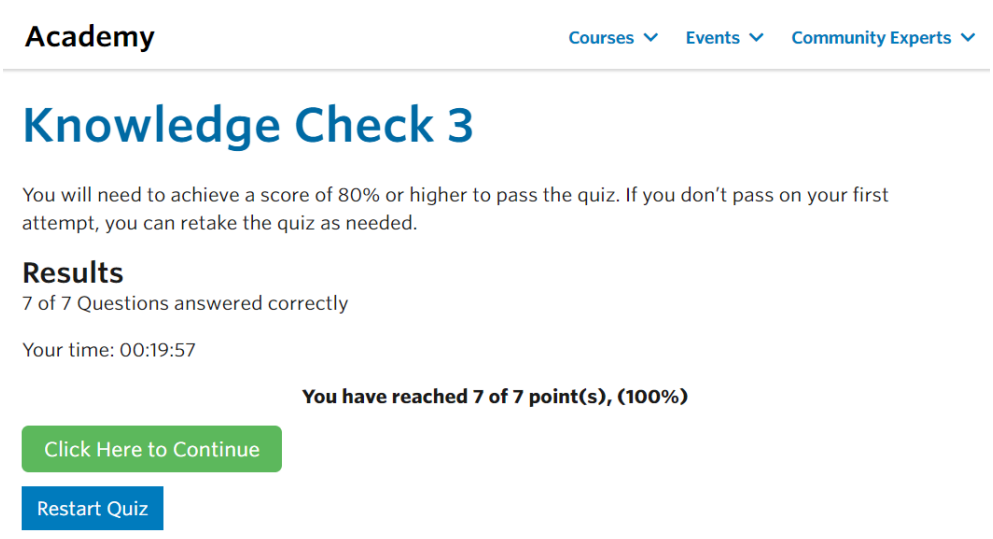


6. **Answers : Develop policies and procedures for the implementation of security controls**
   Reason : Organizations can create policies and procedures for putting security controls in place with the use of cyber security frameworks. Cyber security frameworks give organizations a systematic and all-encompassing approach to security by outlining the security controls, rules, and practices required to safeguard their assets from online dangers. Organizations can create policies and processes for the deployment of security measures that are specific to their needs and risk profile by adhering to a cyber security framework.



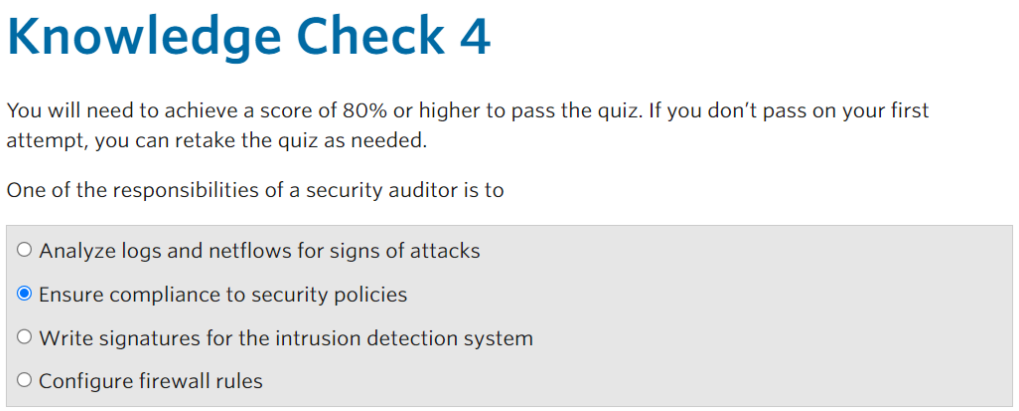
7. **Answers : Firewall**
   Reason : A firewall is a piece of network security equipment that keeps an eye on and manages incoming and outgoing network traffic in accordance with pre-established security rules. Organizations can restrict access to an internal server by implementing firewall rules, enabling only permitted traffic to reach the server.



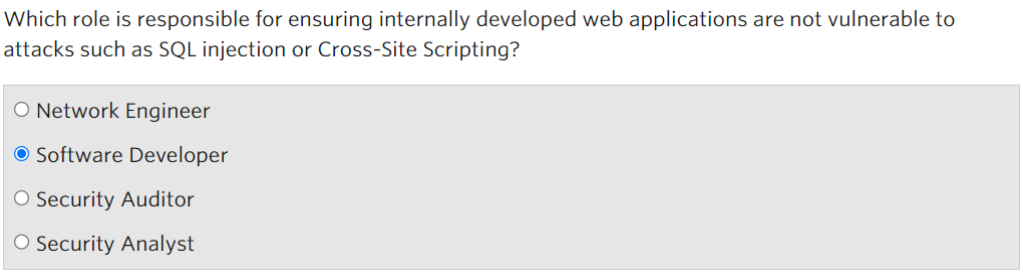


Knowledge Check 4

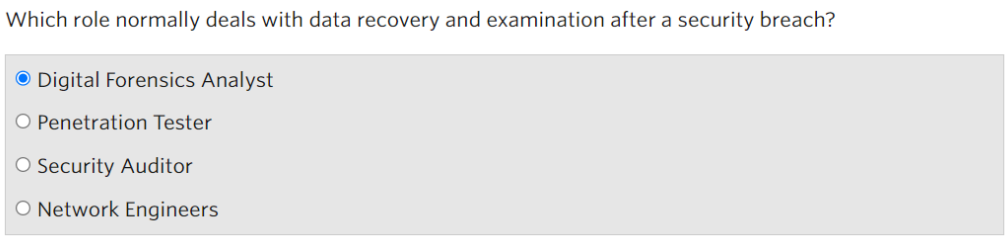
1. **Answers : Ensure compliance to security policies**
   Reason : Making ensuring security policies are followed is one of a security auditor's major duties. An organization's security policies are a collection of norms, processes, and guidelines for safeguarding its assets, such as its data and information systems.



2. **Answers : Software Developer**
   Reason : Internally created web applications must be protected from threats like SQL injection and Cross-Site Scripting by software engineers (XSS). To make sure that their apps are not exposed to typical security risks, developers must design and apply safe coding techniques. Developers play a crucial role in the development process. This entails taking the necessary precautions to prevent Cross-Site Scripting (XSS) attacks as well as SQL injection and other forms of injection attacks by performing the necessary input validation.



3. **Answers : Digital Forensics Analyst**
Reason : Data recovery and analysis following a security breach are often handled by a digital forensics analyst. The process of preserving, gathering, analyzing, and presenting electronic data in a form that is admissible in a court of law is known as digital forensics. A digital forensics analyst will be in charge of locating and examining the digital evidence connected to an occurrence in the context of a security breach with the aim of pinpointing the root cause and apprehending the culprits.



4. **Answers : Top Management**
Reason **:** The organization's security program's resources must be allocated, and management is ultimately in charge of developing the security plan. The overall responsibility for determining the direction and strategy of the business, including its security strategy.