

Introduction-to-Cryptography Exam Dumps Demo | Professional Introduction-to-Cryptography: WGU Introduction to Cryptography HNO1



BTW, DOWNLOAD part of Dumps4PDF Introduction-to-Cryptography dumps from Cloud Storage:
https://drive.google.com/open?id=1dgXvOU3UUxpF_MYdFjoffLYitLnPHI

Only 20-30 hours are needed for you to learn and prepare our Introduction-to-Cryptography test questions for the exam and you will save your time and energy. No matter you are the students or the in-service staff you are busy in your school learning, your jobs or other important things and can't spare much time to learn. But you buy our Introduction-to-Cryptography Exam Materials you will save your time and energy and focus your attention mainly on your most important thing. And you can master the most important Introduction-to-Cryptography exam torrent in the shortest time and finally pass the Introduction-to-Cryptography exam successfully with our excellent Introduction-to-Cryptography learning prep.

WGU Introduction-to-Cryptography dumps may be the best method for candidates who are preparing for their exam and eager to clear exam as soon as possible. People's success lies in their good use of every change to self-improve. Our WGU Introduction-to-Cryptography Dumps will be the best resources for your real test. If you choose our products, we will choose efficient and high-passing preparation materials.

>> Introduction-to-Cryptography Exam Dumps Demo <<

Pass Guaranteed Quiz Introduction-to-Cryptography - The Best WGU Introduction to Cryptography HNO1 Exam Dumps Demo

Because of the different habits and personal devices, requirements for the version of our Introduction-to-Cryptography exam questions vary from person to person. To address this issue, our Introduction-to-Cryptography actual exam offers three different versions for users to choose from. The PC version is the closest to the real test environment, which is an excellent choice for windows - equipped computers. And this version also helps establish the confidence of the candidates when they attend the Introduction-to-Cryptography Exam after practicing.

WGU Introduction to Cryptography HNO1 Sample Questions (Q28-Q33):

NEW QUESTION # 28

(Which symmetric encryption technique uses a 112-bit key size and a 64-bit block size?)

- A. IDEA
- **B. 3DES**
- C. DES
- D. AES

Answer: B

Explanation:

3DES (Triple DES) is a symmetric block cipher that retains DES's 64-bit block size while increasing effective security by applying DES multiple times. The common "two-key 3DES" variant uses two independent 56-bit DES keys (K1 and K2) in an Encrypt-Decrypt-Encrypt (EDE) sequence: Encrypt with K1, Decrypt with K2, then Encrypt again with K1. Because each DES key is 56 bits (ignoring parity bits), the total keying material is 112 bits. This matches the question's "112-bit key size and 64-bit block size." Plain DES uses only a 56-bit effective key and a 64-bit block size, so it does not match the 112-bit key size. AES has a 128-bit block size and key sizes of 128/192/256. IDEA uses a 64-bit block size but has a 128-bit key. Therefore, the correct algorithm is 3DES. Although 3DES improved on DES, it is now considered legacy due to its small 64-bit block size (birthday-bound issues for large data volumes) and performance overhead compared to AES.

NEW QUESTION # 29

(Which mode of encryption uses an Initialization Vector (IV) to encrypt the first block and then uses the result to encrypt the next block?)

- A. Output Feedback (OFB)
- B. Electronic Codebook (ECB)
- C. Cipher Feedback (CFB)
- **D. Cipher Block Chaining (CBC)**

Answer: D

Explanation:

CBC mode introduces dependency between blocks to prevent the pattern leakage seen in ECB. It starts with a random (or unpredictable) IV for the first block. Before encrypting block 1, CBC XORs plaintext block 1 with the IV, then encrypts the result. For block 2 and onward, CBC XORs each plaintext block with the previous ciphertext block before encryption. This chaining means that changing one plaintext block affects that block's ciphertext and also influences the next block's computation. The IV ensures that encrypting the same message twice under the same key produces different ciphertexts (assuming a fresh IV). Option A (ECB) has no IV or chaining. OFB and CFB are feedback modes that effectively generate a keystream; they do use an IV, but the "uses the result to encrypt the next block" wording most directly matches CBC's ciphertext-chaining description in standard teaching. CBC still requires integrity protection (e.g., HMAC or an AEAD mode) because it can be malleable without authentication. Therefore, the correct mode is Cipher Block Chaining (CBC).

NEW QUESTION # 30

(Which component is used to verify the integrity of a message?)

- A. TKIP
- **B. HMAC**
- C. IV
- D. AES

Answer: B

Explanation:

HMAC (Hash-based Message Authentication Code) is a standard mechanism used to verify both integrity and authenticity of a message when two parties share a secret key. It combines a cryptographic hash function (such as SHA-256) with a secret key in a structured way that resists common attacks on naive keyed-hash constructions. The sender computes an HMAC tag over the message and transmits the message plus tag. The receiver recomputes the HMAC using the same shared secret key and compares the result; if the tag matches, the receiver can be confident the message was not modified in transit and that it came from someone who knows the shared key. AES is an encryption algorithm primarily providing confidentiality; it can provide integrity only when used in authenticated modes (e.g., GCM) but "AES" alone is not the integrity component. An IV helps randomize encryption but does not validate integrity. TKIP is a legacy WLAN protocol component, not the general integrity verifier. Therefore, the correct component for verifying message integrity among the options is HMAC.

NEW QUESTION # 31

(How does Electronic Codebook (ECB) mode encryption function?)

- A. Uses a self-synchronizing stream on the blocks, where the IV is encrypted and XORed with the data stream

- B. Uses an IV to encrypt the first block, then uses the result to encrypt the next block
- C. Converts from block to stream, then uses a counter value and a nonce to encrypt the data
- D. Encrypts each block with the same key, where each block is independent of the others

Answer: D

Explanation:

ECB is the simplest block cipher mode: each plaintext block is encrypted independently using the same key and the block cipher primitive. There is no IV and no chaining, so identical plaintext blocks produce identical ciphertext blocks. This property leaks patterns and structure in the plaintext, which is why ECB is generally considered insecure for most real-world data beyond tiny, random-looking inputs. For example, images encrypted with ECB often reveal outlines because repeated pixel blocks map to repeated ciphertext blocks. Option A describes CTR mode, option C describes CBC mode, and option B resembles feedback-based modes. ECB's independence also means it can be parallelized, but the pattern leakage is a severe weakness. Modern practice prefers authenticated encryption modes (like GCM) or, at minimum, modes with IVs and chaining (like CBC with proper padding and MAC).

Therefore, the correct statement is that ECB encrypts each block with the same key and each block is independent of the others.

NEW QUESTION # 32

(A Linux user password is identified as follows:

`$2a$08$AbCh0RCM8p8FGaYvRLi0H.Kng54gcnWCOQYIhas708UEZRQjGBh4`

Which hash algorithm should be used to salt this password?)

- A. NTLM
- B. SHA-512
- C. MD5
- D. bcrypt

Answer: D

Explanation:

The string format `$2a$08$...` is a well-known identifier for the bcrypt password hashing scheme. In common password-hash notation, the prefix indicates the algorithm and parameters: "`$2a$`" denotes bcrypt (version 2a), and "`08`" indicates the cost factor (work factor) controlling how computationally expensive hashing is. bcrypt is designed specifically for password storage: it includes a built-in salt and is intentionally slow and adaptive, making brute-force and GPU attacks far more expensive than fast general-purpose hashes like MD5 or SHA-512. NTLM and MD5 are obsolete for secure password storage due to speed and known weaknesses. SHA-512, while cryptographically strong as a hash, is still too fast for password hashing unless used in a dedicated password-hashing construction (e.g., PBKDF2, scrypt, Argon2) with appropriate parameters and salts. Since the given hash clearly matches bcrypt's encoding, the correct algorithm is bcrypt, which incorporates salting and cost-based key stretching as part of its design.

NEW QUESTION # 33

.....

Our company has taken a lot of measures to ensure the quality of Introduction-to-Cryptography preparation materials. It is really difficult for yourself to hire a professional team, regularly investigate market conditions, and constantly update our Introduction-to-Cryptography exam questions. But we have all of them done for you. And our Introduction-to-Cryptography study braindumps have the advantage of high-effective. Just look at our pass rate of our loyal customers, with the help of our Introduction-to-Cryptography learning guide, 98% of them passed the exam successfully.

Introduction-to-Cryptography Test Centres: <https://www.dumps4pdf.com/Introduction-to-Cryptography-valid-braindumps.html>

Users can easily pass the exam by learning our Introduction-to-Cryptography practice materials, and can learn some new knowledge, is the so-called live to learn old, Our Introduction-to-Cryptography exam questions boost varied functions and they include the self-learning and the self-assessment functions, the timing function and the function to stimulate the Introduction-to-Cryptography exam to make you learn efficiently and easily, With this Introduction-to-Cryptography exam everyone whether he is a beginner or seasoned professional can not only validate their expertise but also get solid proof of their skills and knowledge.

When you hear the word, what comes to your mind, Introduction-to-Cryptography The leader who can articulate a compelling vision gives people the courage to create, Users can easily pass the exam by learning our Introduction-to-Cryptography practice

