

Time:- Three Hours]

Maximum Marks : 80

Minimum Passing Marks: 29

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note: Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

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Section -A

1. Answer the following multiple choice type questions: - **1X10 = 10**

(a) DES stands for
(i) Data encryption standard (ii) Data encryption subscription
(iii) Data encryption solution (iv) Data encryption slots.

(b) An ----- along with a key is used in the encryption and decryption
(i) Data (ii) Cryptography algorithm
(iii) Decryption algorithm (iv) Plain text algorithm

(c) The ----- is encrypted text:-
(i) Cipher text (ii) Secret text
(iii) Cipher script (iv) Secret script

(d) Which of the following is not used for symmetric encryption.
(i) RSA (ii) DES (iii) SHA1 (iv) RC4

(e) Hash collision means:-
(i) Two keys for one message (ii) One key for
(iii) Two different keys for different message (iv) always the

(f) What is the length of key (without Padding) in DES?
(i) 64 bits (ii) 128 bits (iii) 72 bits (iv) 56

(g) the advanced encryption standard was designed by.
(i) National Institute of standards & technology
(ii) IBM (iii) HP (iv) Intel

(h) The ----- method provides a one - time session key for two parties.
(i) Diffie - Hellman (ii) RSA (iii) DES (iv) All

(i) A digital signature needs a
(i) Private - key system (ii) Shared - key system
(iii) public - key system (iv) All of them

(j) Which are the most frequently found.
(i) e, a (ii) e, o (iii) e, t (iv) e, i

2. Answer the following short answer type questions:- 2x5 = 10

- (a) What do you understand by DNS?
- (b) What is cryptograph.
- (c) Specify the components of encryption algorithm.
- (d) Define confidentiality & authentication.
- (e) Differentiate symmetric & asymmetric encryption.

Section -B

Answer the following long - answer type questions:-

3. Draw the general structure of DES & Explain the encryption Decryption process?

$$12 \times 5 = 60$$

Or

Explain the key generation process in DES algorithm?

scribed

Explain the key generation process in DES algorithm.

Explain the technical details of firewall and describe any three types of firewall?

On

Explain DNS and its security?

5. Explain about RSA with one suitable example?
Or
Explain digital signatures and authentication protocol?

6. Define hash function? What are the properties of hash function in cryptography? Explain secure hashing algorithm.

OR

Write short notes on:- (i) Web security (ii) SSL
UNIT V

7. Write short notes on:- (i) WAP (ii) MIME

OR

Explain the types of interaction detection system.