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(FOR THE CANDIDATES ADMITTED DURING THE ACADEMIC YEAR 2022-23 ONLY)

SUBJECT CODE 22 UCT 516

REG.NO.

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMBER – 2024

B.Sc. – COMPUTER TECHNOLOGY **MAXIMUM MARKS: 50**

V SEMESTER **TIME : 3 HOURS**

PART – III

INFORMATION SECURITY

SECTION – A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS. (K1)

1. _____ specifies only the sender and the recipient sould be able to access the contents of the message.

   a) Authentication b) Confidentiality c) Integrity d) non-repudiation.

2. The key length of DES is _____

   a) 64 b) 128 c) 56 d) 120

3. _____ is a trusted agency that can issue digital certificate.

   a) Certificate validation b) Registration authority

   c) Cross Certification d) Certification authority

4. The level of _____ for a user is the weighted trust level for that user.

   a) Legitimacy b) Certificate Trust c) Web of trust d) Both b and c

5. Network layer firewall works as a _____

   a) Frame filter b) Packet filter c) Content filter d) Virus filter

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES. (K2)

6. Describe Trojan Horse
7. Define the term ‘Timing attacks’
8. Restate the similarities between passport and digital certificates
9. What is SSO?
10. Define the term Java Cryptography Architecture.

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SECTION – B (5 X 3 = 15 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K3)

11. a) Elucidate the security approaches to implement security model.

(OR)

b) Describe authentication

12. a) Explain symmetric key cryptography.

(OR)

b) List the possible attacks on RSA.

13. a) Describe digital signatures.

(OR)

b) Sketch the contents of digital certificate.

14. a) Write short notes on S/MIME

(OR)

b) Discuss replay attack.

15. a) Explain Cryptography in Java.

(OR)

b) Give short notes on Types of firewalls.

SECTION – C (5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K4 (Or) K5)

16. a) Discuss the salient features of modern nature of attacks.

(OR)

b) List the programs of security attack and explain.

17. a) Discuss the algorithm modes of block cipher.

(OR)

b) Illustrate the conceptual working of DES.

18. a) Explain how digital certificates are created.

(OR)

b) Explain the working of SSL.

19. a) Explain the working of PGP.

(OR)

b) Illustrate the working of Kerberos.

20. a) Explain the working of VPN.

(OR)

b) Demonstrate how cryptography is achieved using Java.

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