

(FOR THE CANDIDATES ADMITTED  
DURING THE ACADEMIC YEAR 2020-21 ONLY)

( NO. OF PAGES: 2 )  
SUB CODE **20 UCT 518**  
REG.NO. :

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**  
**END-OF-SEMESTER EXAMINATIONS : DECEMBER – 2022**  
**B.Sc.-COMPUTER TECHNOLOGY**  
**V SEMESTER**  
**MAXIMUM MARKS: 70**  
**TIME : 3 HOURS**

**PART - III**  
**INFORMATION SECURITY**

**SECTION - A** (10 X 1 = 10 MARKS)

**ANSWER THE FOLLOWING QUESTIONS.**

**MULTIPLE CHOICE QUESTIONS.**

**(K1)**

1. It is the unreadable output of an encryption algorithm.....
  - a) cipher
  - b) plain
  - c) key
  - d) signature
2. The process of verifying the identity of a user.....
  - a) authentication
  - b) identification
  - c) validation
  - d) verification
3. SSL stands for.....
  - a) serial session layer
  - b) session secure layer
  - c) series socket layer
  - d) secure socket layer
4. Which of the block ciphers offers by PGP for message encryption?
  - a) Triple DES
  - b) CAST
  - c) IDEA
  - d) All of the above
5. Network layer firewall works as a.....
  - a) frame filter
  - b) packet filter
  - c) segment filter
  - d) virus filter

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

**(K2)**

6. What is meant by encryption?
7. Expand DES.
8. What is meant by public key?
9. Expand GSM.
10. What is Intrusion?

**SECTION – B****(5 X 4 = 20 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) Discuss the Need For Security.

**(OR)**

- b) Explain about Substitution Techniques.  
12. a) Explain the working principles of DES.

**(OR)**

- b) Write a note on Digital Signature.

13. a) Explain the features of PKIX Model.

**(OR)**

- b) Describe the functions of Hyper Text Transfer Protocol.

14. a) Explain the Security in GSM

**(OR)**

- b) Write about Kerberos.

15. a) Discuss the Cryptographic Solution Using JAVA.

**(OR)**

- b) Explain the importance of Virtual Private Networks.

**SECTION - C****(4 X 10 = 40 MARKS)****ANSWER ANY FOUR OUT OF SIX QUESTIONS****(16<sup>th</sup> QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS.****(FROM Qn. No : 17 to 21)****(K4/K5)**

16. Describe the types Of Attacks.  
17. Explain the concept of Cryptography.  
18. Demonstrate the principles of RSA Algorithm.  
19. Explain the functions of Secure Socket Layer.  
20. How does PGP Works? Explain.  
21. Explain the types of firewall.

**\*\*\*\*\***