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**Reg. No. :** .....

**Code No. : 6921**

**Sub. Code : PCSM 24**

M.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Second Semester

Computer Science — Core

**SECURITY IN COMPUTING**

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — ( $10 \times 1 = 10$  marks)

Answer ALL questions.

Choose the correct answer :

1. A system for encryption and decryption is called
  - (a) Cipher text
  - (b) Plain text
  - (c) Cryptosystem
  - (d) Cryptanalyst
2. A digital signature needs a
  - (a) Private-Key System
  - (b) Public-Key System
  - (c) Shared-Key System
  - (d) All of the above

3. A \_\_\_\_\_ is a program that spreads copied of itself through a network.
- (a) Virus
  - (b) Trapdoor
  - (c) Backdoor
  - (d) Worm
4. A \_\_\_\_\_ is an undocumented entry point to a module.
- (a) Trapdoor
  - (b) Testing
  - (c) Virus
  - (d) Bootsector
5. The \_\_\_\_\_ of database elements is their correctness or accuracy.
- (a) Availability
  - (b) Auditability
  - (c) Confidentiality
  - (d) Integrity
6. The \_\_\_\_\_ flag means that the DBMS has passed the point of no return.
- (a) Parity
  - (b) Commit
  - (c) Update
  - (d) Error

7. An application proxy gateway also called a
- (a) Bastion host
  - (b) Screening router
  - (c) Guard
  - (d) Packet filtering gateway
8. A \_\_\_\_\_ firewall is an application program that runs on a workstation to block unwanted traffic.
- (a) Application
  - (b) Gateway
  - (c) Guard
  - (d) Personal
9. Unfair use of a copyrighted item is called
- (a) Fair use
  - (b) Public domain
  - (c) First sale
  - (d) Piracy
10. A set of ethical principles is called an
- (a) Ethical system
  - (b) Moral system
  - (c) LAW
  - (d) Ethical pluralism

PART B — ( $5 \times 5 = 25$  marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Discuss about the Caesar Cipher.

Or

- (b) Explain about Columnar Transpositions.

12. (a) Write a note on Nonmalicious Program Errors.

Or

- (b) Give an overview about Virus Signatures

13. (a) Write about Element Integrity.

Or

- (b) Write a note on Two Phase Update.

14. (a) What makes a Network vulnerable? Explain.

Or

- (b) Discuss about encryption in network applications.

15. (a) Why a separate category for computer crime is needed? Explain.

Or

- (b) Discuss about the legal issues relating to information.

PART C — ( $5 \times 8 = 40$  marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Give an overview about DES.

Or

- (b) Write down the uses of Encryption.

17. (a) Discuss in detail about the homes for Viruses.

Or

- (b) Briefly explain about Targeted malicious code.

18. (a) Explain in detail about Sensitive Data.

Or

- (b) Discuss about Multilevel Databases.

19. (a) Describe about Strong authentication in networked environment.

Or

- (b) Illustrate the different types of Firewalls.

20. (a) Explain about Copyrights.

Or

- (b) Briefly explain about Ethical issues in Computer Security.
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