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

**Code No. : 20603 E      Sub. Code : SMCS 42**

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

Fourth Semester

Computer Science — Core

**INFORMATION SECURITY**

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which of them is not a vulnerability to information security?
  - (a) Flood
  - (b) Without deleting data, disposal of storage media
  - (c) Unchanged default password
  - (d) Latest patches and updates not done

2. Which of the following is a class of computer threat?
- (a) Phishing                      (b) Soliciting  
(c) Stalking                      (d) DoS attacks
3. Viruses are \_\_\_\_\_
- (a) Machine made              (b) Naturally occur  
(c) Man made                      (d) All of the above
4. A \_\_\_\_\_ is a straight copy of the selected folders and files at a given instant in time.
- (a) Incremental backup  
(b) Full backup  
(c) Differential backup  
(d) Mirror backup
5. DES stand for \_\_\_\_\_
- (a) Data Encryption Standard  
(b) Digital Encryption Standard  
(c) Dynamic Encryption Standard  
(d) Direct Encryption Standard

6. \_\_\_\_\_ is the process of managing risks associated with the use of information technology?
- (a) System Management
  - (b) Database Management
  - (c) Information Security Risk Management
  - (d) Risk Assessment
7. A \_\_\_\_\_ is a document that outlines the rules, laws and practices for computer network access.
- (a) System policy
  - (b) Network policy
  - (c) Information technology policy
  - (d) Security policy
8. \_\_\_\_\_ is a program or hardware device that filters the information coming through an internet connection to a network or computer system.
- (a) Anti virus
  - (b) Firewall
  - (c) Cookies
  - (d) Cyber safety

9. Who works with a company to provide an audit of security systems used by that company?
- (a) Security Auditor
  - (b) IT Auditor
  - (c) Network Auditor
  - (d) None of these
10. Which of the following is/are email etiquette rules?
- (a) Clear subject
  - (b) Professional email address
  - (c) Think twice before hitting reply to all
  - (d) All of the above

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Write the aspects of information security.
- Or
- (b) What is spam? Explain.
12. (a) Explain briefly on bootsector virus.
- Or
- (b) List and explain quantities of a good back up.

13. (a) Explain the following :
- (i) Private key
  - (ii) Public key
- Or
- (b) What are the challenges in risk management of information security? Explain.
14. (a) Write short note on firewalls.
- Or
- (b) Explain briefly on password policy.
15. (a) Write responsibilities of a security auditor.
- Or
- (b) Discuss security policy compliance.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) What is information security? Explain the purpose of information security.
- Or
- (b) Explain the following :
- (i) Hacking
  - (ii) Spam

17. (a) Discuss virus detection and recovery.  
Or  
(b) Explain backup solutions used in Windows 2000.
18. (a) Describe about public key cryptography.  
Or  
(b) How to analyze the probability of threat occurrence? Explain.
19. (a) Explain security policy in detail.  
Or  
(b) Discuss about honeypots.
20. (a) Describe phases of a security audit.  
Or  
(b) Explain policy documentation in detail.
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