

9. (a) What is a security plan ? What are the factors that should be considered when developing a security plan ? Discuss.
- (b) What is meant by protection for computer objects ? Compare Copyright, Patent and Trade Secret Protections.
- 

Roll No. ....

**67197**

**MCA 4th Semester CBCS Scheme  
WEF 2017-2018  
(Re-appear) Examination – October, 2020**

**COMPUTER SECURITY**

**Paper : 17MCA34DB2**

*Time : 1.45 Hours ]*

*[ Maximum Marks : 80*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt any *three* questions. All questions carry equal marks.

1. (a) What are the objects relating to operating systems for which protection is desirable ?
- (b) Differentiate between Block Ciphers and Stream Ciphers.
- (c) What is public key encryption ? State its relevance.
- (d) What are viruses ? Discuss the causes and effects of viruses.

- (e) What are methods of defense ?
- (f) Distinguish among vulnerability, threat and control.
- (g) Write a set of rules combining the secrecy controls of the Bell-La Padula model with the integrity controls of the Biba model.
- (h) What is hacking ? What are different types of Hackers ?
2. (a) What characteristics would make an encryption algorithm "Good" ? Illustrate.
- (b) How do you compare DES and AES ? Illustrate suitability of each standard.
3. What is meant by computer security ? What are its goals and objectives ? How vulnerabilities, threats, attacks and control measures are inter-related ? Illustrate through a suitable example.
4. (a) What is the purpose of security models ? Explain two popular models highlighting properties that characterize these models.
- (b) What are different security methods for an operating system ? Illustrate.

67197- (P-4)(Q-9)(20) ( 2 )

5. (a) What is program security ? What are important security concerns specific to programs ? Illustrate relevance of each.
- (b) What is trusted operating system ? What characterizes a good trusted operating system ? Explain.
6. (a) What are various levels of protection that users might apply to code or data ? Illustrate.
- (b) What are IDSs ? What are its types ? What are their goals ? Discuss.
7. (a) What is security in networks ? What are threats in networks ? How can these be controlled ? Illustrate.
- (b) What are multilevel databases ? What is the purpose of encryption in a multilevel secure DBMS ? Discuss.
8. (a) What are organizational security policies ? Discuss their relevance in the current scenario.
- (b) What are ethical issues in computer security ? Chart and explain the significance of each.

67197- (P-4)(Q-9)(20) ( 3 )

P. T. O.