MASTER OF COMPUTER APPLICATIONS (CBCS - 2020 COURSE)
M.C.A. Sem-III :SUMMER- 2022
SUBJECT : INFORMATION SECURITY

Day : Wednesday

Time : 10:00 AM-01:00 PM

Date : 8/6/2022 **S-22739-2022** Max. Marks : 60

N.B.
1) **Q.No. 4** from Section-I is **COMPULSORY**.
2) Attempt **ANY TWO** questions from Q.No. 1 to Q. No. 3 in Section – I.
3) Attempt **ANY TWO** questions from Q.No. 5 to Q. No. 7 in Section – II.
4) Figures to the **RIGHT** indicate **FULL** marks.
5) Answers to both the sections should be written in **SAME** answer book.
6) Draw a labeled diagram **WHEREVER** necessary.

SECTION – I

Q.1 Answer the following : (12)
  a) What is Information Security? How organizations manage information?
  b) Explain different types of Network Operating Systems.

Q.2 Answer the following : (12)
  a) Classify Information Security threats. Explain physical threats in detail.
  b) Compare public key cryptography with private key cryptography.

Q.3 Explain the following : (12)
  a) Explain the role of hash function in Information Security.
  b) Explain challenge-response authentication process with appropriate example.

Q.4 Write short notes on **ANY THREE** of the following : (12)
  a) Cyber space
  b) DoS attack
  c) Digital signature
  d) Message Authentication Code
  e) Privacy Policy

SECTION – II

Q.5 Answer the following : (12)
  a) Justify how Information Security management is based on Information Security policy.
  b) Classify different Information Assets. Explain the process of Risk Analysis in Information Security.

Q.6 Answer the following : (12)
  a) What are different types of regulations followed by organizations to ensure Information Security?
  b) What is Information Technology Act? Explain different cyber laws.

Q.7 Explain the following : (12)
  a) Suppose you are an Information Security Officer for an online retail company. List down the various vulnerabilities in the web-portal and suggest solution.
  b) Suggest list of measures to protect information from unauthorized users.

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