

MASTER OF COMPUTER APPLICATIONS (CBCS - 2020 COURSE)
M.C.A. Sem-III : WINTER : 2021
SUBJECT: INFORMATION SECURITY

Day : Thursday
Date : 13-01-2022

W-22739-2021

Time : 02:00 PM-05:00 PM
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 the need of Information Security?
 - b) Explain different types of networks and their security issues.
- Q.2** Answer the following : (12)
- a) Explain technical and man-made threats with respect to Information Security.
 - b) Define virus. Explain different types of viruses with the help of appropriate example.
- Q.3** Explain the following : (12)
- a) Explain public key cryptography with the help of appropriate example.
 - b) Explain the functionality of digital signature in detail.
- Q.4** Write short notes on **ANY THREE** of the following : (12)
- a) HASH function
 - b) Anti-virus software
 - c) Pretty Good Privacy (PGP)
 - d) Risk Management
 - e) Information Technology Act

SECTION – II

- Q.5** Answer the following : (12)
- a) What is importance of Information Security policy in an organisation? Explain purpose of Information Security policy.
 - b) Explain different regulations used in organisations to ensure Information Security.
- Q.6** Answer the following : (12)
- a) Differentiate between authentication and authorization.
 - b) Suggest different measures to keep information safe from unauthorized users and threats.
- Q.7** Explain the following : (12)
- a) What are cyber-crimes? Explain different types of cyber-crimes.
 - b) Suppose you are an Information Security Officer for online retail company. Suggest the measures to avoid online business frauds.
