

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

Day : Wednesday
Date 16-02-2022

W-23066-2021

Time : 10:00 AM-01:00 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) Explain the functions of Information Security Officer.
b) Explain different measures to safeguard the important information in the organization.
- Q.2** Answer the following : (12)
a) What is Cryptography? Explain the role of Cryptography in Information Security.
b) Explain Advanced Encryption Standard (AES) algorithm in detail.
- Q.3** Explain the following : (12)
a) What is message authentication? How Message Authentication Code (MAC) ensures security in communication.
b) Explain the process of Risk Management with respect to Information Security.
- Q.4** Write short notes on **ANY THREE** of the following : (12)
a) Hash function
b) Authentication
c) DoS Attack
d) Network Operating system
e) Anti-virus

SECTION – II

- Q.5** Answer the following : (12)
a) Explain the process of information assets review, classification and management.
b) Explain the process of Risk analysis and evaluation to ensure Information Security in organisations.
- Q.6** Answer the following : (12)
a) Describe the role of Information Security policy in an organization.
b) Explain different Information Security regulations complied by organizations to ensure Information Security.
- Q.7** Explain the following : (12)
a) Explain various threats involved in online business.
b) What is Information Technology Act? Explain different types of Cyber-Crimes.
