

S-749

Total Pages : 3

Roll No. -----

MIT(CS)-104/CEGCS-04

Information System

(MCA/MSCCS/PGDCS/CEGCS)

3RD /1ST Semester, Examination 2022(Dec.)

Time: 2 Hours

Max. Marks: 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section – A

(Long Answer – type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

[2 x 19 = 38]

P.T.O.

- Q.1. Explain the sequence of three-way handshake.
- Q.2. Answer the following:
- a. Explain the functioning of Internet e-mail.
 - b. What is SSL? How does it work?
- Q.3. a. Explain IP Security protocols in detail.
- b. Write short notes on Signature based IDS?
- Q.4. Discuss the various hacking tools and techniques?
- Q.5. Answer the following:
- a. What do we understand by active and passive attacks? What are various techniques used for carrying out these attacks?
 - b. What are the risks involved in e-mail security? How these are mitigated?

Section – B

(Short-answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

[4 x 8 = 32]

- Q.1. Explain the terms Confidentiality, Integrity, Availability, Authenticity and non-repudiation.
- Q.2. Explain the process of Key Management?
- Q.3. What are the major threats to IT infrastructure? How to mitigate them?
- Q.4. What are client-side attacks? Enumerate the techniques used for carrying out such attacks?
- Q.5. Discuss different types of Cipher.
- Q.6. What are the techniques used by hackers for gathering information.
- Q.7. What do you understand by foot printing and reconnaissance in respect of Penetration testing/Hacking?
- Q.8. How does PGP work? Also explain how security of e-mail is ensured.
