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PGDCS-04/MIT(CS)-104/CEGCS-04
Information System
P.G.Diploma/M.Sc. Cyber Security (PGDCS-17/MSCCS/CEGCS)
1st Semester, Examination June 2022

Time : 2 Hours   **Max. Marks:80**

Note : This paper is of eighty (80) 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 Twenty (20) marks each. Learners are required to answer any two (02) questions only.

(2 x 20=40)

Q.1   Explain with the help of a neat labelled diagram the ISO-OSI Model and the function of its various layers.

Q.2   (a)   Explain the various components of CIA Triad. What is it used for?

         (b)   What are the various types of hackers? Explain each of them briefly?

P.T.O.

(c) Explain the process of key generation. Explain the key management of public key encryption in detail.

Q.3 What is Cryptography? What are the different modes of cryptography operations for DES?

Q.4 What do you understand by gaining access & exploitation and post exploitations activities?

Q.5 What do we understand by active and passive attacks? What are the various techniques used for carrying out these attacks?

Section-B
(Short Answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Ten (10) marks each. Learners are required to answer any four (04) questions only.

(4 x 10=40)

Q.1 Explain the concept of Simple Mail Transfer Protocol.

Q.2 What are the risks involved in e-mail security? How these are mitigated?

P.T.O.

Q.3   What is Steganography? Explain the terms
        Confidentiality ,   Integrity, Availability,
        Authenticity and non repudiation.

Q.4   What do you understand by foot printing and
        reconnaissance?

Q.5   What do you understand by "Man in the middle attack"?
        Explain briefly.

Q.6   What are the various components of key management
        process? Briefly explain all of them?

Q.7   What do you understand by IP security?

Q.8   What are the techniques used by hackers for gathering
        information.

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