P-848

MIT(CS)-1020/CEGCS-02

Cyber Security Techniques
(MCA/MSCCS/PGDCS/CEGCS)
3rd / lst Semester Examination, 2023 (June)

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. Candidates should limit their answer to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

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.

(2×19=38)

1. Answer the following:

(a) What is an insider attack? Explain different types of insider attacks. (9)

(b) What is an outsider attack? Explain different types of outsider attacks. (l0)

2. Answer the following :

   (a)   Define IT Asset Management (ITAM) ?   (3)

   (b)   Differentiate between tangible and intangible assets?

             (4)

   (c)   Write down the steps for securing an asset.   (4)

   (d)   Define WEP and WPA.   (4)

   (e)   What are the security problems with WEP and WPA? Explain briefly.   (4)

3. Answer the following :

   (a)   Define residual risk.   (3)

   (b)   Discuss common methods of conducting risk assessment.   (3)

   (c)   What is OCTAVE.   (3)

   (d)   Write a note on COBIT.   (3)

   (e)   Write a note on NIST cyber security framework.   (4)

   (f)   Define Factor analysis of information risk (FAIR).

             (3)

4. Answer the following :

   (a)   What is ITU-cyber wellness profile?   (4)

   (b)   What is ITU-cyber security index?   (5)

   (c)   Discuss the categories and parameters on which cyber security index is calculated.   (5)

   (d)   Discuss National cyber security policy of India.   (5)

5. Answer the following :

   (a) What is DMZ? (3)

   (b) Make diagram of IDS Components? (4)

   (c) Differentiate network and host based IDS? (4)

   (d) List out key features and types of Hardware Security Module (HSM). (4)

   (e) What is a Full-Simulation exercise? (4)

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. (4×8=32)

1. Answer the following :

   (a) Define social engineering. (4)

   (b) What is CIA ? Explain. (4)

2. Explain working of PGP in detail along with diagram.

3. List out five basic differences between policies and procedures.

4. Answer the following:

   (a) Explain significance of maturity models. (4)

   (b) Write note on cyber security capability maturity model.

(4)

5. Answer the following :

    (a) Security is a continuous process - explain. (4)

    (b) Write note on "security integration within SDLC".

                                                          (4)

6. Answer the following :

    (a) Explain different types of social engineering attacks.

                                                          (4)

    (b) How to defend against social engineering attack? (4)

7. Answer the following :

    (a) Write note on Digital India program. (4)

    (b) Discuss National cyber security exercises. (4)

8. Answer the following :

    (a) What is a manual security testing? (4)

    (b) Write a note on DSCI. (4)