S-747

Total Pages: 5 Roll No. -----

MIT(CS)-102/CEGCS-02

Cyber Security Techniques (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.

 $[2 \times 19 = 38]$

P.T.O.

Q.1. Answer the following:

- a. What is IDS? What are the different components of an IDS? (6)
- b. What are the different characteristics of an IDS? (6)
- c. What is PGP and MIME? Explain. (7)

Q.2. Answer the following:

- a. Explain secure software development. (3)
- b. Explain McCumber Cube. (4)
- c. Define maturity model. (4)
- d. What is a Full-Simulation exercise? (4)
- e. Write a short note on information security assurance. (4)

Q.3. Answer the following:

- a. What is social engineering? (6)
- b. What is reverse social engineering? (6)
- c. Explain different types of social engineering attacks. (7)

Q.4. Answer the following:

- a. Discuss importance of national cyber security policies. (4)
- b. Differentiate between Malware, Botnet, Virus and Worms? (3)
- c. Explain IP Sec? (4)
- d. What is physical security? (4)
- e. What is an incident? Write down steps to report an incident? (4)

Q.5. Answer the following:

- a. How exploit kit infect you? How one can prevent drive by download attacks in exploit kit scenario? (6)
- b. What is OCTAVE. (4)
- c. Write a note on COBIT. (4)
- d. Write a note on DSCI. (5)

P.T.O.

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.

$$[4 \times 8 = 32]$$

- Q.1. Answer the following:
 - a. What are the basic elements of policy? (4)
 - b. What are types of security policy? (4)
- Q.2. Define an attack? Discuss various types of attacks.
- Q.3. Explain lifecycle of Incident Handling along with diagram?
- Q.4. What do you understand by firewalls? Explain along with its types and diagram?
- Q.5. Discuss various initiatives of Government of India for achieving information security assurance.

Q.6. Answer the following:

- a. What is HTTP and HTTPS? (2)
- b. Explain application security? (4)
- c. What is a webshell? (2)

Q.7. Answer the following:

- a. Explain Risk and Risk Management. (4)
- b. Write short note on importance of cyber risk management. (4)

Q.8. Answer the following:

- a. Write a note on cyber security initiatives in India. (4)
- b. Discuss Roles and functions of CERT-In. (4)
