S-753

MIT(CS)-203

Advance Cyber Security Techniques

(MSCCS/PGDCS)

2nd 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.   What is RSA algorithm? Explain the generation of public and private keys and hence generation of cipher text through RSA with the help of example.

Q.2.   Explain IP security architecture. Show how ESP works in transport and tunnel mode.

Q.3.   Explain Secure Socket layer in detail.

Q.4.   How does PGP create a secure Network? Also explain PGP.

Q.5.   What do you understand by cryptography? List the various cryptographic techniques with suitable examples.

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. What are the various security mechanism.

Q.2. What is the difference between threat and attack?

Q.3. Write the three dimensions of cryptographic systems.

Q.4. What do you mean by brute force attack and intrusion.

Q.5. What is the difference between substitution and transposition technique.

Q.6. What are the properties that digital signature should have.

Q.7. Define briefly the playfair cipher and Ceaser cipher.

Q.8. What are the various types of Firewalls? Explain each of them in detail.

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