

P-850

Total Pages : 3

Roll No.

MIT(CS)-104/CEGCS-04

Information System

(MCA/MSCCS/PGDCS/CEGCS)

3rd / 1st 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. Discuss OSI model of Internet working and function of the various layers with neat diagram.

2. Answer the following :
 - (a) Explain the purpose and type of subnetting.'
 - (b) Explain the difference between TCP and UDP. Which network applications you feel, these protocols are best suited for?
3. (a) How does PGP provide authentication and confidentiality for email services and for file transfer applications? Draw the block diagram and explain the components
- (b) Analyze the Cryptographic algorithms used in S/MIME and explain S/MIME certification processing
4. Enumerate and explain various phases involved in penetration testing. Explain each of them.
5. Explain the concept of digital signature algorithm with key generation and verification in detail.

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. Explain the various components of CIA Triad. What is used for?

2. What are the various types of hackers? Explain each of them.
 3. What are the various causes of IT infrastructure failure? What are the remedies?
 4. What is Zone transfer? How this vulnerability can be misused by a hacker? What is the remedial action one must take to mitigate this?
 5. What are the various components of key management process? Briefly explain all of them.
 6. Describe DES algorithm.
 7. Explain kerberos's working.
 8. What is SET? How does SET work?
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