

Question Paper

Exam Date & Time: 06-Jan-2023 (02:30 PM - 05:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.TECH MAKEUP EXAMINATIONS, JAN 2023

CYBER SECURITY [ICT 3156]

Marks: 50

Duration: 180 mins.

A

Answer all the questions.

Instructions to Candidates: Answer ALL questions Missing data may be suitably assumed

- 1) Discuss Various browser attacks with respect to their execution and action (5)
 - A)
 - B) Does a PKI perform encryption? Explain your answer with relevant justifications (3)
 - C) Distinguish between general exploit and zero day exploit with examples. Also suggest the solutions for same (2)
- 2) Explain five different types of browser attacks with relevant examples (5)
 - A)
 - B) When the access policies are different from access control mechanisms? Suggest various techniques for effective policy implementation (3)
 - C) Highlight the importance of ethics in incident analysis. How incidents related to computer services and privacy rights? (2)
- 3) "Risk analysis is a management activity which is at the heart of security planning". Explain five reasons to justify the necessity of performing risk analysis (5)
 - A)
 - B) With the help of suitable examples illustrate Man in the browser attack (3)
 - C) Discuss various acts to cause security harm in cyber security with example (2)
- 4) Build a Trusted Computing Base (TCB) implementation with security kernel and its interactions monitored by TCB (5)
 - A)
 - B) Choose and justify suitable parameters to design a good security plan. Recognize and discuss the components of good policy statement (3)
 - C) Classify ways to protect websites against changes (2)
- 5) The chief security architects for Multics proposed various design principles essential for building a solid trusted operating system. How each one of them are significant and applicable? (5)
 - A)

- B) In RSA cryptosystem, why can't the public key is 1 and 2? If $e=13$ and $n=100$, encrypt the message (3)
"CYBER SECURITY" using the 00 to 25 encoding scheme for characters and 26 for space with
block size=3
- C) Illustrate variants of coupling (2)

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