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18AA1008

M. Tech. EXAMINATION, 2021

(First Semester)

(C-Scheme) (Main & Re-appear)

(CSE)

MTCSE529C

STEGANOGRAPHY AND DIGITAL WATERMARKING

Time : 2½ *Hours*] [*Maximum Marks :* 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Four* questions in all. All questions carry equal marks.

1. (a) Define terms related to Cryptology. State and describe the different transposition techniques.

(b) State and describe the various Substitution techniques.

2. (a) Write Diffie Helman algorithm. Analyse its possible use of misuse.

(b) Compare symmetric and asymmetric keys cryptography. How best of both can be used in a practical environment ?

3. (a) Describe the framework for secret communication.

(b) Explain Methods for hiding and issues related to Security, Capacity and Imperceptibility.

4. (a) Summarize the history of steganography.

(b) Explain the spatial domain steganography technique.

5. Demonstrate the digital logic technique algorithm.

6. (a) Demonstrate the steganography algorithm of 6th and 7th bit.

(b) Demonstrate the LSB embedding technique of steganography with example.

7. (a) Illustrate the recent trends in steganography and digital watermarking techniques

(b) Outline the difference between steganography and watermarking in the field of applications.

8. Summarize the digital watermarking techniques and their classification.