Code No: 157CR

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, February/March - 2022
NETWORK SECURITY AND CRYPTOGRAPHY
(Electronics and Communication Engineering)

Time: 3 Hours **Max. Marks: 75**

Answer any Five Questions
All Questions Carry Equal Marks

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1.a) Write a detailed note on the Conventional Encryption model with an example.
b) Justify how Steganography improves Data Security with an example. [8+7]

2. Demonstrate the working of a Transposition Technique for encryption with an example. [15]

3. Explain the implementation of Triple DES with Two Keys with a neat diagram. [15]

4.a) Illustrate two methods for Traffic Confidentiality with neat diagrams.
b) Explain briefly about Blowfish Algorithm. [8+7]

5.a) Using Fermat's theorem, find 3^{201} mod 11.
b) Use Euler's Theorem to find a number x between 0 and 28 with x^{85} congruent to 6 modulo 35. [8+7]

6.a) Write a detailed note on the Chinese Remainder Theorem.
b) Explain briefly the Discrete Logarithms. [8+7]

7.a) Write a detailed note on Kerberos.
b) Explain in detail about Digital Signature Standards. [8+7]

8. Describe in detail the Encapsulating Security Payload with neat diagrams. [15]

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