Roll No ..

MTCF-105

M.E./M.Tech. I Semester

Examination, November 2018

Cryptography and Network Security

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any Five questions.

ii) All questions carry equal marks.

1. a) List and briefly define types of cryptanalytic attacks based on what is known to the attacker.

   b) Explain DES algorithm. What is the purpose of the S-boxes in DES?

2. a) Perform encryption and decryption using the RSA algorithm

   i) $p = 3, q = 11, e = 7, M = 5$

   ii) $p = 7, q = 11, e = 17, M = 9$

   b) What requirements must a public key cryptosystem full-fill to be a secure algorithm?

3. Explain the following term:

   a) Public key authority

   b) Public key certificate

   c) Public key distribution of secret keys

4. a) Define criminal intimidation as mentioned in Indian Penal Code-1860 with suitable examples. 7

 b) What do you mean by Cyber Crimes? Discuss the nature and types of Cyber Crimes. What are the Challenges before it? 7

5. a) What do you understand by Digital Signature? Discuss the use of Digital Signature in e-governance. 7

 b) Discuss the role of international copyright conventions in development of cyber technology copyrights. 7

6. a) How Network Host hacking is performed in Ethical Hacking? Explain it. Illustrate about foundation for ethical hacking. 7

 b) Write the tactics of Terrorist and rogues to attack networks. http://www.rgpvonline.com 7

7. a) Discuss various patent issues in digital medium. Also, explain various international laws pertaining to patent. 7

 b) What are the various types of Software patents and their application to the Cyber world and technologies involved? 7

8. a) Define theft and explain its explanations with suitable illustrations in cyber crimes. 7

 b) As cyber crime what do you understand by money Laundering? Explain. 7

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