ASSIGNMENT QUESTIONS

IMT CENTRE FOR DISTANCE LEARNING GHAZIABAD Distance Learning Programme

IMT-94

Network Security Threats, Attacks and Loopholes

Notes:

a. All set of assignments would be made in a single MS. Word file and would be sent together through e-mail to <u>imt.ankitfadia@gmail.com</u> with a cc to <u>nidhimathur@imtcdl.ac.in</u> & <u>richa@imtcdl.ac.in</u>

b. Subject of the e-mail of assignment submission should be 'UNIT-4'.

- c. Students are required to clearly mention their name, roll no, and subject code in the first page of the word file.
- d. Write answers in your own words as far as possible and refrain from copying from the textbooks/handouts.

FIRST SET OF ASSIGNMENTS (Subjective)

Assignment (I) = 10 Marks

ASSIGNMENT-I

- 1. What is social engineering? Describe different types of social engineering attacks.
- 2. Give ideas of social engineering attacks that could possibly be implemented on people around you.
- 3. What is the difference between intimidation and impersonation?
- 4. Describe the various types of password cracking attacks.
- 5. Give three examples of weak passwords.
- 6. Give three examples of strong passwords.
- 7. How can an attacker crack a UNIX password?
- 8. How can an attacker crack a WINDOWS password?
- 9. How can an attacker crack a Screen Saver password?
- 10. What are default passwords? Why are they enabled in applications by software developers?

SECOND SET OF ASSIGNMENTS (Subjective)

Assignment (II) = 5 Marks

ASSIGNMENT-II

- 1. Describe the functions, structure and uses of the various layers of TCP/IP.
- 2. What is the use of checksum on the Internet?
- 3. What is the use of sequencing on the Internet?
- 4. How can an attacker carry out IP spoofing?
- 5. What are the four biggest challenges associated with IP spoofing?
- 6. What are the advantages of proxy bouncing compared with proxy servers? How can you carry out proxy bouncing?
- 7. What are trust relationships? Are they more secure than username-password authentication?
- 8. What are the three steps of connection establishment and connection termination respectively?
- 9. Describe the functions of the following data packets: ACK, SYN, FIN, URG and PSH.
- 10. What role do DOS attacks play in IP spoofing?

THIRD SET OF ASSIGNMENTS

ASSIGNMENT-III

- 1. Download the file named ankitfadia.zip from the course mailing list and crack its password. (Kindly submit the cracked password as your answer).
- 2. Imagine that you are a social engineer andyou wish to find out the bank account number of Mr A. You decide to call the call centre of the bank and carry out a social engineering attack. How would you do it? Kindly do not actually carry out such an attack, simply submit conversation records/logs of a social engineering attack.