Reg. No.



MANIPAL INSTITUTE OF TECHNOLOGY

VII SEMESTER B.TECH. (COMPUTER SCIENCE & ENGINEERING) DEGREE END SEMESTER EXAMINATION-NOV/DEC 2017 SUBJECT: INFORMATION SECURITY (CSE 4014) REVISEDCREDIT SYSTEM (25/11/2017)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ✤ Answer ALL the questions.
- ♦ Missing data may be suitably assumed.
- 1A. Define Information Security. Explain the different classifications of attacks. 4M Give an example for each.
- 1B. Explain how buffer overflows and buffer over reads lead to software 2M vulnerabilities.
- 1C.Explain the following:4Mi. Hoaxesii. Distributed denial of service4Miii. Sniffersiv. Social Engineering
- 2A. Write the architecture of a distributed intrusion detection system and explain. 4M Differentiate between reactive and proactive password checking.
- 2B. Discuss the generations of anti-virus software. 2M
- 2C. Draw a neat diagram and explain a packet filter firewall. What are its 4M weaknesses?
- 3A. What is concurrency? Explain with an example how concurrent modification can 5M lead to trouble. Describe the various types of monitors with the help of examples.
- 3B. Explain the different designs of multilevel secure databases. 5M
- 4A. Explain the services provided by SSL Record protocol. Draw a neat timeline 5M diagram of SSL handshaking and explain.
- 4B. Draw a neat diagram and explain how PGP provides both confidentiality and 5M authentication. What are MIME transfer encodings? Explain.
- 5A. Explain the following:4Mi. Anti-Replay Serviceii. Features of IKE key determination

5B.	What is a cyber crime? Explain the sources of cyber crimes.	4M
5C.	Explain some of the features of Information Technology Act 2000.	2M
