## Second Semester M. E. (Computer Science and IT) Examination

## INFORMATION TECHNOLOGY AND SECURITY

Paper - 2 RNME 3

| P. Pa | iges : | 2   |
|-------|--------|---|
| Time  | ; Thr  | ee Hours ] [ Max. Marks : 80  |
|       | Note   | <ul> <li>(1) All question carry equal marks.</li> <li>(2) Due credit will be given to neatness and adequate dimensions.</li> <li>(3) Assume suitable data wherever necessary.</li> <li>(4) Illustrate your answer necessary with the help of neat sketches.</li> <li>(5) Use pen of Blue/Black ink/refill only for writing the answer book</li> </ul> |
| 1.    | (a)    | Explain Information policies regarding release and prevention of information  |
|       | (b)    | Explain simmons decision principles use in construction and verification of cryptographic protocol.   |
|       |        | OR  |
| 2.    | (a)    | Explain software security in detail.  |
|       | (b)    | What are the impact of Hardware and software to execute any security mechanism? Explain.  |
| 3.    | (a)    | Explain WLAN in terms of its standard, structure and message types.   |
|       | (b)    | Explain 802.11 security mechanism.  |
|       |        | OR  |
| 4.    | (a)    | Explain encryption method in 3G with the help of neat diagram.  |
|       | (b)    | Explain software security testing cycle with neat diagram.  |
| 5.    | (a)    | Enlist an advantages of tool and techniques of digital forensics.   |
|       | (b)    | Explain different phases of digital investigation process.  |

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## OR

| 6.·         | (a)    | Explain formal and informal security management in brief.  | 8          |
|-------------|--------|--|------------|
|             | (b)    | What are methods and tactics of Social Engineering? Explain.                                     | 6          |
| 7.          | (a)    | What is routing in MANET? Describe its goals.  | 7          |
|             | (b)    | What is network scanner? Why it is important? Also state and experiment function.                | plair<br>6 |
|             |        | · OR   |            |
| 8.          | (a)    | Explain working of "Nessus' remote security scanner tool.  | 6          |
|             | (b)    | Explain dynamic source routing with neat diagram.  | 7          |
| 9.          | (a)    | What are various network components? Explain the function of component.                          | each       |
|             | (b)    | What are possible attacks through proxy server ? Explain.  | 7          |
|             |        | OR   |            |
| 10.         | (a)    | Explain VPN model along with threats and safe guards.  | 6          |
|             | (b)    | Differentiate between :  |            |
|             |        | (i) Dos and DDoS attack.   |            |
|             |        | (ii) Stack and Heap.   | 8          |
| 11.         | (a)    | Explain post-office protocol.  | 6          |
|             | (b)    | What is programming exploits? Explain use of Activex control vulnerabilities in Activex control. | and        |
|             |        | OR   |            |
| 12.         | (a)    | Explain different types of incidents.  | 6          |
|             | (b)    | What are the tools used to exploit web vulnerabilities? Explain.                                 | 7          |
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