

- N.B. : (1) Question No. 1 is **compulsory**.  
 (2) Attempt any **four** questions out of remaining **six** questions.  
 (3) Make **suitable** assumption wherever **necessary** and clearly **justify** them.

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| 1. a) What are the different types of threats?   | 05 |
| b) What is the difference between symmetric and asymmetric key cryptography?             | 05 |
| c) Give the differences between stream and block cipher.                                 | 05 |
| d) Explain diffusion and confusion.  | 05 |
| 2. a) Explain the information security goals.  | 10 |
| b) Explain A5/1 stream cipher.   | 10 |
| 3. a) Explain control of access to general objects in operating system.                  | 10 |
| b) What are the properties of cryptographic hash function? Explain the birthday problem. | 10 |
| 4. a) Explain the Diffie – Hellman key exchange algorithm.                               | 10 |
| b) Write a detailed note on Biometric techniques.  | 10 |
| 5. a) What is the use of Tiger Hash? Explain it in detail.                               | 10 |
| b) What is a firewall ? Explain different types of firewalls.                            | 10 |
| 6. a) Explain the different software flaws with examples.                                | 10 |
| b) What is Spoofing? Explain ARP spoofing.   | 10 |
| 7. Write short notes on the following: –   | 20 |
| a) Session Hijacking   |    |
| b) SYN Flood   |    |
| c) CAPTCHA   |    |
| d) Covert Channel .  |    |
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