

- N. B.: (1) Question **No. 1** is **compulsory**.
 (2) Attempt **any four** from **Question Nos. 2 to 7**.
 (3) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
 (4) Answers to the **same question** must be **written together**.
 (5) Numbers to the **right** indicate **marks**.
 (6) Draw **neat labeled diagrams** wherever **necessary**.
 (7) Use of **Non-programmable** calculators is **allowed**.

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| 1. | a. | Write a note on 'Social Engineering'. | 5 |
| | b. | Write a short note on protocol failure. | 5 |
| | c. | What is the key wrapping? How it is useful? | 5 |
| | d. | Explain Life cycle of Virus. | 5 |
| 2. | a. | What is the stealing password and what are the ways to maintain password? | 8 |
| | b. | What Firewalls cannot do? | 6 |
| | c. | Explain IP Spoofing and IP Sniffing in detail | 6 |
| 3 | a. | What are the different threats to Security? Explain. | 8 |
| | b. | What are WORMS? How do they work? Explain what preventive measures can be taken to avoid WORMS. | 6 |
| | c. | Differentiate between active attacks and passive attack. | 6 |
| 4 | a. | Explain Circuit Gateway in detail. | 8 |
| | b. | Explain in detail different types of viruses. | 6 |
| | c. | Write a note on Filtering TELNET services. | 6 |
| 5 | a. | Explain Diffie Hellman Key Exchange Algorithm with example. | 8 |
| | b. | Write a note on Incident Handling. | 6 |
| | c. | What do you mean by security policy? Who should be involved when forming policy? | 6 |
| 6 | a. | Explain with example how RSA Algorithm works. | 8 |
| | b. | Write a note on Exponential Attack. | 6 |
| | c. | Explain how Vernam cipher works? Give example. | 6 |
| 7 | a. | What are 'Bugs' and 'backdoors'? What prevention mechanisms can be used for them? | 8 |
| | b. | Write a note on Distributed Denial of Service Attack. | 6 |
| | c. | State and explain different Security Models. | 6 |
