## BE Semester-___VI_ (Information Technology) Question Bank

(Information security)

## All questions carry equal marks(10 marks)

| Q. 1 | Explain the types of attacks. |
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| Q. 2 | Describe various security approaches. |
| Q. 3 | Explain the need and principles of security. |
| Q. 4 | Describe DES symmetric key cryptography algorithm. |
| Q. 5 | Explain various substitution techniques. |
| Q. 6 | Explain various transposition techniques. |
| Q. 7 | What is digital certification? How it can be achieved? |
| Q. 8 | Explain secure socket layer. |
| Q. 9 | What are the security aspects attached to Electronic money. |
| Q. 10 | Explain the need and types of firewall. |
| Q.11 | What is virtual private network? |
| Q. 12 | Write about biometric authentication. |
| Q. 13 | Describe the kerberose system. |
| Q. 14 | Write the issues in Email security |
| Q. 15 | Write the issues in web security. |
| Q. 16 | Write the issues in GSM security. |
| Q. 17 | How user authentication can be done with authentication token? |
| Q. 18 | What is secure electronic transaction and how it can be achieved? |
| Q. 19 | How key management is done in case of symmetric and asymmetric <br> cryptography? |
| Q. 20 | Describe IDEA( International data encryption algorithm). |
| Q. 21 | Describe RC5 algorithm. |
| Q. 22 | Describe blowfish algorithm. |
| Q. 23 | Describe AES(Advance encryption standard) algorithm. |
| Q. 24 | Write a note on secure hypertext transfer protocol. |
| Q. 25 | What is a virus? |
| Q. 26 | Explain the following |
|  | 1. Replay attack <br> 2. Denial of service attack |
| Q. 27 | What is cryptanalysis? |
| Q. 28 | What is encryption and decryption? Draw block diagram that shows <br> encryption and decryption. |
| Q. 29 | Explain one time pad and why it is secure? |
| Q. 30 | Describe two types of cryptographic algorithms. |
| Q.31 | Explain electronic code book mode. |
| Q.32 | Explain cipher block chaining mode. |
| Q.33 | Explain cipher feedback mode. |
| Q.34 | Explain output feedback mode. |
| Q.35 | Describe the variations of DES(Data Encryption standard). |
| Q.36 | What is the difference between authentication,integrity, confidentiality and <br> nonrepudiation? |
| Q.37 | What are the issues in information security and network security? How they <br> can be solved? |

Q. 38 Generate public key and private key in case of RSA algorithm if two prime numbers giver are 5 and 7. $\mathrm{p}=5$ and $\mathrm{q}=7$.
Q. 39 Explain the different methods to generate random numbers.
Q. 40 Write a note on XML and security.

