

ROLL No:

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Total number of pages: [ ]

Total number of questions: 06

B.C.A. 6<sup>th</sup> Sem

## Information Security

Subject Code: BSBC-604

Paper ID: (for office use)

Max Marks: 60

Time allowed: 3 Hrs

### Important Instructions:

- All questions are compulsory
- Assume any missing data and Additional instructions, if any

### PART A (2×10)

#### Q1. Short-Answer Questions:

- What are the functions that information security is supposed to perform for an organization?
- Differentiate between Authentication and Authorization.
- What is a message digest?
- What are various types of attacks?
- What is Cipher text? How it is different from Plain text?
- What is a Risk? How it is identified?
- List the services provided by SSL.
- Define IT security plan.
- How Virus operation differs from a Worm?
- Differentiate between Public and Private-key cryptography.

### PART B (8 × 5)

- Q. 2. Discuss about the security systems development life cycle and various access controls with respect to information security?

OR

Discuss the various types of deliberate software attacks designed to damage, destroy or deny service to target systems.

- Q. 3. What are firewalls? How do firewalls used to protect the network against threats?

OR

How SSL is used to secure internet transactions?

- Q. 4. Explain the operation of Intrusion detection system.

OR

Explain the following:

a) IPR

b) Business ethics

- Q. 5. What is Asymmetric key cryptography? Explain RSA algorithm with example.

OR

Explain different Transposition and Substitution techniques of Cryptography.

**Q. 6. Write down the principles and components of Information security.**  
**OR**

**Describe the following:**

**a) Malicious software**

**b) AES**