

M. Tech.-II (Information Technology) (CBCS – 2015 Course) :

SUMMER - 2019

SUBJECT: INFORMATION SECURITY

Day: Tuesday
Date: 11/06/2019

Time: 11.00 AM TO 02.00 PM
Max Marks. 60

S-2019-3412

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer to both the sections should be written in **SAME** Answer book.

SECTION - I

Q.1 What is big – O notation? Estimate time required to convert a k – bit integer to its representation in the base 10. (10)

OR

Explain Euclidean algorithm. Also explain the working of Euclidean algorithm to calculate greatest common divisor with suitable example. (10)

Q.2 Describe different methods of message authentication. (10)

OR

Why is security monitoring and auditing necessary? What are phases of audit process? (10)

Q.3 Explain security policy development procedure? Also give need of security policy. (10)

OR

What are different data security consideration that must be performed related to data backup? (10)

SECTION - II

Q.4 Define following terminologies with suitable example (10)

- i) Threat
- ii) Vulnerabilities
- iii) Risk
- iv) Threat agent

OR

Describe 5 E– mail threats and web threats in for detail. (10)

Q.5 What is an elliptic curve? What is the zero point of an elliptic curve? (10)

OR

What is the difference between an index and a discrete logarithm? Explain properties of discrete logarithm? (10)

Q.6 Explain features of security testing tools. Enlist five security testing tools. (10)

OR

What is business continuity? What is purpose of business continuity plan? (10)

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