

B.SC. (I. T.) SEM. - VI (2011 COURSE) : SUMMER - 2018

SUBJECT: ELECTIVE: d) CYBER SECURITY

Day: **Saturday**
Date: **26/05/2018**

S-2018-0993

Time: **10.00 am to 12.00 Noon**
Max. Marks: 40

N.B.:

- 1) Attempt **ANY FIVE** full questions.
 - 2) Be brief. Make assumptions where necessary stating the assumptions made.
 - 3) Figures to the right indicate **FULL** marks.
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- Q.1** Clearly explain the five goals of Information Security. (08)
- Q.2** a) List the different types of threats to an Information System. (04)
b) Distinguish between Virus, Worms and Trojan Horses. (04)
- Q.3** a) What is Asymmetric Key Encryption? (03)
b) Enumerate the advantages and drawbacks of Asymmetric Key Encryption as compared to Symmetric Key Encryption? (05)
- Q.4** Describe in detail the functioning of SSL. Explain how authentication and message integrity are ensured using SSL. (08)
- Q.5** a) List the functions performed by firewalls. (04)
b) What is DMZ? Draw a diagram depicting architecture of a DMZ. (04)
- Q.6** a) Describe the different attacks against passwords. (04)
b) Explain why an Information Security Policy is important for an organization. (04)
- Q.7** Write short notes on (**ANY TWO**) of the following: (08)
- a) VPN
 - b) Buffer Overflow Attack
 - c) Rainbow Tables
 - d) IDS

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