

B.SC. (I. T.) SEM. - VI (2011 COURSE) : WINTER - 2017

SUBJECT: ELECTIVE: d) CYBER SECURITY

Day: **Thursday**
Date: **28/12/2017**

W-2017-0886

Time: **02.30 PM TO 04.30 PM**
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** a) Distinguish between message integrity and message authentication. (03)
b) Why are internal threats considered more serious than external threats? Clearly explain. (05)
- 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** What are Digital Certificates? Explain the mechanism of creation of Digital Certificates and how these can be used by a website to prove authenticity. (08)
- Q.4** Describe how confidentiality, integrity and authentication are ensured for a banking transaction over the Internet. (08)
- Q.5** a) Explain the techniques used by IDS to detect an intrusion. (04)
b) Draw a diagram depicting a DMZ using a dual-firewall architecture. (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) ARP Spoofing
 - b) Buffer Overflow Attack
 - c) VPN
 - d) Phishing

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