Seat 1 Su	_	Enrolment No GUJARAT TECHNOLOGICAL UNIVERSITY MCA SEMESTER—III–EXAMINATION –WINTER-2016 et code: 3630012 Date:09/01/20)17
Su	ıbje	ct Name: INFORMATION SECURITY	- 0
	me: ıstrı	10.30 AM TO 01.00 PM Total Marks actions:	s: 70
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q:1	1	Answer the Following (any 7) A Vending machine is installed in a dangerous part of city. List five vulnerabilities of the vending machine.	[14]
	2	List three kinds of harm a company could experience from electronic espionage. Name one recent espionage.	
	3	List Fundamental Security properties and for each give an example.	
	4	Name any three non-malicious programming errors.	
	5	Is it possible to detect or prevent Salami attack? List possible controls.	
	6	Some Operating Systems use buffered I/O. Whereas the actual write is performed later by the OS. What is effect of buffered I/O on integrity of the OS?	
	7	Name different Message integrity threats.	
	8	List 3 and explain one website vulnerability.	
	9 10	What is characteristic of a good security policy? List different computer related privacy problems.	
Q.2	(a)	Describe Interception, Interruption and modification System Security threats.	07
	(b)	What purpose the CIA triangle serves for System Security? Explain in detail.	07
		OR	
	(b)	What is an unexpected Program behaviour? List flaws arising out of them.	07
Q.3	(a)	What is Buffer Overflow? Explain using a small code-snippet and appropriate diagram	07
	(b)	What is an incomplete mediation? Explain possible security implication of the same OR	07
Q.3	(a)	What is web anonymity? Is there any Browser on such anonymity principle?.	07
	(b)	What is a Trusted System? Explain key characteristics.	07
Q.4	(a)	Does Military Security Policy exist in real? If so explain different sensitive levels.	07
-	(b)	Compare Clark-Wilson and Chinese wall security policy. OR	07
Q.4	(a)	Explain SQL injection attack with a code example.	07
	(b)	Explain characteristics of a Good Security Policy.	07
Q.5	(a)	What is a Threat in Transit? Can you name any two such attacks and explain them in	07

07

07

07

brief?

(b)

(a)

(b)

Q.5

List and explain message integrity threats.

List Computer related privacy problems and explain any one. Can reverse engineering uncover the patented software? How?