## GUJARAT TECHNOLOGICAL UNIVERSITY

Subject code: 732303

M. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Date: 26/12/2012

Subject Name: Software Forensic Time: 10.30 am – 01.00 pm Total Marks: 70 Instructions:			
	2.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	
Q.1	(a) (b)	Discus the types of Blackhats, their characteristics and motivation. What is software forensic? What are the object and objectives of it?	07 07
Q.2	(a)	Discuss the following issues related to law and ethics in software forensic: types of evidence and blackhat motivation as a defense.	07
	<b>(b)</b>	How the programming process and tools used to develop the program are used as software forensic tools?	07
		OR	
	<b>(b)</b>	Compare between content and non-content analysis.	07
Q.3	(a) (b)	List the various Blackhat products and discus their characteristics. List the products required to study during code analysis and discuss their complicating factors.	07 07
Q.3	(a)	<b>OR</b> Briefly discuss the analytical tools like DEBUG and BinText for software code analysis.	07
	<b>(b)</b>	Discuss the types of utilities used in virus detection technologies in order to assist in software forensic.	07
Q.4	(a) (b)	Explain the requirement and process of decompilation of software code.  Define the term: malware and discuss the structure of logic bomb.	07 07
	(D)	OR	U I
Q.4	(a)	How can one determine duplication of the code? Which tools are available for this? Explain any one in detail.	07
	<b>(b)</b>	Briefly discuss the requirement of change detection (Integrity checking) software and different approaches of scanning.	07
Q.5	(a) (b)	Write short note on stylistic analysis and linguistic forensic. How does programming culture help us in identifying a particular author of software?	07 07
		OR	
Q.5	(a)	Discuss the noncontent metrics and additional indicators as evidence of authorship.	07
	<b>(b)</b>	Write short note on plagiarism detection versus authorship analysis.	07

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