Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – III • EXAMINATION – SUMMER • 2013

Subject code: 732303 **Date: 15-05-2013**

Subject Name: Software Forensics

Time: 10.30 am – 01.00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	What is software forensic? Discuss objects and objectives of software forensic.	**07**
	(b)	Define the term ñblackhatò. Discuss the different types of blackhats and their characteristics.	**07**
Q.2	**(a)**	Discuss the issues related to law and ethics in software forensic.	**07**
	(b)	Write short note on stylistic analysis and linguistic forensic.	**07**
		OR	
	(b)	How does programming culture help us in identifying a particular author of software?	**07**
Q.3	**(a)**	How can one determine duplication of the code? Which tools are available for this? Explain any one in detail.	**07**
	(b)	Explain the programming process and products used to develop software.	**07**
		OR	
Q.3	**(a)**	Briefly discuss the requirement of change detection (Integrity checking) software and different approaches of scanning.	**07**
	(b)	Compare between content and non-content analysis	**07**
Q.4	**(a)**	Explain the process of assembly code analysis using simulator.	**07**
	(b)	Define the term: malware and discuss the structure of virus.	**07**
		OR	
Q.4	**(a)**	Explain the requirement and process of decompilation of software code	**07**
	(b)	Define the term: malware and discuss the structure of logic bomb.	**07**
Q.5	**(a)**	Discuss the analysis tools Desquirr and JPlag.	**07**
	(b)	Briefly discuss the structure of Trojan and Logic Bomb.	**07**
		OR	
Q.5	**(a)**	Discuss the indicators of programming style.	**07**
	(b)	Write short note on plagiarism detection versus authorship analysis.	**07**

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