Seat No.: ____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI • EXAMINATION – WINTER • 2014

Subject Code: 160701 **Date: 26-11-2014**

Subject Name: Software Engineering

Time: 02:30 pm - 05:00 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)**	Describe FOUR Ps for Project Management and explain any THREE in detail.	**07**
	(b)	What does CASE stands for? Explain all the CASE components.	**07**
Q.2	**(a)**	Define Software Engineering. Draw and explain Software Engineering layers.	**07**
	(b)	Write and explain briefly possible reasons for project failure.	**07**
		OR	
	(b)	Describe two main features of Spiral model and discuss working of Prototyping model with its diagram.	**07**
Q.3	**(a)**	Discuss umbrella activities and its role in software development life cycle (SDLC).	**07**
	(b)	Explain W5HH principle with respect to software project management.	**07**
		OR	
Q.3	**(a)**	Draw context diagram and data flow diagram (DFD) for Airlines Reservation System.	**07**
	(b)	What is Software Reliability? Compare Black Box testing and White Box testing in software product.	**07**
Q.4	**(a)**	Prepare an E-R diagram for a Hospital Management System.	**07**
	(b)	Describe process of requirement engineering in detail.	**07**
		OR	
Q.4	**(a)**	Discuss all generic frame work activities of software engineering with respect to any one process model.	**07**
	(b)	What is testing? What is debugging? Draw the spiral diagram showing testing strategies with phases of software development.	**07**
Q.5	**(a)**	Draw database design model and discuss Architectural design and Interface design.	**07**
	(b)	What is User Interface (UI)? Explain the design model for UI.	**07**
		OR	
Q.5	**(a)**	Discuss Incremental process model with its diagram and compare with Waterfall model.	**07**
	(b)	Define Software Quality Assurance (SQA) and explain SQA activities.	**07**

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