Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI (NEW) EXAMINATION – WINTER 2018

Subject Code:2160701 Date:16/11/2018

Subject Name:Software Engineering

Time: 02:30 PM TO 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)**	Explain Software Engineering as a Layered technology.	**03**
	(b)	Explain Spiral Model in brief with suitable diagram.	**04**
	(c)	What is the importance of Process Model in development of Software System? Explain Prototype Process Model.	**07**
Q.2	**(a)**	Differentiate Procedural Design and Object Oriented Design.	**03**
	(b)	What is Architectural Design? Enlist different styles and patterns of architecture.	**04**
	(c)	Explain Project Scheduling Process. Also Explain Gantt Chart in detail.	**07**
		OR	
	(c)	Explain Scrum with its advantages and disadvantages.	**07**
Q.3	**(a)**	Compare Prototype and RAD Model.	**03**
	(b)	List the different Agile Process Model and Explain any one with suitable example.	**04**
	(c)	What is Object Oriented Design of a system? Draw the Use case diagram and Class diagram for Library Management system.	**07**
		OR	
Q.3	**(a)**	Describe Golden Rules of User Interface Design.	**03**
	(b)	Draw the Time-line chart for the Hospital Management System.	**04**
	(c)	What is activity diagram and Swim-lane? Draw activity diagram for Billing Counter of a Shopping Mall.	**07**
Q.4	**(a)**	List Quality Standards. Explain any one.	**03**
	(b)	Discuss RMMM.	**04**
	(c)	Compare Coupling and Cohesion. Explain different types of Coupling and its effects on software modules.	**07**
		OR	
Q.4	**(a)**	Explain Formal Technical Review.	**03**
	(b)	Differentiate between Quality Assurance & Quality Control.	**04**
	(c)	What do you mean by Quality for a software? Enlist and explain SQA activities in brief.	**07**
Q.5	**(a)**	Write short note on Reengineering.	**03**
	(b)	Discuss Software Project Management and W5HH Principle in brief.	**04**
	(c)	Discuss Software Configuration Management in detail.	**07**

OR

Q.5	**(a)**	What is Cyclomatic Complexity? Define Steps to find Cyclomatic Complexity using flow graph.	**03**
	(b)	Explain Reverse Engineering in brief.	**04**
	(c)	Explain Software Process Improvement with various elements of SPI framework.	**07**

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