Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA Integrated - SEMESTER–VI • EXAMINATION – SUMMER - 2017

Subject Code: 4460602   **Date: 02/05/2017**

Subject Name: Software Engineering

Time:10:30 am to 1:00 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 the following terms :
		     a) OCP
		     b) Agile Process
		     c) Component Based Software Engineering (CBSE)
		     d) ASD
		     e) Alpha and Beta Testing
		     f) Archetypes
		     g) Time-Line Chart
			07

	(b)	Explain waterfall and spiral process model. List the differences between them.	**07**
Q.2	**(a)**	What is requirement engineering? Describe the seven distinct tasks encompassed in requirement engineering.	**07**
	(b)	List five functional requirement of hotel management system. Draw DFD level-0 and DFD level-1 for the same.	**07**

OR

	(b)	Explain core principles that guide the software process of software engineering.	**07**
Q.3	**(a)**	Explain human factors that may affect in agile software development.	**07**
	(b)	Explain the types of cohesion and coupling	**07**

OR

Q.3	**(a)**	Explain Architecture Design from Design pyramid for WebApp.	**07**
	(b)	What is function based metrics? Explain in detail.	**07**
Q.4	**(a)**	State and explain the three golden rules that form the basis of interface design.	**07**
	(b)	1) Write a short note on Formal Technical Review (FTR).	**04**
		2) Explain any one category of Architecture style	**03**

OR

Q.4	**(a)**	What is white box testing? Discuss basis path testing in detail.	**07**
	(b)	Describe the set of goals that are applicable to WebApp design.	**07**
Q.5	**(a)**	Explain unit testing and integration testing with suitable examples.	**07**
	(b)	What is W5HH principle in project management	**07**

OR

Q.5	**(a)**	Explain COCOMO II model of software estimation.	**07**
	(b)	List the Fundamental design concepts. Discuss modularity and functional independence	**07**

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