

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE – SEMESTER – VI (NEW).EXAMINATION – WINTER 2016**

**Subject Code: 2160701****Date: 22/10/2016****Subject Name: Software Engineering****Time: 10:30 AM to 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 Engineering? Explain Software Engineering: A Layered Technology. **07**  
(b) Explain Agile Development in detail. **07**
- Q.2** (a) What is Software Measurement? Explain Software metrics used for software cost estimation. **07**  
(b) Compare Prototype Model and RAD Model. **07**
- OR**
- (b) Explain Spiral Model in detail. **07**
- Q.3** (a) Explain project scheduling process. Explain Gantt Chart in detail. **07**  
(b) Explain the importance of Software Quality Assurance. Also explain different CMM levels. **07**
- OR**
- Q.3** (a) What is Software Testing? What is the role of a Software Tester? Compare: Black Box Testing and White Box Testing. **07**  
(b) Write a short note on Requirement Engineering. **07**
- Q.4** (a) Write a short note on Component-Based Software Engineering. **07**  
(b) What is User Interface? Explain the design rules for UI. **07**
- OR**
- Q.4** (a) Compare Coupling and Cohesion. Explain different types of Coupling and its effects on software modules. **07**  
(b) Write a short note on Software Configuration Management. **07**
- Q.5** (a) Write a short note on Reverse Engineering **07**  
(b) Explain Software as a Service (SaaS). Give its applications. **07**
- OR**
- Q.5** (a) Explain CASE tools and its use in Software Engineering. **07**  
(b) What is Risk Management? Explain RMMM plan. **07**

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