

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-V (NEW) EXAMINATION – WINTER 2018****Subject Code:2153202****Date:16/11/2018****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.

	MARKS
<b>Q.1</b> (a) Explain Software Characteristics in detail.	<b>03</b>
(b) Define Software Engineering. Draw and explain Software Engineering layers.	<b>04</b>
(c) Explain various categories of Software in Detail.	<b>07</b>
<b>Q.2</b> (a) Compare Waterfall Model and Spiral Model in Software Engineering.	<b>03</b>
(b) Explain Spiral Model in Detail. State its Advantages and Disadvantages.	<b>04</b>
(c) Discuss umbrella activities and its role in software development life cycle (SDLC).	<b>07</b>
<b>OR</b>	
(c) Explain different tasks of Project Manager in Detail.	<b>07</b>
<b>Q.3</b> (a) Explain Different Metrics –Size, Functional and complexity	<b>03</b>
(b) Discuss all process Framework activities of Software Engineering.	<b>04</b>
(c) Explain W5HH Principle in detail.	<b>07</b>
<b>OR</b>	
<b>Q.3</b> (a) What is System testing and Recovery Testing?	<b>03</b>
(b) Explain Cohesion and Coupling for Software Design.	<b>04</b>
(c) Define FOUR Ps for project management and explain them in detail.	<b>07</b>
<b>Q.4</b> (a) Explain Alpha and Beta Testing in detail	<b>03</b>
(b) Prepare ER diagram for Payroll Management System.	<b>04</b>
(c) What is Importance of User Interface? Explain Concept of UI.	<b>07</b>
<b>OR</b>	
<b>Q.4</b> (a) Differentiate Reactive Vs Proactive Risks.	<b>03</b>
(b) Describe the difference between risk components and risk drivers.	<b>04</b>
(c) What is Risk Management? Explain RMMM plan.	<b>07</b>
<b>Q.5</b> (a) Explain Scheduling with Time line chart.	<b>03</b>
(b) Prepare DFD for Library Management System.	<b>04</b>
(c) What is Software Quality Assurance? Explain various factors that affect Software Quality	<b>07</b>
<b>OR</b>	
<b>Q.5</b> (a) What are the steps in software Project Planning? What is effort estimation?	<b>03</b>
(b) Prepare DFD for Employee Attendance System	<b>04</b>
(c) What do you mean by debugging? Explain various debugging approaches.	<b>07</b>

\*\*\*\*\*