

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

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| 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 |
