

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA – SEMESTER – 5 • EXAMINATION – SUMMER 2018

Subject Code: 2650001

Date: 30-Apr-2018

Subject Name: Software Engineering (SE)

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 followings: **14**
- i) Software engineering
 - ii) Framework
 - iii) Stakeholder
 - iv) Characteristics of the software
 - v) Software process
 - vi) Umbrella activities
 - vii) Work breakdown structure

- Q.2 (a)** Explain Agile Development in detail. **07**
- (b)** What is prototype? Under what circumstances is it beneficial to construct a prototype? Does construction of a prototype always increase the overall cost of software development? **07**

OR

- (b)** Explain why the spiral life cycle model is considered to be a meta model. **07**

- Q.3 (a)** List and explain the requirement engineering task. **07**
- (b)** Prepare a scenario and draw use case diagram of ATM. **07**

OR

- Q.3 (a)** What is SRS? Explain the need of SRS and List the five desirable characteristics of good SRS document. **07**
- (b)** Prepare a scenario and draw use case diagram of issue a book of a library management system. **07**

- Q.4 (a)** What do you mean by the terms cohesion and coupling in the context of software design? How are these concepts useful in arriving at a good design of a system? **07**
- (b)** Explain the architectural styles and pattern in detail. **07**

OR

- Q.4 (a)** List and explain the design concepts in detail. **07**
- (b)** What is a component? Explain about designing class-based components. **07**

- Q.5 (a)** Explain the golden rules in user interface design. **07**
- (b)** Explain acceptance testing and beta testing. **07**

OR

- Q.5 (a)** What is design in the context of web engineering? Explain the WebE design pyramid. **07**
- (b)** What is the Management spectrum in term of the people, the product, the process, and the project? **07**
