Seat No.: _____ Enrolment No.____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (OLD) - EXAMINATION – SUMMER 2018

Subject Code:160701 Date:10/05/2018

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.

(ii) List SOA related activities.

(a) Describe four Ps for Project Management and explain any three in detail. **Q.1** 07 **(b)** Discuss umbrella activities and its role in software development life cycle. 07 **Q.2** Explain DFD with symbols used and draw context diagram and DFD for Air **07** (a) line reservation system. Define Testing. What is the need of it? Explain various levels of software **(b)** 07 testing. OR (b) (i) Compare the relative advantages of function oriented and object oriented 04 approaches to software design. (ii) List the characteristics of a good quality SRS. 03 **Q.3** (a) Explain E-R with symbols used and draw E-R diagram for Hospital Management 07 System. **(b)** Explain five levels of SEI-CMM. **07** OR 0.3 (a) Write and explain possible reasons for project failure. 07 **(b)** Explain the role of data dictionary in analysis and design. **07** What is activity diagram and swim-lane diagram? Draw activity diagram for **07 Q.4** (a) Billing Counter of a shopping mall. Write a Short note on Risk Management. 07 **(b)** Explain in detail the design issues while designing User Interface. 0.4 07 (a) What is Cyclomatic Complexity? Define steps to find cyclomatic complexity using **(b)** 07 flow graph. Write a short note on ReEngineering. **07 Q.5** (a) **(b)** Write Short note on COCOMO model. 07 OR Q.5 Write a short note on Reverse Engineering. 07 (a) (i) Explain the difference between coupling and cohesion. 04

03