

# C. U. SHAH UNIVERSITY

## Winter Examination-2019

**Subject Name: Software Engineering**

**Subject Code: 4TE05SWE1**

**Branch: B.Tech (CE)**

**Semester: 5**

**Date: 27/11/2019**

**Time: 10:30 To 01:30**

**Marks: 70**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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**Q-1 Attempt the following questions: (14)**

- a) \_\_\_\_\_ is a collection of software engineering work tasks, milestones, and deliverable that must be accomplished to complete a particular project.
- b) In function point analysis, value adjustment factors used to rate the system are \_\_\_\_\_  
A) 10 B) 14 C) 20 D) 12
- c) Which one is not a risk management activity?  
A) Risk identification B) Risk generation  
C) Risk Monitoring D) Risk Mitigation
- d) Define: Software Process
- e) What are the merits of incremental model?
- f) What are the benefits of prototyping?
- g) What is ERD?
- h) What is a cohesive module?
- i) What is equivalence partitioning?
- j) What is meant by unit testing?
- k) List out the task regions in the Spiral model.
- l) What is the use of CMM?
- m) Define: Data dictionary
- n) Distinguish between alpha and beta testing.

**Attempt any four questions from Q-2 to Q-8**

**Q-2 Attempt all questions (14)**

- a) Explain Waterfall process model. (7)
- b) Explain Requirement Engineering Tasks. (7)

**Q-3 Attempt all questions (14)**

- a) Explain COCOMO model for project estimation. (5)
- b) List the different Agile Process Model and Explain any one with suitable example. (5)
- c) Explain Software Engineering as a Layered Technology. (4)



- Q-4** Attempt all questions (14)
- a) What is architectural design? Enlist different style and patterns of architecture. (5)
  - b) Explain Formal Technical Review. (5)
  - c) What is the importance of SQA? Explain the SQA activities. (4)
- Q-5** Attempt all questions (14)
- a) What is Object Oriented Design of a system? Draw the Use case diagram and Class diagram for Library Management system. (7)
  - b) Explain various coding standard. (7)
- Q-6** Attempt all questions (14)
- a) Write short note on W5HH Principle. (7)
  - b) Explain Integration testing. (7)
- Q-7** Attempt all questions (14)
- a) Compare Coupling and Cohesion. Explain different types of Coupling and its effects on software modules. (7)
  - b) What is User Interface? Explain the design rules for UI. (7)
- Q-8** Attempt all questions (14)
- a) Compare Prototype and RAD Process Model. (5)
  - b) Write short notes on Reverse Engineering. (5)
  - c) Explain Software as a Service. (4)

