

SVKM'S NMIMS

MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT ENGINEERING /
SCHOOL OF TECHNOLOGY MANAGEMENT ENGINEERING

Program MBA.Tech (COMPUTER)

Year: II / Semester: IV

Academic Year: 2018-2019

Subject: Software Engineering

Marks: 70

Date : 14 June 2019

Time: 2.00 pm to 5.00 pm

Duration: 3 (hrs)

No. of Pages: 2

Re-Examination (2017-18 / 2018-19)

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover of the Answer Book, which is provided for their use.

- 1) Question No. 01 is compulsory.
- 2) Out of remaining questions, attempt any 04 questions.
- 3) **In all 05 questions to be attempted.**
- 4) All questions carry equal marks.
- 5) **Answer to each new question to be started on a fresh page.**
- 6) **Figures in brackets on the right hand side indicate full marks.**
- 7) Assume suitable data if necessary.



1. (a) (i) Explain in details about software Engineering. What should be steps taken under the software development of life cycle (SDLC)? (4)
(ii) In software engineering explain golden rules for the User Interface Design. (3)
- (b) (i) Explain Spiral Model in detail and under what circumstances is it beneficial. (4)
(ii) Explain in details about software quality and technique for improving software quality. (3)
2. (a) Narrate the importance of software requirements specification (SRS). Differentiate between functional and non-functional requirements. With appropriate block diagram explain the requirement engineering process. (7)
- (b) Explain in details about agile principles and define scrum in Agile process model of software Engineering. (7)
3. (a) Design and draw context or level0 and level1 data flow diagram for **Food Ordering System** with proper explanation (7)
- (b) Explain in details about Testing Principles with examples. (7)

4. (a) What is Software Architecture? List the system structuring styles with suitable diagram. (7)
- (b) Assume that the size of an organic type software product has been estimated to be 32,000 lines of source code. Assume that the average salary of software engineers be Rs. 15,000/- per month. Determine the effort required to develop the software product and the nominal development time. (7)
5. (a) Explain in details about unified process model with each phase of explanation. (7)
- (b) Explain in details about system testing and its type related to quality software engineering. (7)
6. (a) How CQCOMO Model work for the cost estimation? Explain in detail. (7)
- (b) Explain in details about software configuration management cycle with design diagram of each element with explanation. (7)
7. Write short note on (any two) (14)
- (i) Incremental and prototype Model
 - (ii) Crystal framework in Agile
 - (iii) Cohesion and coupling
 - (iv) McCall's Software Quality Factors
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