

SVKM's NMIMS
MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING

Programme: B. Tech (COMP)
Batch: 2013-2014

Year: III Semester: V

Academic Year: 2014-2015

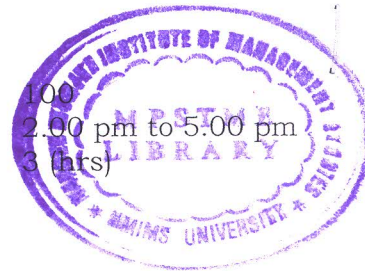
Subject: **Software Engineering**

Date: 04/12/2014

Marks: 100

Time: 2.00 pm to 5.00 pm

Durations: 3 (hrs)



Re-Examination

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.

NB:

1. Question No.1 is compulsory. Out of remaining questions, attempt any 4 .
2. In all , 5 questions to be attempted.
3. Answers to each new question to be started on fresh page.
4. Figure to the right indicate full marks.

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|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Q.1 | a) Why is software engineering important? | 5 |
| | b) Explain White Box and Black Box Testing | 5 |
| | c) Compare RAD Model and Spiral Model. | 5 |
| | d) Explain W5HH principles. | 5 |
| Q2. | a) How analysis model is translated into design model? Explain with diagram. | 10 |
| | b) Why do we use Agile process models? Explain any two Agile process model. | 10 |
| Q3. | a) Use COCOMO- II model to estimate the effort required to build software for Simple Application that produces 12 screens, 10 reports, and will require approximately 80 software components. Assume average complexity and average developer/ environment maturity for which productivity can be assumed as 13. Complexity weight for each screen is 2 and for each Report is 5. All components are difficult hence for each component complexity weight is assumed as 10. | 10 |
| | b) What are functional and non-functional requirements for ATM of any bank ? | 10 |
| Q4. | a) What are the golden rules for User Interface Design? | 10 |
| | b) Summarize the testing strategies for a Software. | 10 |
| Q5. | a) Explain Size oriented and Function oriented metrics for software. | 10 |
| | b) What is meant by software quality assurance? Mention the goals of software quality group | 10 |
| Q6. | a) What are different categories of software? state example of each category. | 10 |
| | b) Design Screen Layouts to enter data required to generate Student Identity Card with Image. | 10 |
| Q7. | Write detailed notes on any two of the following: | 20 |
| | a) CMMI | |
| | b) Software Configuration Management | |
| | c) Software Architectural Styles | |
| | d) Reengineering | |

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