

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

Programme: MBA Tech (Computer)

Year: II

Semester: IV

**Academic Year: 2015-16**

Batch: 2015-16

Subject: Software Engineering

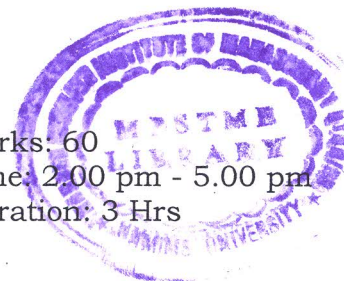
Date: 05 July 2016

**Re-Examination**

Marks: 60

Time: 2.00 pm - 5.00 pm

Duration: 3 Hrs



Instruction: 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.
- 2) Out of remaining questions, attempt any \_\_4\_\_ questions.
- 3) In all \_\_5\_\_ 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) State and Discuss Golden Rules for user interface design.	[6]
	(b) Why testing is important? Explain black-box and white-box testing in detail.	[6]
2	(a) Explain different notations used in data flow diagram. Construct context level DFD, Level-I and level II for a library management system, which keeps record of issue and return of books and manages fine for late return of books. It also generates reminders if a person does not return a book. Student's queries are also handled for availability of books.	[7]
	(b) Explain different categories of software with example.	[5]
3	(a) Draw Extreme Programming activities diagram and list framework activities of XP.	[6]
	(b) List software development process models. Compare and contrast Waterfall and Spiral model.	[6]
4	(a) Explain SQA activities	[6]

	(b) Explain all requirement engineering tasks.	[6]
5	(a) Define software quality . Explain McCall's triangle of quality attributes. (b) Explain reengineering and reverse engineering.	[6] [6]
6	(a) Explain Alpha and Beta testing. (b) Consider a C-like function for bubble sorting given below <pre> 0. { 1. i = 1; 2. while (i &lt;= n) { 3. j = i; 4. while (j &lt;= i) { 5. if (A[i] &lt; A[j]) 6. swap(A[i], A[j]); 7. j = j + 1; } 8. i = i + 1; } 9. } </pre> <p>Draw a flow graph of the above code. Find the cyclomatic complexity and all independent paths.</p>	[5] [7]
7	Write short notes on <b>any three</b> : (a) COCOMO II model (b) Incremental Process model (c) CMMI and its levels (d) Software configuration management (e) Unit testing	[4] [4] [4] [4] [4]