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

Marks: 60
Time: 2.00 pm - 5.00 pm
Duration: 3 Hrs

Date: 05 July 2016

Re-Examination

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
	0. {
	1. i = 1;
	2. while (i <= n) {
	3. j = i;
	4. while (j <= i) {
	5. if (A[i] < A[j])
	6. swap(A[i], A[j]);
	7. j = j + 1; }
	8. i = i + 1; }
	9. }
	Draw a flow graph of the above code.
	Find the cyclomatic complexity and all independent paths.
		[5]
		
		[7]

7	Write short notes on **any three** : (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]