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

Programme: MBA Tech (COMPUTER) Year: II Semester: IV

Academic Year: 2016-2017

Subject: Software Engineering

Date: 15 May 2017

Marks: 70
Time: 2.00 pm to 5.00 pm
Durations: 3 (hrs)
No. of pages: 2

Final-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.

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

Q.1 a. Define the following (any 3) (07)
i. Software Engineering ii. Baseline
iii. Verification iv. Validation

b. Perform the requirements workflow for a library management system with respect to a rapid application model. (07)

Q.2 a. Differentiate between generic and customized software products. Also give a brief note on legacy system. (07)

b. Give key characteristics of agile models. How is extreme programming an important tool in software engineering discipline? Explain. (07)

Q.3 a. Under what different situations are Cost Estimation Models and COCOMO Models used? Give a brief description of COCOMO-II model. (07)

b. Discuss the general format of a SRS document and discuss its main components in detail. (07)

Q.4 a. Discuss McCall's quality Factors and state their significance in the context of software engineering. (07)

b. What is static product metrics? Describe static product metrics that have used for quality assessment. (07)

Q.5 a. Consider the program given below (07)

```
void main()
{
int i,j,k;
readln (i,j,k);
if( (i < j) || ( i > k) )
{
writeln("then part");
if (j < k)
writeln ("j less then k");
```

```
else writeln ( " j not less then k");
}
else writeln( "else Part"); }
```

(i) Draw the flow graph.
(ii) Determine the cyclomatic complexity.
(iii) Arrive at all the independent paths.

b. Write short notes on client server model, layered mode. (07)

Q.6 a. What is data-flow model? With an example show the notations used in data flow model. (07)

b. Explain with illustration: i. Integration testing, ii. Release testing. (07)

Q.7 a. Write a Note on following (Any 2) (7x2)
i. SCM
ii. User Interface design Rules
iii. Role of software and Software Myths