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

Programme : B. Tech (COMPUTER) Year : III Semester : V
Batch : 2014-2015/ 2015-2016
Academic Year : **2016-2017**

Subject : Software Engineering

Date : 01 December 2016

Marks : 60
Time : 2.00 pm to 5.00 pm
Duration : 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 the use.

NB:

1. **Question 1 is compulsory.**
2. **Attempt any four out of remaining 6 questions.**
3. **In all 5 question to be attempted.**
4. **All questions carry equal marks.**
5. **Answer to each new question should be started on a fresh page.**
6. **Figure in brackets indicate full marks.**

Q.1 a) Calculate the function point for online railway ticket reservation system. Necessary assumptions required for the calculation of FP . [6]
b) The incremental process models considered by many to be the best approach to software development in a modern context? Do you agree on this? Justify. [6]

Q.2 a) Construct level 0, level 1 and Level 2 DFD for online railway ticket reservation system. [6]
b) Describe the three key assumptions regarding software projects that every agile software process must address. Explain refactoring, Spike solutions and JAD in Agile software process. [6]

Q.3 a) Why architecture is important? What is partitioning the architecture? Explain with an example. [6]
b) Design Control Flow Diagram for online railway ticket reservation system. [6]

Q.4 a) List and explain user interface design models. [6]
b) What are stubs and drivers in testing? Differentiate between them. [6]

Q5 a) Design unit testing environment (Test case) for online railway ticket reservation system. [6]
b) Discuss the Basis path testing. Calculate the cyclomatic complexity by considering any example. [6]

Q6 a) Briefly explain the role of SQA team. Justify the term SQA activities Pay Off. [6]
b) What is software quality? Explain McCalls Triangle of quality attributes. [6]

Q.7 Write short notes on the following:- [12]
a)W5HH principles b) Software configuration Management
c) Reengineering and Reverse Engineering
