**PVP 14**

Code: CS7T5A

**IV B.Tech - I Semester – Regular Examinations – October 2017**

# SOFTWARE ENGINEERING
## (COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours Max. Marks: 70

PART – A

Answer ***all*** the questions. All questions carry equal marks

11 x 2 = 22 M

1. a) What is the prime objective of software engineering?
   b) Define software process. State the important features of a process.
   c) What do you meant by use case?
   d) What are different Requirements?
   e) Enumerate different data flow architectures.
   f) How do you describe software interface?
   g) Distinguish between verification and validation.
   h) Write short notes on equivalence partitioning.
   i) Write the types of system tests.
   j) What is Quality?
   k) Define software risks.

## PART – B

Answer any ***THREE*** questions. All questions carry equal marks. 3 x 16 = 48 M

2. a) Explain iterative waterfall for software life cycle and various activities in each phase. 8 M

   b) Explain spiral model for software life cycle and various activities in each phase. 8 M

3. Explain the ways and means for collecting the software requirements and how are they organized and represented? 16 M

4. a) Explain about the various design concepts considered during design. 8 M

   b) Explain data architectural and procedural design for a software. 8 M

5. a) Discuss the differences between black box and white box testing models. 8 M

   b) What do you mean by system testing? Explain in detail. 8 M

6. a) What are the different quality parameters to ensure quality of the software? 10 M

   b) Identify various Risks involved in software. 6 M