Total number of printed pages – 2

B. Tech

PCIT 4402

Seventh Semester Examination – 2013

SOFTWARE PROJECT MANAGEMENT

BRANCH : IT

QUESTION CODE : C-274

Full Marks – 70

Time : 3 Hours

Answer Question No. **1** which is compulsory and any **five** from the rest.
The figures in the right-hand margin indicate marks.

1. Answer the following questions :   2×10

    (a) What is a project ?

    (b) What is conventional software management ?

    (c) List the two stage of life-cycle.

    (d) What is a dummy activity in PERT and CPM network ?

    (e) What is conventional software economics ?

    (f) Name the different UML diagrams.

    (g) Define Architecture framework.

    (h) What is LOC ?

    (i) Differentiate between PERT and CPM.

    (j) What is Putnam's work ?

2. (a) Identify main differences between managing the development of a
         conventional project and a outsourced project.   5

    (b) Explain the major activities carried out by a software project manager and
         the order in which these are carried out.   5

3. (a) Explain why discounted cash flow techniques provide better criteria for project
         selection than net profit or return on investment.   5

    (b) How ROI can be achieved across a line of business ?   5

P.T.O.

4. What are the major shortcomings of the waterfall model ? How have those shortcomings been overcome by the agile model ? 10

5. (a) Using the COCOMO II methodology estimate the Effort required for building an Automated Teller Machine Software for a bank. The ATM produces 12 simple screens, 12 simple reports and needs 80 difficult 3 GL software components. Assume nominal values for

    (i) Developer's experience/quality

    (ii) Environment maturity/capability and assume a value of 20 for % reuse. 5

  (b) Explain the six generic functions to be included any Automated Estimation Tool used in the field of software development. 5

6. (a) How the risks involved in a software project can be identified ? 5

  (b) Discuss various types of basic size-oriented metrics and function-oriented metrics. Also explain how one can extend the basic function-point metrics in situations where the basic one proves to be inadequate. 5

7. (a) Explain timeline chart and project table in the context of project scheduling. 5

  (b) Explain about the Improving software economics. 5

8. Write short notes on any **two** of the following : 5×2

  (a) Software safety

  (b) Software Reliability

  (c) ISO 9000 Quality Standards.

  (d) SEI CMM.