2016

MCA

MCA 4.2

SOFTWARE ENGINEERING

Full Marks : 75
Time : 3 Hrs

Figures in the right hand margin indicate full marks for the question

1. Answer the following questions: 1X5=5
   i. Define software.
   ii. What is the difference between program and software?
   iii. What is data dictionary?
   iv. Define Use Case diagram.
   v. What is software sizing?
2. Answer the following questions: 2X10=20
   i. What is meant by unit testing?
   ii. What is software portability?
   iii. Explain Build and Fix model.
   iv. What is design?
   v. What is cardinality?
   vi. Write the reason for failure of waterfall model.
   vii. Define module cohesion.
   viii. What is software maintenance?
   ix. What are CASE tools?
   x. Define software metrics.

3. Answer any four questions: 5X4=20

i. Explain lines of code in cost estimation process.
ii. Describe Prototyping model.
iii. Explain ISO 9001:2000.
iv. Describe evolutionary development model.
v. Explain entity relationship modeling, draw ER diagram of a banking system. 2+3=5
vi. Describe software characteristics.

4. Answer any three questions from the following: 10X3=30

i. Describe COCOMO. Explain the Basic and Intermediate model.
ii. Describe Spiral model.
iii. Write how the various notations used in DFDs are represented.
iv. Explain the different phases involved in waterfall model of SDLC.
v. Draw the DFD for the student admission and examination system. Make your own assumption about the system. Elaborate the DFD upto level 2 for registration process, examination process and login process.

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