T.E-SEM-VI-OLD-COMPUTER ENGG - OOSE

12/05/2015

QP Code : 4320

(OLD COURSE)

(3 Hours) [Total Marks: 100

N.B.: (1) Question no. 1 is compulsory.
(2) Attempt any four questions out of remaining six questions.
(3) Assume suitable data wherever necessary.

1. Draw use-case and class diagram for an engineering college information system. [20]

   A college has departments and employees. College employees are of three types: professors, technical assistants and others. Students pay their fees in accounts department and enroll into the various departments in the college. Each student has roll number. For each department specific rooms are assigned, some of them are used for labs while others for taking classes. Each lab has technical assistant assigned to it. Each lab has equipments required for conducting practical. Professors teach the students of the department. Each professor teaches only one subject. College exam department conducts exams, prepares results and distributes results to students.

2. (a) Explain COCOMO model used for cost estimation. [10]

   (b) Explain spiral model used for software development [10]

3. (a) Define cohesion and coupling. Explain different types of cohesion and coupling. [10]

   (b) Explain version control and change control with example. [10]

4. (a) Explain different testing strategies. [10]

   (b) Explain reverse and re-engineering. [10]

5. (a) What is requirement? Explain different types of requirement. [10]

   (b) Explain sequence diagram and its elements with example. [10]

6. (a) Differentiate between static and dynamic modeling in detail. [10]

   (b) What are attributes of software quality? Explain. [10]

7. Write short notes on (any two) [20]

   (i) Task network and timeline chart

   (ii) Types of maintenance

   (iii) Formal technical review

   (iv) Agile process