Insem Feb 2016

Total No. of Questions:6]

SEAT No. :

P155

APR. -16/BE/Insem. - 79

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## B.E. (Computer Engineering) SOFTWARE DESIGN METHODOLOGIES AND TESTING

(2012 Course) (Semester - II) (410449)

Time: 1Hour]

[Max. Marks:30

Instructions to the candidates:

- 1) Answer any 3 questions.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data if necessary.
- Q1) a) Explain COMET and phases of COMET.

[5]

b) Draw a state machine diagram for coffee vending machine.

[5]

OR

- Q2) a) What is extends and include stereotype in use case diagram. Explain with an appropriate example. [5]
  - b) Draw a sequence diagram for Online shopping system.

[5]

- Q3) a) Explain client server software architecture. Describe multiple Client/
  Multiple Service Architectural pattern with example. [5]
  - b) Describe location transparency and platform transparency with reference to SOA. [5]

OR

- Q4) a) Explain Port, provided interface and required interface with an example.[6]
  - b) Explain the important characteristics of real time software architecture.[4]
- Q5) a) Explain characteristics, consequences and application of Iterator and Observer pattern.[6]
  - b) Describe Singleton pattern and its significance with an example. [4]

OR

Q6) Write short notes (Any two):

[10]

- a) Factory Pattern
- b) Proxy Pattern
- c) Web services