Code: 9A05801

**R09** 

## B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations, July 2013 **DESIGN PATTERNS**

(Common to CSE, IT and CSSE)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

- 1 (a) What is an interaction diagram? What is its role in design of the particular model?
  - (b) List and explain the various constructors and destructors present in list class.
- 2 (a) Explain with a suitable example, how to find the appropriate objects in the particular pattern.
  - (b) What is delegation? Explain it in detail.
- 3 (a) Differentiate between compositor and composition.
  - (b) Give brief description about the transparent enclosure.
- 4 (a) Draw and explain the structure of a abstract factory.
  - (b) Draw and explain the interaction diagram that shows the relationship between builder and director.
- 5 (a) Explain the various implementation issues of the bride pattern.
  - (b) Write short notes on applicability and collaborations of an adapter design pattern.
- 6 (a) What is the motivation for flyweight pattern? Explain it in detail.
  - (b) Give brief description about the interpreter design pattern.
- 7 (a) List and explain the various constructors that are supported by iterator pattern.
  - (b) Draw and explain the class diagram for FrontDialogDirector abstraction.
- 8 Write short notes on the following:
  - (a) Consequence of state pattern.
  - (b) Applicability of template method.
  - (c) Structure of a visitor pattern.

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