Code No: NR-46

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD MCA IV Semester Supplementary Examinations January 2010 **DESIGN PATTERNS**

Time: 3 hours Max.Marks:60

Answer any FIVE questions All questions carry equal marks

- 1.a) Explain about the object diagram with an example.
 - b) Differentiate between sequence and collaboration diagram.
- 2. a) Describe the essential elements of Design patterns?
 - b) Explain the design pattern in Smalltalk MVC?
- 3.a) Explain the Compositor and composition class relationships with an example
- b) Explain Window and Window Imp class with an example.
- 4. a) Explain about the prototype patterns with an example?
- b) Explain the applications and consequences of Abstract factory method?

 a) Explain the Motivation and structure of D

 b) Design
- 5. a) Explain the Motivation and structure of Decorator pattern?
 - b) Design a drawing editor application by using Adapter pattern. Explain.
- 6. Write a sample code of command pattern?
- 7. Describe about the state pattern?

NNN

- 8. a)Explain the consequences and implementation issues of template method
 - b) Explain the benefits and draw backs of strategy method
