

**R09**

Code No: 09A70509

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech IV Year I Semester Examinations, November - 2013**

**Design Patterns**

**(Computer Science and Engineering)**

**Time: 3 Hours**

**Max. Marks: 75**

**Answer any Five Questions**

**All Questions Carry Equal Marks**

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- 1.a) Describe the catalog of design patterns.
- b) Discuss how to use a design pattern for an application. [15]
2. What are the design problems while designing a document editor? Discuss the role of design patterns in solving these design problems. [15]
3. What are the creational patterns? Discuss the structure, implementation and source code for any three creational patterns. [15]
- 4.a) Distinguish between creational patterns and structural patterns.
- b) Write the structure and implementation and applicability of Bridge pattern. [15]
- 5.a) Distinguish between decorator and façade patterns.
- b) Write the implementation and source code for proxy pattern. [15]
6. Explain clearly with suitable examples how chain of responsibility command and interpreter patterns can be used. [15]
7. Discuss the consonances, structure and implementation of memento, observer and Template method patterns. [15]
8. Write short notes on the following:
  - a) Fly weight pattern
  - b) Strategy pattern
  - c) Design patterns in small talk MVC. [15]

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