

Code: 9F00505c

MCA V Semester Supplementary Examinations May 2016

DESIGN PATTERNS

(For 2010, 2011, 2012 and 2013 admitted batches only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks

- 1 (a) What is a design pattern? Why do we need it? Explain it in detail.
(b) Give brief description about the organization of design patterns.
- 2 (a) What are the factors that should support the Lexi's internal representation? Also mention their constraints.
(b) Write and explain the basic glyph interface.
- 3 (a) Explain how to provide an interface for creating families of related objects without specifying their concrete classes.
(b) Who are the different participants present in factory method and draw the structure of the same?
- 4 (a) In what way a structural pattern differs from creational patterns? Explain.
(b) Write about the consequences and implementation issues of a composite design pattern.
- 5 (a) Explain how to add the additional responsibilities to an object dynamically.
(b) List the situations where we are going to use the façade pattern.
- 6 Discuss in detail about the role of chain of responsibility in design of patterns.
- 7 (a) Draw and explain the typical structure of a mediator pattern. Also mention their consequences.
(b) Give brief description about the memento pattern.
- 8 Discuss about the following:
 - (a) Implementation issues of template method.
 - (b) Applicability of strategy pattern.
 - (c) Collaborations of a state pattern.
