Code: 9F00505c

MCA V Semester Regular & Supplementary Examinations November/December 2016
DESIGN PATTERNS
(For 2011, 2012, 2013 & 2014 admitted batches only)

Time: 3 hours   Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks
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1 (a) Justify the statement designing reusable object oriented software is harder.
   (b) List and explain the reasons for redesign of the particular pattern.

2 (a) Explain the role of document structure in design pattern.
   (b) With the help of an example, explain the relationship between MonoGlyph and its classes.

3 (a) Which pattern lets a class defer instantiation to subclasses? What is the motivation for that? Explain.
   (b) Give brief description about the benefits of prototype pattern.

4   What pattern is used to convert the interface of class into another interface? Discuss the applicability, structure, participants, collaborations, consequences and implementation issues of the same.

5 (a) When can we apply the Flyweight pattern? Explain in detail.
   (b) Why we need to provide the uniform interface to a set of interfaces in a subsystem? Explain.

6 (a) Describe the motivation for chain of responsibilities pattern.
   (b) What is meant by traction? Which pattern is used to perform transaction? What are its consequences and implementation issues? Explain.

7   Write short notes on the following:
   (a) Participants of memeto pattern.
   (b) Collaborations of observer pattern.
   (c) Applicability of mediator pattern.

8 (a) Describe the role of state pattern in design of a particular pattern.
   (b) Write about the importance of template method.

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