15IS72

USN

Seventh Semester B.E. Degree Examination, Aug./Sept. 2020
Software Architecture and Design Patterns

Time: 3 hrs.   Max. Marks: 80

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1	a.	Enlist the four essential elements of pattern.	(08 Marks)
	b.	Describe with neat sketch Design pattern in smalltalk MVC.	(08 Marks)

OR

2	a.	How to select a Design pattern?	(08 Marks)
	b.	Explain how to use a Design pattern.	(08 Marks)

Module-2

3	a.	Explain the Business processes of the library system.	(08 Marks)
	b.	Describe with a diagram the library system.	(08 Marks)

OR

4	a.	How do Business Rules Relate to use cases?	(08 Marks)
	b.	Explain use case Renew Books.	(08 Marks)

Module-3

5	a.	Describe with neat diagram the object adapter case.	(08 Marks)
	b.	With neat diagram, explain :	
		i) A class adapter uses multiple inheritance	
		ii) An object adapter relies on object composition.	(08 Marks)

OR

6	a.	Explain composite pattern.	(08 Marks)
	b.	Describe Textview object with Border Decorator and Scroll Decorator.	(08 Marks)

Module-4

7	a.	Explain model view controller architecture.	(08 Marks)
	b.	What are benefits of the MVC pattern?	(08 Marks)

OR

8	a.	With neat diagram describe sequence of operation for drawing a line.	(08 Marks)
	b.	Illustrate the implementation of UNDO operation.	(08 Marks)

Module-5

9	a.	Explain basic architecture of Client/Server systems.	(08 Marks)
	b.	How Servelets and HTML co-operate serve web pages?	(08 Marks)

OR

10	a.	Explain state transition diagram for renewing books.	(08 Marks)
	b.	Analyze the Directory structure for the servelets.	(08 Marks)

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