

## SAPTHAGIRI COLLEGE OF ENGINEERING Department of Information Science and Engineering Internal Assessment –I

Subject: Software Architecture & Design patterns

Semester/Section: VII 'A' & 'B'

Duration: 1.5 hours

Sub Code: 15IS72

Max Marks: 30 Date: 22-09-2018

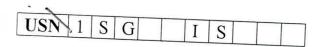
Note: Answer any two full questions, choosing one from each module

Module-1  efine and describe design pattern in detail  splain at least ten different types of design pattern.  splain the key concepts of object oriented design?  OR	6M 5M	L1,L2	CO's
efine and describe design pattern in detail splain at least ten different types of design pattern. splain the key concepts of object oriented design?		L1,L2	
explain at least ten different types of design pattern.  Explain the key concepts of object oriented design?		L1,L2	
aplain the key concepts of object oriented design?	5M		CO1
OR		L2	CO1
OR	4M	L2	CO1
plain how docing the state of t		1	
plain how design pattern solve design problem?	10M	L1,L2	CO1
plain the different approaches of selecting a pattern.	5M	L1,L2	COI
Module-2	5111	C1,C2	COI
fine use case analysis. Explain the use case to register new member,			
issuing books and place a hold on books of library system.	8M	L1,L2	CO2
plain the sequence diagram for adding books and renewing books of			
rary system.	7M	L2	CO2
OR			
strate the relationship between the software classes with a neat diagram	5M	1.2	CO2
and the diagram	100000000000000000000000000000000000000		CO2
a	OR trate the relationship between the software classes with a neat diagram	OR  Trate the relationship between the software classes with a neat diagram 5M  ain the Class diagram for library, book, and catalog class.	OR  trate the relationship between the software classes with a neat diagram 5M 1.2

CO1: To Learn How to add functionality to designs while minimizing complexity.

CO2: To Understand what code qualities are required to maintain to keep code flexible.

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057



## SAPTHAGIRI COLLEGE OF ENGINEERING Department of Information Science and Engineering Internal Assessment –II

Subject:Software Architecture & Design patterns

Semester/Section: VII 'A' & 'B'

Duration: 1.5 hours

Sub Code: 15IS72

Max Marks: 30

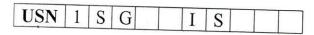
Date: 23-10-2018 Note: Answer any two full questions, choosing one from each module

Question No.	Questions		1	
110.	Questions	Marks	BLT	CO
J .	Module-3			
1 a.	Explain the Bridge design pattern in detail.			
<b>b.</b>	Describe the Structure, Consequences and Implementation of Composite	10M	L1,L2	CO
	design pattern.	5M	L2	CO
2 a.	Explain d. A. II. A. III. A. I			
2 a.	Explain the Applicability, Structure and Participants of Decorator design pattern.	5M	L1,L2	CO3
b.	Explain with example Façade design pattern.	10) (		
	Module-4	10M	L1,L2	CO3
3 a.				
	Explain Flyweight design pattern with structure, collaborations and Consequences.	7M	L1,L2	CO3
b.	Explain MVC Architecture pattern with neat diagram.	ONA		
,	OR	8M	L2	CO4
4 a.	Define System. Explain the different phases of designing a subsystem.			
b.	Draw the sequence of operations for adding a label and drawing a line	8M	L1,12	CO4
	a laber and drawing a line	7M	L2	CO4

CO3:To Understand the common design patterns.

CO4:To explore the appropriate patterns for design problems.

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## SAPTHAGIRI COLLEGE OF ENGINEERING Department of Information Science and Engineering Internal Assessment –III

Subject: Software Architecture & Design patterns

Semester/Section: VII 'A' & 'B'

Duration: 1.5 hours

Sub Code: 15IS72 Max Marks: 30

Date: 24-11-2018

Note: Answer any two full questions, choosing one from each module

Question No.	Questions	Marks	BLT	CO's
	Module-4		DET	COS
1 a.	Write the implementation code for Model class and Controller class	7		
		8M	L1,L2	CO4
<b>b.</b>	Define Command pattern. Explain Undoing operation in detail with neat		, , , , ,	
	diagram	7M	L2	CO4
	OR			
2 a.	Explain the Mechanism to Add new feature using Composite pattern.	01.6	* ^	
b.	Write a note on Pattern based solution.	9M	L2	CO4
~•	on rattern based solution.	6M	L1,L2	CO4
	Module-5			
3 a.	Explain steps involved in Java Remote Method Invocation in detail.			
b.		10M	L2	CO <sub>5</sub>
υ.	Illustrate the basic Architecture of Client/Sever system with neat diagram	5M	L2	CO5
	OR	· · · · · · · · · · · · · · · · · · ·		
	Explain State Transition diagram for i)Add book ii)issuing book			
	iii)Renewing book.	8M	L2	CO5
b.	Draw the Class diagram for Library Servlet. Explain the structure of			
<u></u>	Servlets in the web based Library system.	7M	L2	CO5

CO4: Able to apply the design principles in the design of object oriented systems.

CO5: To demonstrate an understanding of distributed objects using object oriented system.

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