ST. ANN'S COLLEGE OF ENGINEERING &TECHNOLOGY: CHIRALA

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

LECTURE SCHEDULE

Subject: SOFTWARE ARCHITECTURE AND DESIGN PATTERNS
Class : IV -I CSE-C Semester : I ACADEMIC YEAR :2019-20
Faculty : M.BABU RAO

S. No.	Date	Unit	Topic
1	10/6/2019	UNIT-I	overview of software architecture and design patterns
2	11/6/2019		**Envisioning Architecture**: the Archtitecture Business Cycle (ABC)
3	13/06/19		what is Software Architecture
4	15/06/19		Architecture patterns
5	17/06/19		reference models and architectures
6	18/06/19		Architectures and views
7	20/06/19		**Creating and Architecture :Quality Attributes**
8	22/06/19		Achieving qualities
9	24/06/19		Architectural styles and patterns
10	25/06/19		designing the Architecture
11	27/06/19		Documenting software archit ectures
12	29/06/19		Reconstructing Software Architecture.
13	1/7/2019		**unit-I-slip test**
14	2/7/2019	UNIT-II	**Analyzing Architectures** :Architecture Evaluation
15	4/7/2019		Architecture design decision making
16	6/7/2019		ATAM
17	8/7/2019		CBAM
18	9/7/2019		**Moving from One System to Many: Software Product Lines**
19	11/7/2019		Building systems from off the shelf components
20	15/07/19		software architecture in future
21	16/07/19		**unit-II-slip test**
22	18/07/19	UNIT-III	**DESIGN PATTERNS**:Pattern Description
23	20/07/19		Organizing catalogs
24	22/07/19		role in solving design problems,
25	23/07/019		Selecction and usage
26	25/07/19		**Creational Patterns :Abstract factory**
27	27/07/19		Builder
28	29/07/19		Builder
29	30/07/19		Factory method
30	1/8/2019		Prototype
31	3/8/2019		Singleton
32	5/8/2019		**revision for subjective test**
33	6/8/2019		**revision for subjective test**
34	8/8/2019		**revision for subjective test**
35	10/8/2019		**revision for subjective test**
36	13/08/19	UNIT- IV	**Structural Patte:Adapter**

37	17/08/19		Bridge
38	19/08/19		Composite
39	20/08/19		Decorator,
40	22/08/19		Façade
41	26/08/19		Flyweight
42	27/08/19		PROXY
43	29/08/19		**unit-IV-slip test**
44	31/08/19	UNIT-V	**Behavioral Patterns: Chain of responsibility**
45	3/9/2019		command
46	5/9/2019		nterpreter
47	7/9/2019		iterator, mediator
48	12/9/2019		memento
49	16/9/19		observer, state
50	17/9/19		strategy, template method
51	19/9/19		visitor
52	21/9/19		**unit-V-slip test**
53	21/9/19		**Case Studies: A-7E – A case study in utilizing architectural structures**
54	23/9/19		The World Wide Web - a case study in Interoperability
55	24/9/19		Air Traffic Control – a case study in designing for high availability
56	26/9/19		Celsius Tech – a case study in product line development
57	28/9/19		A Case Study (Designing a Document Editor):Design Problems
58	30/9/19		Document Structure, Formatting, Embellishing the User Interface
59	1/10/2019		Supporting Multiple Look-and-Feel Standards
60	3/10/2019		Supporting Multiple Window Systems
61	5/10/2019		User Operations, Spelling Checking and Hyphenation
62	7/10/2019		**revision for subjective test**
63	8/10/2019		**revision for subjective test**
64	10/10/2019		**revision for subjective test**
65	12/10/2019		**revision for subjective test**
TOTAL NUMBER OF CLASSES =65			

TEXT BOOKS:

1. Software Architecture in Practice, second edition, Len Bass, Paul Clements & Rick Kazman, Pearson Education, 2003.
2. Design Patterns, Erich Gamma, Pearson Education, 1995.

REFERENCE BOOKS:

1. Beyond Software architecture, Luke Hohmann, Addison wesley, 2003.
2. Software architecture, David M. Dikel, David Kane and James R. Wilson, Prentice Hall PTR, 2001
3. Software Design, David Budgen, second edition, Pearson education, 2003
4. Head First Design patterns, Eric Freeman & Elisabeth Freeman, O'REILLY, 2007.
5. Design Patterns in Java, Steven John Metsker & William C. Wake, Pearson education, 2006
6. J2EE Patterns, Deepak Alur, John Crupi & Dan Malks, Pearson education, 2003.

7. Design Patterns in C#, Steven John metsker, Pearson education, 2004.
8. Pattern Oriented Software Architecture, F.Buschmann & others, John Wiley & Sons.

FACULTY MEMBER **HEAD OF THE DEPARTMENT**