



# SRI BHARATHI

ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Kaikkurichi, Pudukkottai -622 303

[www.sbec.edu.in](http://www.sbec.edu.in)

## NAAC DOCUMENTS



Quality Indicator Frame Work

Criterion – 1

CURRICULAR ASPECTS

Submitted by

**IQAC**

**Internal Quality Assurance Cell**

Sri Bharathi Engineering College for Women



# SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

**Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India**

<b>Criterion 1</b>	<b>Curricular Aspects</b>	<b>100</b>
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## 1.1 Curricular Planning and Implementation(20)

**1.1.1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment**

### Table of contents

S.No	Description
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Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### PREFACE OF THE COURSE FILE

Batch : 2017-2021

Academic Year : 2019-2020 / ODD

Program : COMPUTER SCIENCE AND ENGINEERING

Year & Semester : 3<sup>rd</sup> Year / 5<sup>th</sup> Semester

Course Code : CS8592

NBA Course Code: C305

Name of the Course : OBJECT ORIENTED ANALYSIS AND DESIGN

Faculty in-charge : R.VIJAY AP/CSE

SIGNATURE OF THE FACULTY IN-CHARGE

[R.VIJAY]

  
Dr. S. THILAGAVATHI M.E., Ph.D.,  
PRINCIPAL  
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Kaikkurichi - 622 303, Pudukkottai Dt.

  
HOD / CSE

[R.VIJAY]

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PUDUKKOTTAI - 622 303



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### REVIEW OF COURSE FILE

(To be pasted on the inner side of the file-backside).(#-State Yes/No.)

S.N	Details  Date:	R-I-*	R-II-*&	R-III- *&	R-IV- *&\$	R-V- *&\$@
1.	Preface of the course file	yes				
2.	Vision, Mission, PEOs, POs, PSOs, Blooms taxonomy	yes				
3.	Subject handlers of yesteryears					
4.	Timetable/Workload of the staff – Distribution of teaching load – Roles and Responsibilities	yes				
5.	Syllabus signed by staff & HoD	yes				
6.	Lecture Schedule signed by staff & HoD	yes				
7.	Course Committee meeting circular and minutes	yes				
8.	Identification of Curricular gap and Content Beyond the syllabus	yes				
9.	Self-study topics	yes				
10.	Previous AU Question papers	yes				
11.	Unit wise Q&A and Objective type questions	yes				
12.	Unit wise course material	yes				
13.	Assignment question paper with sample answer sheets and mark entry		yes			
14.	Tutorial question paper with key and mark entry		yes			
15.	Class test/IA test Q Paper with Key, sample answer papers and mark entry		yes			
16.	IA Test- result analysis-CAP-evidence-root cause analysis.		yes			
17.	Retest –Q paper-Attendance-marks		yes			
18.	AU Web portal entry sheet		yes			
19.	Very poor performance in first two tests-action taken.-communication to parents-evidence					
20.	Absence for two tests-action taken-communication to parents-evidence.					
21.	Indiscipline of student reported, if any					
22.	Special class/coaching class/remedial class/attendance-CAP					
23.	Conduct of Seminar, Quizzes - proof					
24.	Content beyond the syllabus - proof			yes		
25.	Student feedback on faculty			yes		
26.	Course end survey					
27.	Internal Assessment sheet			yes		
28.	AU question paper with students feedback					
29.	Discrepancy of the question paper and correspondence, if any					
30.	AU result analysis-Details of arrear students.					
31.	AU grade sheet					yes
32.	CO – PO & PSO attainment sheet					yes
	Signature of Course handling faculty					
	Signature of HoD/CSE					

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**KAIKKURICHI, PUDUKKOTTAI - 622 303**

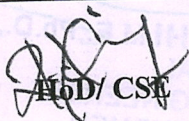
**ACADEMIC YEAR (2019 – 2020) ODD SEMESTER**  
**DEPARTMENT OF CSE & IT**  
**INDIVIDUAL STAFF WORKLOAD**

S. No	STAFF NAME	SUBJECT CODE & NAME	YEAR & DEPT	NO OF STUDENTS	NO OF HOURS	TOTAL HOURS
1.	Mr.R.Vijay	IT6701- Information Management	IV/ IT	09	6	14
		CS8592- Object Oriented Analysis and Design	III/ CSE	22	5	
		CS6711 - Security Laboratory	IV/ CSE	21	3	
2.	Ms.P.Subha	CS6703 – Grid and Cloud Computing	IV/ CSE & IT	30	5	14
		IT8501-Web Technology	III/ IT	09	5	
		CS6712 – Grid & Cloud Computing Lab	IV/ CSE	30	3	
		Job Seekers	IV/ CSE & IT	30	1	
3.	Ms.G.Bhuvanewari	CS8392-Object Oriented Programming	II/ CSE	29	6	17
		GE8151- Problem Solving and Python Programming	I/ SEC B	-	5	
		EC8563- Communication Networks Laboratory	III/ ECE	19	3	
		GE8161- Problem Solving and Python Programming Laboratory	I/ SEC A	-	3	
4.	Mrs.G.Sugapriya	CS8591- Computer Networks	III/ CSE & IT	31	5	16
		CS8494-Software Engineering	III/ IT	09	5	
		CS8381- Data Structures Laboratory	II/ CSE	29	3	
		GE8161- Problem Solving and Python Programming Laboratory	I/ SEC B	-	3	
5.	Ms.V.Yogam	EC8552- Computer Architecture and organization	III/ ECE	19	5	14
		IT8511-Web Technology Laboratory	III/ IT	09	3	
		CS8383- Object Oriented Programming Laboratory	II/ CSE	29	3	
		GE8161- Problem Solving and Python Programming Laboratory	I/ SEC B	-	3	

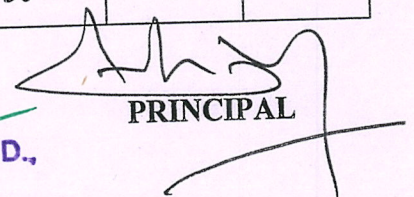
  
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S. No	STAFF NAME	SUBJECT CODE & NAME	YEAR & DEPT	NO OF STUDENTS	NO OF HOURS	TOTAL HOURS
6.	Ms.S.Jayapratha	CS8501- Theory of Computation	III/ CSE	22	5	14
		EC8381- Fundamentals of Data Structures in C Lab	II/ ECE	12	3	
		GE8161- Problem Solving and Python Programming Laboratory	I/ SEC A	-	3	
		IT6711 - Data Mining Lab	IV/ IT	09	3	
7.	Ms.G.Sasikala	CS8392- Object Oriented Programming	III/ EEE	09	5	16
		GE8151- Problem Solving and Python Programming	I/ SEC B	-	5	
		CS8383- Object Oriented Programming Laboratory	III/ EEE	09	3	
		GE8161- Problem Solving and Python Programming Laboratory	I/ SEC B	-	3	
8.	Ms.K.Priyanka	CS6003- Ad hoc and Sensor Networks	IV/ CSE & IT	30	5	16
		CS6007-Information Retrieval	IV/ CSE	21	5	
		CS8582- Object Oriented Analysis and Design Lab	III/ CSE	22	3	
		EC8563- Communication Networks Laboratory	III/ ECE	19	3	
9.	Mr.K.Swaminathan	CS6701- Cryptography and Network Security	IV/ CSE & IT	30	5	16
		EC8551- Communication Networks	III/ ECE	19	5	
		IT8511-Web Technology Laboratory	III/ IT	09	3	
		CS8581- Networks Laboratory	III/ CSE & IT	31	3	
10.	Mrs.A.Nushrath Fathima	CS8391-Data Structures	II/ CSE	29	5	16
		EC8393-Fundamentals of Data Structures In C	II/ ECE	12	5	
		CS8383- Object Oriented Programming Laboratory	II/ CSE	29	3	
		CS8581- Networks Laboratory	III/ CSE & IT	31	3	
11.	Ms.S.Mounica	IT6702 – Data Warehousing And Data Mining	IV/ IT	09	6	15
		CS8381- Data Structures Laboratory	II/ CSE	29	3	
		CS6712 – Grid & Cloud Computing Lab	IV/ CSE & IT	30	3	
		CS6711&IT6712- Security Laboratory	IV/ CSE & IT	30	3	

  
Ph.D./ CSE

  
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KAIKKURICHI, PUDUKKOTTAI – 622 303

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## COURSE PLAN

Subject code : CS8592	Branch/ Year/ Sem/ Section : BE/CSE/ III/ V
Subject Name : Object Oriented Analysis and Design	Batch: 2017-2021
Staff name : R.VIJAY	Academic Year: 2019-2020

### COURSE OBJECTIVE

- To understand the fundamentals of object modeling
- To understand and differentiate Unified Process from other approaches.
- To design with static UML diagrams.
- To design with the UML dynamic and implementation diagrams.
- To improve the software design with design patterns.
- To test the software against its requirements specification

### TEXT BOOK:

**T1:** Craig Larman , “Applying UML and Patterns: An Introduction to Object– Oriented Analysis and Design and Iterative Development”, Third Edition, Pearson Education,2005.

**T2:** Ali Bahrami –“Object Oriented Systems Development”- McGraw Hill International Edition– 1999.

### REFERENCES:

**R1:** Erich Gamma and Richard Helm, Ralph Johnson , John Vlissides , “Design patterns: Elements of Reusable Object-Oriented Software”, Addison-Wesley,1995.

**R2:** Martin Fowler , “UML Distilled: A Brief Guide to the Standard Object Modeling Language”, Third edition, Addison Wesley, 2003.

### WEB REFERENCES:

**W1:** <https://www.google.com/search?q=object+oriented+metrics>

### TEACHING METHODOLOGIES:

- BB -BLACKBOARD
- PPT -POWERPOINTPRESENTATION
- VIDEO -VIDEO

  
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CS8592

OBJECT ORIENTED ANALYSIS AND DESIGN

L T P C  
3 0 0 3

**UNIT I UNIFIED PROCESS AND USE CASE DIAGRAMS**

9

Introduction to OOAD with OO Basics- Unified Process-UML diagrams- Use Case-Case study-the Next Gen POS system, Inception- Use case Modeling - Relating Use cases -include, extend and generalization-when to use Use-cases.

**UNIT II STATIC UML DIAGRAMS**

9

Class Diagram — Elaboration – Domain Model – Finding conceptual classes and description classes – Associations – Attributes –Domain model refinement- Finding conceptual class Hierarchies –Aggregation and Composition – Relationship between sequence diagrams and use cases-when to use Class Diagrams.

**UNIT III DYNAMIC AND IMPLEMENTATION UML DIAGRAMS**

9

Dynamic Diagrams- UML interaction diagrams – System sequence diagram –Collaboration diagram-when to use Communication Diagrams – State machine diagram and Modeling-When to use State Diagrams-Activity diagram –when to use activity diagrams-Implementation Diagrams - UML package diagram - When to use package diagrams –Component and Deployment Diagrams- When to use Component and Deployment diagrams.

**UNIT IV DESIGN PATTERNS**

9

GRASP: Designing objects with responsibilities – Creator – Information expert – Low Coupling- High Cohesion- Controller Design Patterns –creational – factory method –structural –Bridge –Adapter-behavioural- Strategy-observer-Applying GoF design patterns- Mapping design to code.

**UNIT V TESTING**

9

Object Oriented Methodologies – Software Quality Assurance – Impact of object orientation on Testing- Develop Test Cases and Test Plans.

**TOTAL:45 PERIODS**

SIGNATURE OF THE FACULTY IN-CHARGE

  
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Topic No	Topic Name	Books for reference	Page No	Teaching Methodology	No of periods Required	Cumulative periods
<b>UNIT 1 UNIFIED PROCESS AND USE CASE DIAGRAMS</b>						<b>(9)</b>
1.	Introduction to OOAD with OO Basics	T1	(5-11)	BB	1	1.
2.	Unified Process –	T1	(43-52)	BB	1	2.
3.	UML diagrams	T1	(60-65)	BB	1	3.
4.	Use Case –Case study	T1	(191-194)	BB	1	4.
5.	The Next Gen POS system	R1	(115-119)	BB	1	5.
6.	Inception -Use case Modeling	T1	(988-990)	BB	1	6.
7.	Relating Use cases	T1	(990-995)	BB	1	7.
8.	Include, extend and generalization	T1	(995-1002)	BB	1	8.
9.	When to use Use-cases	T1	(151-167)	BB	1	9.
<b>LEARNING OUTCOME:</b>						
<b>At the end of unit, the students will be able to</b>						
<ul style="list-style-type: none"> <li>• Know the basics of OOAD</li> <li>• Understand the basic concepts of UML diagrams, Next Gen POS system, use case modeling.</li> </ul>						
<b>UNIT II STATIC UML DIAGRAMS</b>						<b>(9)</b>
10.	Class Diagram	T1	(589-594)	BB	1	10.
11.	Elaboration – Domain Model	T1	(589-603)	BB	1	11.
12.	Associations – Attributes	R1	(165-178)	BB	1	12.
13.	Domain model refinement	T1	(624-631)	BB	1	13.
14.	Finding conceptual class Hierarchies	T1	(642-659)	BB	1	14.
15.	Aggregation	T1	(684-693)	BB	1	15.
16.	Composition	T1	(709-711)	BB	1	16.



17.	Relationship between sequence diagrams and use cases	T1	(714-716)	BB	1	17.
18.	When to use Class Diagrams	T1	(732-736)	BB	1	18.

**LEARNING OUTCOME:**

**At the end of unit, the students will be able to**

- Understand the concept of class diagram, domain model
- Gain knowledge about associations, attributes.
- Understand the concept of aggregation, composition.

**UNIT III DYNAMIC AND IMPLEMENTATION UML DIAGRAMS (9)**

19.	Dynamic Diagrams – UML interaction diagrams	T1	(65-68)	BB	1	19.
20.	System sequence diagram – Collaboration diagram	T1	(170-180)	BB	1	20.
21.	When to use Communication Diagrams	T1	(359-361)	BB	1	21.
22.	State machine diagram and Modeling –When to use State Diagrams	T1	(370-378)	BB	1	22.
23.	Activity diagram	T1	(390-397)	BB	1	23.
24.	When to use activity diagrams Implementation Diagrams	T1	(414-415)	BB	1	24.
25.	UML package diagram – When to use package diagrams	R1	(456-468)	BB	1	25.
26.	Component and Deployment Diagrams	T1	(390-397)	BB	1	26.
27.	When to use Component and Deployment diagrams	T1	(428-437)	BB	1	27.



**LEARNING OUTCOME:****At the end of unit, the students will be able to**

- Gain knowledge about UML diagrams, sequence diagrams, collaboration diagrams.
- Gain knowledge on state machine diagram and modeling.
- Understand the concepts of activity diagram, UML package diagram, Component and Deployment diagrams.

**UNIT IV DESIGN PATTERNS (9)**

28.	GRASP: Designing objects with responsibilities	R1	(187-198)	BB	1	28.
29.	Creator – Information expert	R1	(198-202)	BB	1	29.
30.	Low Coupling – High Cohesion	R1	(210-215)	BB	1	30.
31.	Controller Design Patterns – creational	R1	(223-226)	BB	1	31.
32.	Factory method – Structural – Bridge	R1	(227-229)	BB	1	32.
33.	Adapter – Behavioural	R1	(278-286)	BB	1	33.
34.	Strategy – observer	R1	(315-318)	BB	1	34.
35.	Applying GoF design patterns –	R1	(346-354)	BB	1	35.
36.	Mapping design to code	T1	(1111-1117)	BB	1	36.

**LEARNING OUTCOME:****At the end of unit, the students will be able to**

- Understand the concept GRASP, creator, information expert
- Know about Low coupling. High cohesion, Design patterns
- Understand the concept of bridge, adapter, behavioural strategy.

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**UNIT V TESTING (9)**

37.	Object Oriented Methodologies	R1	(498-510)	BB	1	37.
38.	OMT Object Model	T1	(1048-1053)	BB	1	38.
39.	OMT Dynamic Model	T1	(516-526)	BB	1	39.
40.	The Booch Methodology	T1	(1067-1086)	BB	1	40.



41.	Design Patterns and Frameworks	R1	(624-632)	BB	1	41.
42.	UA Methods and Technology	R1	(675-678)	BB	1	42.
43.	Software Quality Assurance	R1	(671-674)	BB	1	43.
44.	Impact Of Object Orientation Testing	T1	(114-118)	BB	1	44.
45.	Test Cases	T1	(118-130)	BB	1	45.
46.	Object Oriented Metrics	T1	W1	VIDEO	2	47.

### COURSE OUTCOME:

At the end of the course, the student should be able to:

- Express of software design with UML diagrams.
- Design software applications using OO concepts.
- Identify various scenarios based on software requirements.
- Transform UML based software design into pattern based design using design patterns.
- Understand the various testing methodologies for OO software.
- Test the software against its requirements specification.

### CONTENT BEYOND SYLLABUS

Object Oriented Metrics

### INTERNAL ASSESSMENT DETAILS

ASSESMENTNUMBER	I	II	III
Units	Unit 1 & 2 (half)	Unit 3& 4	Unit 5

ASSIGNMENT NUMBER	I	II	III
DATE OF SUBMISSION	6.7.19	14.8.19	29.9.19

  
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ASSIGNMENT NUMBER	DESCRIPTIVE QUESTIONS / TOPIC (Minimum of 8 Pages)
1	Describe UML diagrams?
2	How to connect the UI Layer to the Domain Layer?
3	How to apply the GRASP patterns?

  
PREPARED BY

[R.VIJAY]

  
APPROVED BY

PRINCIPAL

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Identification of Curricular Gap & Content Beyond Syllabus(CBS)

Name of the Faculty :R.VIJAY      Course Code & Name:CS8592 & Object Oriented Analysis and Design

Degree & Program :B.E. /CSE      Semester: V      Academic Year: 2019 -2020/ODD

#### I. Mapping of Course Outcomes with POs & PSOs.( before CBS)

Table.1 Mapping of COs, C, PSOs with POs - before CBS.

CO/PSO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
C305.1	3	1	1	-	-	-	-	-	-	-	-	-	1	2	1
C305.2	3	2	2	1	-	-	-	-	-	-	-	-	2	1	1
C305.3	2	2	2	1	-	-	-	-	-	-	-	-	1	1	1
C305.4	3	1	1	-	-	-	-	-	-	-	-	-	1	1	1
C305.5	2	1	1	-	-	-	-	-	-	-	-	-	1	1	1
C305.6	1	1	1	-	-	-	-	-	-	-	-	-	1	1	1
C8592	2.3	1.3	1.3	1.0	-	-	-	-	-	-	-	-	1.2	1.2	1

#### II. Identification of content beyond syllabus.

Table.2 Identification of content beyond syllabus

Details of Content Beyond Syllabus(CBS) added	POs strengthened/ vacant filled	CO/Unit
Object Oriented Metrics	PO4(1) Vacant filled	C305.6 / V

  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**Assignment Answer Paper**

Name of the student: *Akiba.8*

AU Register No: *912617104002*

Assignment – 02			Date of Issue:	08.08.19	Marks	10
Course code	CS8392	Course Title	OBJECT ORIENTED ANALYSIS AND DESIGN			
Year	III	Semester	V	Date of Submission:	14.08.19	

Q.No	Answers	CO
1	How to connecting the UI Layer to the Domain Layer?	C305.3

**Mark Allocation**

Rubrics	Marks Allocated	Marks obtained
Content Quality	6	5
Presentation Quality	2	2
Timely submission	2	2
Total marks	10	9

SIGNATURE OF THE FACULTY IN-CHARGE

[R.VIJAY]

*[Signature]*  
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## IQAC Academic Audit Form

ACADEMIC YEAR: 2019-2020 ODD SEMESTER

Name of Department :	CSE	Year / Sem :	III/ V	No. of Students Registered :	22
Details of Examination :	✓ CT - 1 / CT - 2 / CT - 3 / Model Test				

S.No.	Course Code	List of Reg.No Verified	Course Log Book Verified (Y/N)	Course File Verified (Y/N)	No of students Attended	No of Absentees	No of Failures	Pass %	Remarks
1.	MA8551	912617104002	Yes	Yes	21	01	08	61%	-
2.	CS8591	912617104007	Yes	Yes	21	01	04	80%	-
3.	EC8691	912617104011	Yes	Yes	21	01	03	85%	-
4.	CS8691	912617104014	Yes	Yes	21	01	02	90%	-
5.	CS8592	912617104019	Yes	Yes	21	01	03	85%	-
6.	OMD551	912617104303	Yes	Yes	21	01	00	100%	-

Verified by

External Member Name and Signature:

J. SATHIYARAJ - J. Sathiyaraj

Internal Member Name and Signature:

G. SUGAPRIYA - G. Sugapriya

Overall Remarks:

HOD, CSE

IQAC Coordinator

Principal

Dr. S. THILAGAVATHI M.E., Ph.D.,

PRINCIPAL

SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN

Kaikkurichi - 622 303, Pudukkottai Dt.





# SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, Affiliated to Anna University, Chennai, India)

Kaikkurichi, Pudukkottai – 622 303

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### STUDENT FEEDBACK ON FACULTY

S.NO.	DESCRIPTION	SCORED OUT OF 4	SCORED OUT OF 100
1.	Syllabus coverage as prescribed by University.	3.9	97
2.	Technical knowledge of the Teacher.	3.6	90
3.	Teacher's communication skill.	4.0	100
4.	Regularity in taking classes.	4.0	100
5.	Helping the students in conducting the experiment through set of instructions and demonstrations.	3.5	87
6.	Tendency of inviting opinion and question on subject matter from students.	4.0	100
7.	Knowledge of the Teacher in latest development of field.	4.0	100
8.	Perfectness of Valuation.	3.4	85
<b>OVERALL SCORE</b>		<b>3.8</b>	<b>95</b>

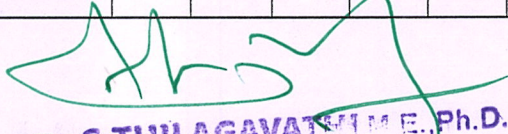
**Dr. S.THILAGAVATHI M.E., Ph.D.,**  
PRINCIPAL

**SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN**  
Kaikkurichi - 622 303, Pudukkottai Dt.



## REPORT SHEET

S.NO	REG.NO	NAME	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
1.	912617104001	ADAIKKALAJAYASRI J	4	3	4	4	4	4	4	3
2.	912617104002	AKILA S	4	3	4	4	4	4	4	3
3.	912617104003	BAVANI V	4	3	4	4	4	4	4	3
4.	912617104005	INDUMATHI S	4	4	4	4	4	4	4	3
5.	912617104006	KARTHIKA S	4	4	4	4	3	4	4	3
6.	912617104007	KAYATHRI K	4	4	4	4	3	4	4	3
7.	912617104008	MULLAIYARASI R	4	4	4	4	3	4	4	3
8.	912617104009	NISHADEVI G	4	4	4	4	3	4	4	3
9.	912617104010	PARAMESHWARI S	4	4	4	4	3	4	4	3
10.	912617104011	PERIYANAYAGI M	3	4	4	4	3	4	4	3
11.	912617104012	PRIYADARSHINI S	4	4	4	4	3	4	4	3
12.	912617104013	PRIYADHARSHINI C	4	4	4	4	3	4	4	4
13.	912617104014	PRIYATHARSHINI V	4	4	4	4	3	4	4	4
14.	912617104015	RIZWANA PARVEEN Z	4	4	4	4	3	4	4	4
15.	912617104017	SEETHALAKSHMI S	4	4	4	4	4	4	4	4
16.	912617104018	VAHINI D	4	4	4	4	4	4	4	4
17.	912617104019	VINOTHA P	4	3	4	4	4	4	4	4
18.	912617104301	JAYA PREETHA C	4	3	4	4	4	4	4	4
19.	912617104302	RAJA LAKSHMI R	3	3	4	4	3	4	4	4
20.	912617104303	SANGEETHA S	4	3	4	4	3	4	4	4
21.	912617104701	NAVINA N	4	3	4	4	3	4	4	4
<b>AVERAGE</b>			3.9	3.6	4.0	4.0	3.5	4.0	4.0	3.4
<b>PERCENTAGE</b>			97	90	100	100	87	100	100	85

  
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 Kaikkurchi - 622 303, Pudukkottai, Dt.





**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN**  
**KAIKKURICHI, PUDUKKOTTAI – 622 303.**

Circular

Date: 12-07-2019

The first cycle test will be conducted from 22.07.2019 to 27.07.2019 for the III, V & VII semester (II, III & IV year) students.

The following instructions are to be followed by the faculty members.

- Total marks for which the question paper to be set will be for 60 marks.
- Question Pattern – Part A – 10 X 2 = 20 Marks, Part B – 2 X 13 = 26 Marks & Part C = 1 X 14 = 14 Marks
- It is the responsibility of the question paper setter to take the Xerox copies of the required number of question papers with the help of Ms. Anusha. G & Ms. Keerthana. P and it should be handed over to the Exam Coordinator Mr. J. Sathyaraj A.P/ EEE on or before 19.07.2019.
- The Exam Coordinators (exam cell) are requested to make necessary arrangements (hall arrangements, invigilation duty etc.,) for conducting the test.
- Faculty members are requested to handover the valued answer scripts to the students on or before 29.07.2019 and the class in-charges are requested to send the consolidated mark sheet along with the attendance percentage to the parents on or before 30-07-2019.

  
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Kaikkurichi - 622 303, Pudukkottai Dt.

  
PRINCIPAL (2/27)

Cc:

- All faculty
- Exam cell
- Office file





**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN  
KAIKKURICHI, PUDUKKOTTAI – 622 303.**

**Circular**

Date: 12-07-2019

The first cycle test will be conducted from 22.07.2019 to 27.07.2019 for the V semester (III year) B.E/ B.Tech students for 60 marks as per the timetable given below. Students are directed to prepare well and score good marks.

Date	9.30 am -11.30 am (FN)
22.07.2019	CE8591 Foundation Engineering (Civil) ✓ MA8551 Algebra and Number Theory (CSE & IT) EE8501 Power System Analysis (EEE) EC8501 Digital Communication (ECE)
23.07.2019	CE8501 Design of Reinforced Cement Concrete Elements(Civil) CS8591 Computer Networks (CSE & IT) EE8551 Microprocessors and Microcontrollers (EEE) EC8552 Computer Architecture and Organization (ECE)
24.07.2019	EN8491 Water Supply Engineering (Civil) ✓ EC8691 Microprocessors and Microcontrollers (CSE & IT) ✓ EE8552 Power Electronics (EEE) EC8553 Discrete-Time Signal Processing (ECE)
25.07.2019	CE8502 Structural Analysis I (Civil) ✓ CS8592 Object Oriented Analysis and Design (CSE) ✓ CS8494 Software Engineering (IT) EE8591 Digital Signal Processing (EEE) EC8551 Communication Networks (ECE)
26.07.2019	ORO551 Renewable Energy Resources (Civil) OMD551 Basics of Biomedical Instrumentation (CSE & IT) CS8392 Object Oriented Programming (EEE) GE8077 Total Quality Management (ECE)
	2.15 pm - 4.15 pm (AN)
27.07.2019	GE8071 Disaster Management (Civil) CS8501 Theory of Computation (CSE) ✓ IT8501 Web Technology (IT) OMD551 – Basics of Biomedical Instrumentation (EEE, ECE)

Cc:

- All III year B.E / B.Tech Classes
- All faculty
- Exam cell
- Notice Board
- Office file

PRINCIPAL

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PRINCIPAL  
SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN  
Kaikkurichi - 622 303, Pudukkottai Dt.



Register Number: 

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**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN**  
 (Approved by AICTE, New Delhi and affiliated to Anna University, Chennai)  
 Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

CYCLE TEST – I			Date/Session	25.07.2019	Marks	60
Course code	CS8592	Course Title	OBJECT ORIENTED ANALYSIS AND DESIGN			
Regulation	2017	Duration	2 Hrs	Academic Year	2019-2020	
Year	III	Semester	V	Department	CSE	

**COURSE OUTCOMES**

C305.1:	Express software design with UML diagrams
C305.2:	Design software applications using OO concepts.
C305.3:	Identify various scenarios based on software requirements
C305.4:	Transform UML based software design into pattern based design using design patterns
C305.5:	Understand the various testing methodologies for OO software
C305.6:	Test the software against its requirements specification

Q.No.	Question	CO	BTS
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**PART A**  
 (Answer all the Questions 10 x 2 = 20 Marks)

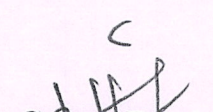
1	What is an object? Give an example.	C305.1	K1
2	What is Analysis and Design?	C305.1	K1
3	Define OOAD.	C305.2	K2
4	Define Unified Process (UP).	C305.2	K2
5	State Class Diagram.	C305.2	K1
6	Compare Aggregation and Composition.	C305.1	K4
7	What is meant by Deployment diagram?	C305.2	K1
8	Define Domain Model.	C305.2	K2
9	List of three perspectives to apply UML.	C305.1	K1
10	Mention the key requirement artifacts.	C305.1	K1

**PART B**  
 (Answer all the Questions 2 x 13 = 26 Marks)

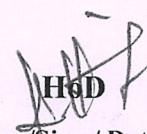
8a	What is Elaboration? Explain why elaboration is complex? (13)	C305.1	K2
(OR)			
8b	Explain the benefits and concepts of use case and use case model and analyze the relating use cases have in ATM system (13)	C305.1	K2
9a	(i)What is UP? (6)	C305.2	K1
	(ii)Explain briefly about the Four Major phases of Unified Process? (7)		
(OR)			
9b	Explain with an example relationship between sequence diagram and use cases. (13)	C305.2	K1

**PART C**  
 (Answer all the Questions 1 x 14= 14Marks)

10a	List the Various UML diagrams and explain the purpose of each diagram. (14)	C305.2	K2
(OR)			
10b	Describe the Design pattern concepts with examples. (14)	C305.2	K2

  
**Course Faculty**  
 (Name /Sign / Date)  
 [R.VIJAY]

  
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 Kaikkurichi - 622 303, Pudukkottai Dt.

  
 (Name /Sign / Date)  
**HOD / R.VIJAY**  
 SRI BHARATHI ENGINEERING  
 COLLEGE FOR WOMEN





**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN**

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

**KAIKKURICHI, PUDUKKOTTAI-622 303.**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**ACADEMIC YEAR 2019 – 2020 (ODD SEMESTER)**

**SUBJECT CODE & TITLE: CS8592 – OBJECT ORIENTED ANALYSIS AND DESIGN**

**YEAR/SEM: III YEAR & V SEMESTER**

**MONTH & YEAR: JULY 2019**

**ANSWER KEY  
CYCLE TEST-1  
PART A**

1. What is an object? Give an example.  
An object is a real-world element in an object-oriented environment.
2. What is Analysis and Design?  
Analysis is an investigation of a domain that results in models Design is a description of a database schema and software objects.
3. Define OOAD.  
Object-Oriented Analysis and Design (OOAD) is a software engineering methodology that involves using object-oriented concepts to design and implement software systems.
4. Define Unified Process (UP).  
The Unified Process (UP) is a software development framework used for object modeling
5. State Class Diagram.  
A state diagram is used to represent the condition of the system or part of the system at finite instances of time.
6. Compare Aggregation and Composition.  
Composition is a way to wrap simple objects or data types into a single unit.
7. What is meant by Deployment diagram?  
A deployment diagram shows components and artifacts in relation to where they are used in the deployed system
8. Define Domain Model.  
A domain model is a system of abstractions that describes selected aspects of a sphere of knowledge, influence or activity.
9. List of three perspectives to apply UML.  
UML as programming language Perspectives-Conceptual perspective, Specification (software) perspective, Implementation (Software) perspective.
10. Mention the key requirement artifacts.  
A requirement describes a condition or capability to which a system must conform.

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## PART B

11. a) What is Elaboration? Explain why elaboration is complex?

Elaboration is the initial series of iterations during which the team does serious investigation, implements (programs and tests) the core architecture, clarifies most requirements, and tackles the high-risk issues. Points to be retrieved reason behind the complex of elaboration.

11. b) Explain the benefits and concepts of use case and use case model and analyze the relating use cases have in ATM system

Automated Teller Machine (ATM) also known as ABM (Automated Banking Machine) is a banking system. This banking system allows customers or users to have access to financial transactions. These transactions can be done in public space without any need for a clerk, cashier, or bank teller.

12. a)(i) What is UP?

A unified process (UP) is a software development process that uses the UML language to represent models of the software system to be developed. It is iterative, architecture centric, use case driven and risk confronting.

12 a) (ii) Explain briefly about the Four Major phases of Unified Process?

Inception.

Elaboration (milestone)

Construction (release)

Transition (final production release)

12. b) Explain with an example relationship between sequence diagram and use cases.

Benefits of system sequence diagrams

SSDs are ideal for demonstrating when and how tasks are completed in a system, especially as those tasks relate to use cases. Here are a few specific examples of when to use SSDs:

- In a step-wise fashion, modeling operations of the system in response to events.
- Building a blueprint for the main success scenario of a given use case, then creating alternative paths.
- Identifying major system events and operations in order to come up with realistic estimates of resources needed.

## PART C

13. a) List the Various UML diagrams and explain the purpose of each diagram.

- Structural Diagrams
- Behavioral Diagrams

Structural Diagrams

The structural diagrams represent the static aspect of the system. These static aspects represent those parts of a diagram, which forms the main structure and are therefore stable.

- Class diagram
- Object diagram
- Component diagram
- Deployment diagram

UML has the following five types of behavioral diagrams –

- Use case diagram
- Sequence diagram
- Collaboration diagram
- State chart diagram

  
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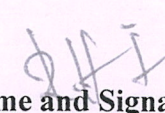
# SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

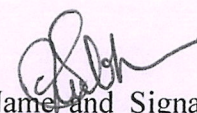
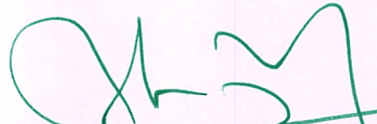
(Approved by AICTE, New Delhi and affiliated to Anna University, Chennai)

Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

Internal Assessment Test Answer Book

Name	BAVANI ✓		Year/ Semester/Section	III/V
Reg No.	912617104003	Date/Session	Department	
Course code	CS 8592	Course Title	OBJECT ORIENTED PROGRAMMING	
CYCLE TEST	CT 1	<input checked="" type="checkbox"/>	CT 2	<input type="checkbox"/>
			CT 3	<input type="checkbox"/>
			Model	<input type="checkbox"/>
Name and Signature of the Invigilator with date			 K. Poiganda	

Instruction to the Student: Put tick mark to the question attended in the column against question.								
Part A			Part B / Part C				Total Marks	
Q. No.	✓	Marks	Q. NO.	✓	a	b		
					Marks			Marks
1	✓	2	11	✓	15		13	
2	✓	2	12	✓	15		13	
3	✓	2	13	✓	13			
4	✓	2	14		15			
5	✓	2	15		15			
6	✓	2	16					
7	✓	2	Grand Total					
8	✓	2	93				 Name and Signature of the Examiner with date	
9	✓	2						
10	✓	2						
Total		20	Grand Total					

To be filled by the examiner							
Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	43	47	10				
Marks Obtained	43	40	10				
IQAC Audit - Remarks							 Name and Signature of the IQAC member
							

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**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN**  
**KAIKKURICHI, PUDUKKOTTAI – 622 303**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**ACADEMIC YEAR 2019 – 2020 (ODD SEMESTER)**  
**STUDENTS MARK STATEMENT- CO BASED**

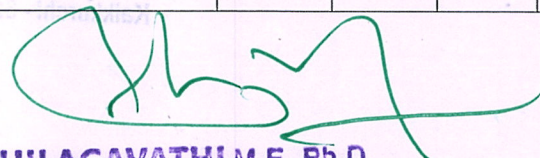
**CYCLE TEST-I**

**SUBJECT CODE & TITLE: CS8592 – OBJECT ORIENTED ANALYSIS AND DESIGN**

**YEAR/SEM: III YEAR & V SEMESTER**

**MONTH & YEAR: JULY 2019**

S.NO	REG NO	STUDENT NAME	CO1 (43)	CO2 (47)	CO3 (10)	TOTAL (100)
1.	912617104001	ADAIKKALAJAYASRI J	35	46	6	77
2.	912617104002	AKILA S	32	38	9	79
3.	912617104003	BAVANI V	43	40	10	93
4.	912617104004	DHANALAKSHMI S	0	0	0	0
5.	912617104005	INDUMATHI S	43	29	9	81
6.	912617104006	KARTHIKA S	31	36	8	75
7.	912617104007	KAYATHRI K	43	24	10	77
8.	912617104008	MULLAIYARASI R	37	30	8	75
9.	912617104009	NISHADEVI G	32	34	10	76
10.	912617104010	PARAMESHWARI S	28	38	10	76
11.	912617104011	PERIYANAYAGI M	33	36	10	79
12.	912617104012	PRIYADARSHINI S	35	30	10	75
13.	912617104013	PRIYADHARSHINI C	35	31	9	75
14.	912617104014	PRIYATHARSHINI V	39	32	8	79
15.	912617104015	RIZWANA PARVEEN Z	38	35	9	82
16.	912617104017	SEETHALAKSHMI S	35	30	10	75
17.	912617104018	VAHINI D	40	31	9	81
18.	912617104019	VINOTHA P	43	33	8	84
19.	912617104301	JAYA PREETHA C	38	30	10	78
20.	912617104302	RAJA LAKSHMI R	37	40	10	87
21.	912617104303	SANGEETHA S	43	43	10	96
22.	912617104701	NAVINA N	41	31	9	81

  
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**MARKS RANGE:**

<20	20-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100
0	0	0	0	0	0	13	6	2

Total No.of Candidates Present	22
Total No.of Candidates Absent	01
Total No.of Students Pass	21
Total No. of Students Fail	00
Percentage of Pass	100%

**FACULTY IN CHARGE**

**HOD/CSE**

**PRINCIPAL**

11/8/2019

**HOD / IT**

**SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN  
KAIKKURICHI  
PUDUKKOTTAI - 622 303.**

**PRINCIPAL  
SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN  
KAIKKURICHI 622 303.  
PUDUKKOTTAI DISTRICT**

**Dr. S.THILAGAVATHI M.E., Ph.D.**

**PRINCIPAL**

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# SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

KAIKKURICHI, PUDUKKOTTAI – 622 303

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2019-2020 (ODD SEMESTER)

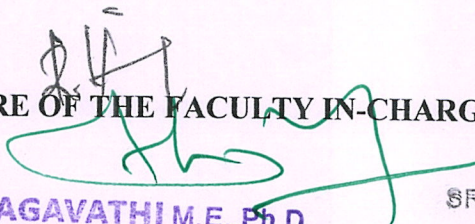
INTERNAL MARK STATEMENT (OUT OF 20)

SUBJECT CODE & TITLE: CS8592 OBJECT ORIENTED ANALYSIS AND DESIGN

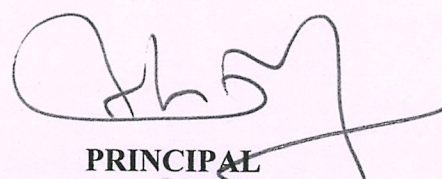
YEAR/SEM: III/V

S.NO	REG NO	STUDENT NAME	TOTAL (20)
1.	912617104001	ADAIKKALAJAYASRI J	16
2.	912617104002	AKILA S	16
3.	912617104003	BAVANI V	19
4.	912617104004	DHANALAKSHMI S	0
5.	912617104005	INDUMATHI S	16
6.	912617104006	KARTHIKA S	16
7.	912617104007	KAYATHRI K	16
8.	912617104008	MULLAIYARASI R	16
9.	912617104009	NISHADEVI G	16
10.	912617104010	PARAMESHWARI S	16
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12.	912617104012	PRIYADARSHINI S	15
13.	912617104013	PRIYADHARSHINI C	16
14.	912617104014	PRIYATHARSHINI V	17
15.	912617104015	RIZWANA PARVEEN Z	18
16.	912617104017	SEETHALAKSHMI S	15
17.	912617104018	VAHINI D	16
18.	912617104019	VINOTHA P	18
19.	912617104301	JAYA PREETHA C	16
20.	912617104302	RAJA LAKSHMI R	17
21.	912617104303	SANGEETHA S	19
22.	912617104701	NAVINA N	18

SIGNATURE OF THE FACULTY IN-CHARGE

  
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SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN  
Kaikkurichi - 622 303, Pudukkottai Dt.

  
HoD/CSE

  
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HOD / CSE SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN  
SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN  
COLLEGE FOR WOMEN, KAIKKURICHI - 622 303,  
PUDUKKOTTAI DISTRICT





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KAIAKURICHI, PUDUKKOTTAI - 622 303

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2019-2020(ODD SEMESTER)

UNIVERSITY EXAM RESULT

SUBJECT CODE & TITLE: CS8592 OBJECT ORIENTED ANALYSIS AND DESIGN

YEAR/SEM: III/V

S.NO	REG NO	STUDENT NAME	GRADE
1.	912617104001	ADAIKKALAJAYASRI J	A
2.	912617104002	AKILA S	A
3.	912617104003	BAVANI V	B+
4.	912617104004	DHANALAKSHMI S	-
5.	912617104005	INDUMATHI S	B+
6.	912617104006	KARTHIKA S	B
7.	912617104007	KAYATHRI K	U
8.	912617104008	MULLAIYARASI R	B+
9.	912617104009	NISHADEVI G	B
10.	912617104010	PARAMESHWARI S	B+
11.	912617104011	PERIYANAYAGI M	B
12.	912617104012	PRIYADARSHINI S	B+
13.	912617104013	PRIYADHARSHINI C	B
14.	912617104014	PRIYATHARSHINI V	B+
15.	912617104015	RIZWANA PARVEEN Z	A+
16.	912617104017	SEETHALAKSHMI S	B+
17.	912617104018	VAHINI D	B
18.	912617104019	VINOTHA P	A+
19.	912617104301	JAYA PREETHA C	B+
20.	912617104302	RAJA LAKSHMI R	B+
21.	912617104303	SANGEETHA S	A
22.	912617104701	NAVINA N	B+

SIGNATURE OF THE FACULTY IN-CHARGE

HOD/CSE

PRINCIPAL

Dr. S. THILAGAVATHI M.E., Ph.D.,

PRINCIPAL

SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN

Kaikkurichi - 622 303, Pudukkottai Dt.

HOD / CSE  
SRI BHARATHI ENGINEERING  
COLLEGE FOR WOMEN  
KAIAKURICHI - 622 303,  
PUDUKKOTTAI DISTRICT  
PUDUKKOTTAI - 622 303

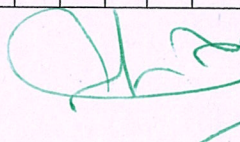


**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN, KAIKURUCHI, PUDUKKOTTAI**

Department of Computer Science and Engineering

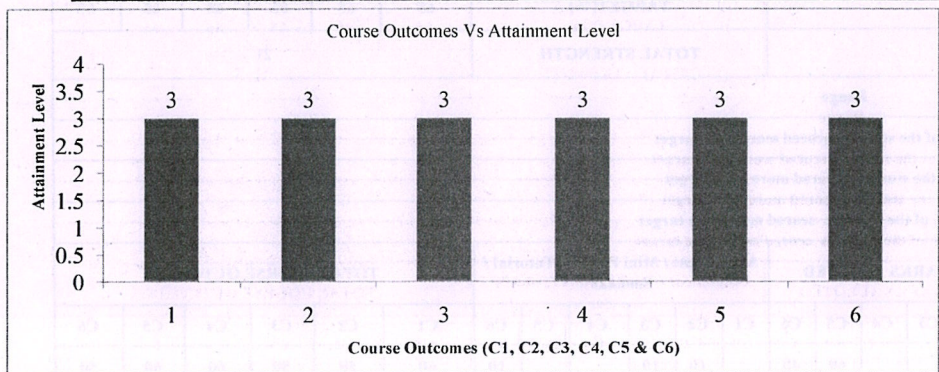
**Internal Assessment - Attainment of Course Outcomes (Through Direct Assessment)**

		ACADEMIC YEAR - 2019-2020														BATCH						2017 - 2021										
COURSE CODE/TITLE		CS8592 (C305)/OBJECT ORIENTED ANALYSIS AND DESIGN														COURSE OUTCOME						1	2	3	4	5	6					
YEAR/SEM		III/V														TARGET(%)						65	65	65	65	65	65					
COURSE COORDINATOR		R.VIJAY,AP/CSE														TOTAL STRENGTH						21										
ATTAINMENT LEVEL		Level		Range																												
		1		UP TO 60% of the students scored more than target																												
		2		61 - 79% of the students scored more than target																												
		3		80% & ABOVE of the students scored more than target																												
S.NO	REG NO	NAME OF THE STUDENT	IAT 1 - MARKS ALLOTTED						IAT 2 - MARKS ALLOTTED						IAT 3 - MARKS ALLOTTED						Assignment / Mini Project / Tutorial / Seminar						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	40							40	60							60	40		10	10			10	60	50	50	60	60	50
1	912617104001	ADAIKKALAJAYASRI J	46	31							32	49							50	34		8	8			8	46	39	40.4	49	50.4	41.6
2	912617104002	AKILA S	47	32							31	47							52	35		8	8			7	47	40	39.2	47	52.2	41.8
3	912617104003	BAVANI V	56	37							38	58							58	39		9	9			8	56	46	47.4	58	58.2	46.8
4	912617104005	INDUMATHI S	0	0							0	0							1	1		7	9			8	0	7	9	0	1.2	8.8
5	912617104006	KARTHIKA S	49	32							34	50							51	34		8	8			9	49	40	41.6	50	51	43
6	912617104007	KAYATHRI K	45	30							32	47							55	36		8	7			9	45	38	38.6	47	54.6	45.4
7	912617104008	MULLAIYARASI R	46	31							31	47							50	33		8	8			9	46	39	39.2	47	49.8	42.2
8	912617104009	NISHADEVI G	45	30							34	50							52	34		9	8			9	45	39	41.6	50	51.6	43.4
9	912617104010	PARAMESHWARI S	46	30							32	49							49	33		9	9			9	46	39	41.4	49	49.2	41.8
10	912617104011	PERIYANAYAGI M	46	30							32	47							50	33		8	9			8	46	38	40.6	47	49.8	41.2
11	912617104012	PRIYADARSHINI S	50	33							32	48							51	34		8	8			8	50	41	40	48	51	42
12	912617104013	PRIYADHARSHINI C	45	30							32	47							50	33		8	9			8	45	38	40.6	47	49.8	41.2
13	912617104014	PRIYATHARSHINI V	45	30							34	51							51	34		9	9			8	45	39	43	51	51	42
14	912617104015	RIZWANA PARVEEN Z	47	32							34	52							57	38		9	9			8	47	41	43.4	52	57	46
15	912617104017	SEETHALAKSHMI S	49	33							38	58							58	39		8	9			9	49	41	47.4	58	58.2	47.8
16	912617104018	VAHINI D	45	30							32	47							49	33		8	9			9	45	38	40.6	47	49.2	41.8

  
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17	912617104019	VINOTHA P	49	32							34	50						49	33		8	8			8	49	40	41.6	50	49.2	40.8
18	912617104301	JAYA PREETHA C	50	34							38	56						57	38		8	8			7	50	42	45.6	56	57	45
19	912617104302	RAJA LAKSHMI R	47	31							32	49						55	37		8	8			8	47	39	40.4	49	55.2	44.8
20	912617104303	SANGEETHA S	52	35							33	49						52	34		7	7			8	52	42	39.8	49	51.6	42.4
21	912617104701	NAVINA N	58	38							40	59						60	40		8	8			9	58	46	47.6	59	60	49



CO's Target Value	39.0	32.5	32.5	39.0	39.0	32.5
No. of Students scored above CO's Target Value	20	20	20	20	20	20
Percentage of Students scored above Target	95.2	95.2	95.2	95.2	95.2	95.2
CO Attainment	3	3	3	3	3	3
CO attainment Values to plot the Graph	3	3	3	3	3	3

*[Signature]*  
Faculty Incharge

*[Signature]*  
**Dr. S. THILAGAVATHI M.E., Ph.D.,**  
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*[Signature]*  
HOD / CSE  
SRI BHARATHI ENGINEERING  
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KAIKKURICHI,  
PUDUKKOTTAI - 622 303

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**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN**

DEPARTMENT OF CSE

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

ACADEMIC YEAR : 2019 - 2020 (ODD SEM)

YEAR/SEM:III / V

Batch:2017-2021

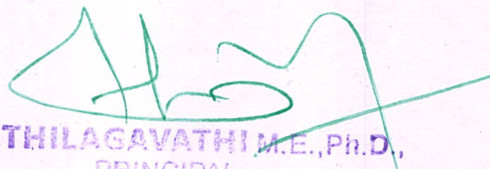
SUBJECT :CS8592 (C305) / OBJECT ORIENTED ANALYSIS AND DESIGN

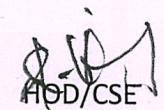
CO Attainment Level: 1 - (UPTO 60%) 2- (61%-79%) 3-(80% and Above)

TOTAL STRENGTH : 21

S.NO	Register No	NAME	Univ. Grade	
1	912617104001	ADAIKKALAJAYASRI J	A	
2	912617104002	AKILA S	A	
3	912617104003	BAVANI V	B+	
4	912617104005	INDUMATHI S	B+	
5	912617104006	KARTHIKA S	B	
6	912617104007	KAYATHRI K	U	
7	912617104008	MULLAIYARASI R	B+	
8	912617104009	NISHADEVI G	B	
9	912617104010	PARAMESHWARI S	B+	
10	912617104011	PERIYANAYAGI M	B	
11	912617104012	PRIYADARSHINI S	B+	
12	912617104013	PRIYADHARSHINI C	B	
13	912617104014	PRIYATHARSHINI V	B+	
14	912617104015	RIZWANA PARVEEN Z	A+	
15	912617104017	SEETHALAKSHMI S	B+	
16	912617104018	VAHINI D	B	
17	912617104019	VINOTHA P	A+	
18	912617104301	JAYA PREETHA C	B+	
19	912617104302	RAJA LAKSHMI R	B+	
20	912617104303	SANGEETHA S	A	
21	912617104701	NAVINA N	B+	
No. of O Grade			0	0
No. of A+ Grade			2	2
No. of A Grade			3	3
No. of B+ Grade			10	10
No. of B Grade			5	5
No. of U Grade			1	1
No. of UA Grade			0	0
Target for course outcome Attainment			60	21
No of students above the target			20	
CO-Attainment University (%)			95.24	

  
FACULTY

  
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KAIKKURICHI,  
PUDUKKOTTAI - 622 303



Overall Attainment Sheet – COs - POs & PSOs attainment calculation

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.20xCO-INT + 0.80xCO-UNI) (%)	CO Attainment Level
C305.1	95.2	95.24	95.2	3
C305.2	95.2	95.24	95.2	3
C305.3	95.2	95.24	95.2	3
C305.4	95.2	95.24	95.2	3
C305.5	95.2	95.24	95.2	3
C305.6	95.2	95.24	95.2	3

Closure of the Quality Loop:

CO	CO-Target for Academic Year						CO Attainment Gap for (%) 16-17	Action Proposed to Bridge the Gap
	14-15		15-16		16-17			
C305.1	65	79.71	65	69	65	95.2	-	-
C305.2	65	79.71	65	71.17	65	95.2	-	-
C305.3	65	79.71	65	63.15	65	95.2	-	-
C305.4	65	79.71	65	75.11	65	95.2	-	-
C305.5	65	79.71	65	73.57	65	95.2	-	-
C305.6	65	79.71	65	68.44	65	95.2	-	-

Expected CO-PO Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C305.1	3	1	1	1	-	-	-	-	-	-	-	-	1	2	-
C305.2	3	2	2	1	-	-	-	-	-	-	-	-	2	1	-
C305.3	3	2	2	1	-	-	-	-	-	-	-	-	1	1	-
C305.4	2	1	1	1	-	-	-	-	-	-	-	-	1	1	-
C305.5	2	1	1	1	-	-	-	-	-	-	-	-	1	1	-
C305.6	1	1	1	1	-	-	-	-	-	-	-	-	1	1	-
C305	2.3	1.3	1.3	1	-	-	-	-	-	-	-	-	1.2	1.2	-

PO Attainment Level


Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C305.1	3	1	1	1	-	-	-	-	-	-	-	-	1	2	-
C305.2	3	2	2	1	-	-	-	-	-	-	-	-	2	1	-
C305.3	3	2	2	1	-	-	-	-	-	-	-	-	1	1	-
C305.4	2	1	1	1	-	-	-	-	-	-	-	-	1	1	-
C305.5	2	1	1	1	-	-	-	-	-	0	-	-	1	1	-
C305.6	1	1	1	1	-	-	-	-	-	-	-	-	1	1	-
C305	2.33	1.33	1.33	1	-	-	-	-	-	0	-	-	1.17	1.17	-

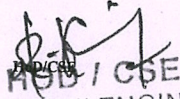
Attainment of POs and PSOs:

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C305	2.3	1.3	1.3	1	-	-	-	-	-	-	-	-	1.2	1.2	-
Attainment	2.33	1.33	1.33	1	-	-	-	-	-	0	-	-	1.17	1.17	-

Comments by Program Coordinator	1. 2.
Remarks by HoD	

Signature and Signature of the Faculty Member  
R.KIJAY

  
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