

# J. B. INSTITUTE OF ENGINEERING AND TECHNOLOGY



Course Plan  
For  
Object Oriented Analysis & Design


III B. Tech(CSE)

I SEMESTER

ACADEMIC YEAR

2015-16

D. Jyothsna  
Assistant Professor

	<p>COURSE PLAN</p>	2015-16
		Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna  
 Designation: Assistant Prof  
 Department:: Computer Science & Engineering

1. TARGET

- a) Percentage Pass:: 100
- b) Percentage I class::85

2. COURSE PLAN

(Please write how you intend to cover the contents: i.e., coverage of Units by lectures, guest lectures, design exercises, solving numerical problems, demonstration of models, model preparation, or by assignments, etc.)

3. METHOD OF EVALUATION

- 3.1. Continuous Assessment Examinations (CAE 1, CAE 2)
- 3.2. Assignments / Seminars
- 3.3. Mini Projects
- 3.4. Quiz
- 3.5. Term End Examination
- 3.6. Others

4. List out any new topic(s) or any innovation you would like to introduce in teaching the subject in this Semester.

- 1. Working on Applications like
  - i. Online Book Shopping
  - ii. Library Management System
  - iii. Online marketing
  - iv. E Seva
  - v. Online School/ College management
  - vi. Online Training Course
  - vii. Online Auction System
  - viii. Online Voting
  - ix. Online Job Searching
  - x. Online Mapping

Signature of HOD  
Date:

Signature of Faculty  
Date:



## GUIDELINES TO STUDY THE SUBJECT

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothisna

Designation: Assistant Professor

Department:: Computer Science & Engineering

Guidelines for Preparing the Course:

#### Course Description:

Object Oriented Analysis & Design is a course which gives the information of Software Designing and helps in designing the software applications.

#### Course Objectives:

1. Importance of Modelling
2. Classes and Relationships
3. Object Diagrams
4. Interactions
5. Usecases
6. Advanced Behavioral Modelling
7. To Learn about the Documenting the Software Intensive System

#### Learning Outcomes:

Designing of software application. The student will know the modelling language. He/She will get an idea of problem solving and learn to draw UML diagrams.



## COURSE OBJECTIVES

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna

Designation:: Assistant Professor

Department:: CSE

On completion of this Subject / Course the student shall be able to:

S.No.	Objectives	Outcomes
1.	To Understand the concept of Modelling	Modelling
2.	To Understand the concept of classes and relationships.	Classes and relationships
3.	To Understand the concept of Class & Object Diagrams	Class and Object
4.	To Understand Interactions, Interaction diagrams.	Basic behavioral modelling_1
5.	To Understand Use case and Activity diagrams	Basic behavioural modelling -2
6.	To Understand Events and signals, state machines, processes and Threads, time and space, state chart diagrams.	Advanced Behavioural modelling
7.	To Understand Component, Deployment, Component diagrams and Deployment diagrams.	Component and deployment
8.	To Understand Unified Library Application.	Library Application

**Signature of Faculty**

**Date:**

Note: For each of the OBJECTIVE indicate the appropriate OUTCOMES to be achieved.  
Kindly refer Page 16, to know the illustrative verbs that can be used to state the objectives.



## COURSE OUTCOMES

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothisna  
Designation: Assistant Professor  
Department:: Computer Science & Engineering

### The expected outcomes of the Course / Subject are:

S.No.	General Categories of Outcomes	Specific Outcomes of the Course
A.	An ability to apply knowledge of mathematics, science, and engineering	Yes
B.	An ability to design and conduct experiments, as well as to analyze and interpret data	Yes
C.	An ability to design a system, component, or process to meet desired needs within realistic Constraints such as economic, environmental, social, political, ethical, health and safety, Manufacturability and sustainability	Yes
D.	An ability to function on multi-disciplinary teams	Yes
E.	An ability to identify, formulate, and solve engineering problems	Yes
F.	An understanding of professional and ethical responsibility	Yes
G.	An ability to communicate effectively	Yes
H.	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	Yes
I.	A recognition of the need for, and an ability to engage in life-long learning	Yes
J.	A knowledge of contemporary issues	Yes
K.	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	Yes

**Objectives – Outcome Relationship Matrix** (Indicate the relationships by ☒ mark).

OutComes\Objectives	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>
1	X	X	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X	X	X

X



## COURSE SCHEDULE

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothisna

Designation:: Assistant Professor

Department:: Computer Science & Engineering

The Schedule for the whole Course / Subject is::


Object Oriented Analysis & Design

S. No.	Description	Duration (Date)		Total No. of Periods
		From	To	
1.	Introduction to UML	14-12-15	19-12-15	5
2.	Basic Structural modelling and Advanced Structural modeling	21-12-15	6-1-16	10
3.	Class and Object diagrams	7-1-16	23-1-16	8
4.	Basic behavioral modeling-I	25-1-16	4-2-16	8
5.	Basic behavioral modeling-II	15-2-16	25-2-16	8
6.	Advanced behavioral modeling	26-2-16	5-3-16	7
7.	Architectural Behavioral modeling	7-3-16	17-3-16	8
8.	Unified Library Application	18-3-16	Last Working day	8

Total No. of Instructional periods available for the course:

60

Hours / Periods

	<b>SCHEDULE OF INSTRUCTIONS</b>	2015-16
	<b>UNIT - I</b>	Regulation: R12

**FACULTY DETAILS:**

Name of the Faculty:: D. Jyothsna  
 Designation:: Assistant Professor  
 Department::CSE  
 The Schedule for the whole Course / Subject  
 is::OOAD

Sl. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal...) Page No ___ to ___
1	14-12-15	1	Importance of modeling, Principles of modelling	Modelling, Principles	The Unified Modeling language User Guide 27-33
2	16-12-15	1	OO modeling, Conceptual Model introduction	OOM	The Unified Modeling language User Guide 35-39
3	17-12-15	1	Conceptual model of the UML	Modelling Concepts	The Unified Modeling language User Guide 39-51
4	18-12-15	1	Overview of UML and Architecture	UML Overview and Architecture	The Unified Modeling language User Guide 52-55
5	19-12-15	1	Software development life cycle	SDLC	The Unified Modeling language User Guide 55-57

Signature of Faculty  
Date

- Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.  
 2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**.  
 3. MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.





## SCHEDULE OF INSTRUCTIONS

2015-16

### UNIT - II

Regulation: R12

**FACULTY DETAILS:**

Name of the Faculty:: D. Jyothisna

Designation:: Assistant Prof

Department:: CSE


The Schedule for the whole Course / Subject  
is::OOAD

Sl. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal...) Page No ___ to ___
1	21-12-15	1	Basic Structural modeling	Basic about Classes	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65
2	23-12-15	1.5	Classes	Classes	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65
3	28-12-15	1.5	Relationships	Relations	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65
4	30-12-15	1	Common mechanisms	Common Mechanisms	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65
5	31-12-15	1	Diagrams	Diagrams	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65

6	1-1-16	1	Advanced classes	Advanced Classes	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65
7	2-1-16	1	Advanced relationships	Advanced Relations	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65
8	4-1-16	1	Interfaces,	Interfaces	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65
9	6-1-16	1	Types and roles, Packages	Packages	The Unified Modeling language For Designer & Learner By Graddy Booch, Ivar Jacobson,james Rumbaugh Pages 49-65

Signature of Faculty  
Date

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MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	<b>SCHEDULE OF INSTRUCTIONS</b>	2015-16
	<b>UNIT - III</b>	Regulation: R12


**FACULTY DETAILS:**

Name of the Faculty:: D. Jyothisna  
 Designation::Assistant Professor  
 Department::CSE  
 The Schedule for the whole Course / Subject  
 is::OOAD

Sl. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal...) Page No ___ to ___
1	7-1-16	1	Class Diagrams	Advance Concept of Classes and Objects	The Unified Modelling User Guide 127-132
2	8-1-16	1	Terms and Concepts	Basics	The Unified Modelling User Guide 129-133
3	11-1-16	1	Modelling Techniques for Class Diagrams: Modelling simple collaborations	Modelling Techniques- Collaborations	The Unified Modelling User Guide 134-137
4	13-1-16	1	Modelling Logical Database Schema	Physical Database Schema	The Unified Modelling User Guide 217-220
5	18-1-16	1	Forward and Reverse Engineering	Forward and Reverse Engineering	The Unified Modelling User Guide 130-132
6	20-1-16	1	Object Diagrams	Object Diagrams	The Unified Modelling User Guide 132-135
7	22-1-16	1	Terms and Concepts of Object Diagrams	Basics	The Unified Modelling User Guide 134-137
8	23-1-16	1	Modelling Techniques for Object diagrams	Modeling Object Structures	The Unified Modelling User Guide 220-223

Signature of Faculty  
Date

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 MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	<b>SCHEDULE OF INSTRUCTIONS</b>	2015-16
	<b>UNIT - IV</b>	Regulation: R12


**FACULTY DETAILS:**

Name of the Faculty::D. Jyothsna  
 Designation::Assistant Prof  
 Department::CSE  
 The Schedule for the whole Course / Subject  
 is::OOAD

Sl. No.	Date	No. of Periods	Topics / Sub – Topics	Objectives & Outcome Nos.	References (Text Book, Journal...) Page No ___ to ___
1	25-1-16	1	Interactions	Interactions	The UML User Guide 227-229
2	27-1-16	1	Terms and Concepts	Basics	The UML User Guide 229-234
3	28-1-16	1	Sequencing	Sequencing	The UML User Guide 234-238
4	29-1-16	1	Modeling Techniques for Interactions	Modeling Techniques	The UML User Guide 238-2239
5	30-1-16	1	Interaction Diagrams	Interaction Diagram	The UML User Guide 265-267
6	1-2-16	1	Terms and Concepts	Basics	The UML User Guide 267-271
7	3-2-16	1	Semantic Equivalence and Common Uses	MTs of SD	The UML User Guide 271-272
8	4-2-16	1	Modelling Techniques of Interaction Diagrams	MTs of CD	The UML User Guide 273-277

Signature of Faculty  
Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.  
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 MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	<b>SCHEDULE OF INSTRUCTIONS</b>	2015-16
	<b>UNIT - V</b>	Regulation: R12


**FACULTY DETAILS:**

Name of the Faculty:: D. Jyothsna  
 Designation:Assistant Prof  
 Department::CSE  
 The Schedule for the whole Course / Subject  
 is::OOAD

Sl. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal...) Page No __ to __
1	15-2-16	1	Usecases	Usecases	Unified modelling user guide 242-243
2	17-2-16	1	Terms and Concepts	Basics	Unified modelling user guide 244-251
3	18-2-16	1	Usecases and Flow of Events	Flow of Events	Unified modelling user guide 242-246
4	19-2-16	1	Organizing Usecases	Organization of usecases	Unified modelling user guide 248-251
5	20-2-16	1	Modeling techniques for usecase diagrams	Modelling Techniques of usecases	Unified modelling user guide 258-261
6	22-2-16	1	Usecase Diagrams	Usecase Diagrams	Unified modelling user guide 255-256
7	24-2-16	1	Modeling techniques of activity diagrams	Modelling Techniques of AD	Unified modelling user guide 290-294
8	25-2-16	1	Activity Diagrams	Activity Diagrams	Unified modelling user guide 279-281

Signature of Faculty  
Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.  
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 MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	<b>SCHEDULE OF INSTRUCTIONS</b>	2015-16
	<b>UNIT - VI</b>	Regulation: R12

**FACULTY DETAILS:**

Name of the Faculty:: D. Jyothisna

Designation:Assistant Prof

Department:: CSE

The Schedule for the whole Course / Subject is::

OOAD

Sl. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal...) Page No ___ to ___
1	26-2-16	1	Advanced Behavioral Modelling	Learning Concepts of State Chart Diagram	The Unified Modelling User Guide 299-301
2	27-2-16	1	Events and Signals	Events and Signals	The Unified Modelling User Guide 303-308
3	29-2-16	1	State machines	State M/cs	The Unified Modelling User Guide 309-313
4	2-3-16	1	Process & threads	Threads	The Unified Modelling User Guide 331-341
5	3-3-16	1	Time & space	Time & Space	The Unified Modelling User Guide 343-349
6	4-3-16	1	State chart diagrams	State Chart Diag	The Unified Modelling User Guide 353-357
7	5-3-16	1	Transitions	Transitions	The Unified Modelling User Guide 357-361


Signature of Faculty

Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.

2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**.

MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	<b>SCHEDULE OF INSTRUCTIONS</b>  <b>UNIT - VII</b>	2015-16
		Regulation: R12

**FACULTY DETAILS:**

Name of the Faculty:: D. Jyothsna

Designation:: Assistant Prof

Department::CSE

The Schedule for the whole Course / Subject is::

OOAD

Sl. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal...) Page No ___ to ___
1	7-3-16	1	Architectural Modeling	Architectural Modeling	The Unified Modeling User Guide 362-365
2	9-3-16	1	Component	Component	The Unified Modeling User Guide 365-367
3	10-3-16	1	Terms and Concepts	Basics	The Unified Modeling User Guide 367-371
4	11-3-16	1	Components and Classes	Classes	The Unified Modeling User Guide 368-369
5	12-3-16	1	Components and Interfaces	Interfaces	The Unified Modeling User Guide 369-371
6	14-3-16	1	Deployment	Deployment	The Unified Modeling User Guide 381-385
7	16-3-16	1	Component diagrams	Component Diagram	The Unified Modeling User Guide 425-428
8	17-3-16	1	Deployment diagrams	Deployment Diagram	The Unified Modeling User Guide 429-433


Signature of Faculty

Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.

2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**.

MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	<b>SCHEDULE OF INSTRUCTIONS</b>	2015-16
	<b>UNIT - VIII</b>	Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: D. Jyothisna  
 Designation:Assistant Prof  
 Department::CSE  
 The Schedule for the whole Course / Subject  
 is::OOAD

Sl. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal...) Page No ___ to ___
1	18-3-16	8	Case study: <b>The Unified library application</b>	Overall Concepts of UML	From The Link <a href="http://www.uml-diagrams.org/use-case-diagrams-examples.html">http://www.uml-diagrams.org/use-case-diagrams-examples.html</a>

Signature of Faculty  
Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.  
 2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**.  
 MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.



	<b>COURSE COMPLETION STATUS</b>	2015-16
		Regulation: R12

**FACULTY DETAILS:**

Name of the Faculty:: D. Jyothsna

Subject:: Object Oriented Analysis & Design

Subject Code::6756028

Department:: CSE

Actual Date of Completion & Remarks, if any

Units	Remarks	Nos. of Objectives Achieved
Unit 1	No Remarks	7
Unit 2	No Remarks	4
Unit 3	No Remarks	2
Unit 4	No Remarks	3
Unit 5	No Remarks	4
Unit 6	No Remarks	5
Unit 7	No Remarks	8
Unit 8	No Remarks	10

**Signature of Dean of School**

**Date:**

**Signature of Faculty**

**Date:**

NOTE: AFTER THE COMPLETION OF EACH UNIT MENTION THE NUMBER OF OBJECTIVES ACHIEVED.



## TUTORIAL SHEETS - I

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna

Designation:Assistant Professor

Department::CSE

The Schedule for the whole Course / Subject  
is::OOAD

Date: 12-12-15

This Tutorial corresponds to Unit Nos. I

Time: 2:00 P.M

Q1.Define UML ? Explain its Important ?

Q2.Explain Principals of UML ? Explain Conceptual Model of UML ?

Q3.Explain Architecture of UML ?

Q4. Explain Software Development Life Cycle of UML ?

Q5.Explain The Following

- i) Structural diagrams
- ii) Behavioral Diagram
- iii) Relationships
- iv) Common Mechanism

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School  
Date:

Signature of Faculty  
Date:



## TUTORIAL SHEETS - II

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna

Designation:Assistant Professor

Department::CSE

The Schedule for the whole Course / Subject  
is::OOAD

Date: 12-12-15

This Tutorial corresponds to Unit Nos. II

Time: 2:00 P.M

Q1. Define Class? Explain with an example?

Q2. Explain common mechanism in classes?

Q3. Define Relationship? Explain about various relationships?

Q4. Explain Common mechanism in relationships?

Q5.Explain the following

- i) Advance in classes
- ii) Advance in relationships
- iii) Interfaces
- iv) Types & role in Association Relationship
- v) Packages

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School

Date:

Signature of Faculty

Date:



## TUTORIAL SHEETS - III

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna  
Designation:Assistant Professor  
Department::CSE  
The Schedule for the whole Course / Subject  
is::OOAD

Date: 12-12-15

This Tutorial corresponds to Unit Nos. III

Time: 2:00 P.M

:

Q1. Define Class Diagram? Explain with an example?

Q2. Define Object Diagram? Explain with an example?

Q3.Explain Common Modelling Techniques in Class Diagram?


Q4. Q3.Explain Common Modelling Techniques in Object Diagram?

Q5.Explain Forward & Reverse Engineering ? In class & Object Diagrams

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School  
Date:

Signature of Faculty  
Date:

	<b>TUTORIAL SHEETS - IV</b>	2015-16
		Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna  
 Designation:Assistant Professor  
 Department::CSE  
 The Schedule for the whole Course / Subject  
 is::OOAD

Date: 12-12-15

This Tutorial corresponds to Unit Nos. **IV**

Time: 2:00 P.M

:

Q1. Define Interaction Diagram? Explain with an example?

Q2. Define Sequence & Collaboration Diagram? Explain with an example?

Q3.Explain Common Modelling Techniques in Sequence Diagram?

Q4. Q3.Explain Common Modelling Techniques in Collaboration Diagram?

Q5.Explain Forward & Reverse Engineering ? In Sequence & Collaboration Diagrams

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School  
 Date:

Signature of Faculty  
 Date:



## TUTORIAL SHEETS - V

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna  
Designation:Assistant Professor  
Department::CSE  
The Schedule for the whole Course / Subject  
is::OOAD

Date: 12-12-15

This Tutorial corresponds to Unit Nos. **V** :

Time: 2:00 P.M

Q1. Define Use Case Diagram? Explain with an example?

Q2. Define Activity Diagram? Explain with an example?

Q3.Explain Common Modelling Techniques in Use Case Diagram?

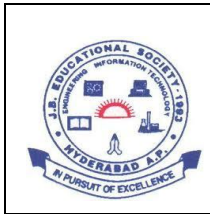
Q4. Q3.Explain Common Modelling Techniques in Activity Diagram?

Q5.Explain Forward & Reverse Engineering ? In Use Case & Activity Diagrams

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School  
Date:

Signature of Faculty  
Date:



## TUTORIAL SHEETS - VI

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna

Designation:Assistant Prof

Department::CSE

The Schedule for the whole Course / Subject  
is::OOAD

Date: 12-12-15

This Tutorial corresponds to Unit Nos. **VI**

Time: 2:00 P.M

:

Q1. Define and Explain Events & Signal? Explain with an example?

Q2. Define & Explain State Machine ? Explain with an example?

Q3.Difference Between Process & Threads with an example ?

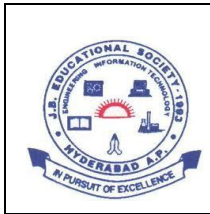
Q4. Q3. Explain State Chart Diagram?

Q5.Explain Common Modelling Techniques in State Chart Diagrams?

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School  
Date:

Signature of Faculty  
Date:



## TUTORIAL SHEETS - VII

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna  
Designation:Assistant Professor  
Department::CSE  
The Schedule for the whole Course / Subject  
is::OOAD

Date: 12-12-15

This Tutorial corresponds to Unit Nos. **VII**

Time: 2:00 P.M

:

Q1. Define Component Diagram? Explain with an example?

Q2. Define Deployment Diagram? Explain with an example?

Q3.Explain Common Modelling Techniques in Component Diagram?

Q4. Q3.Explain Common Modelling Techniques in Deployment Diagram?

Q5.Explain Forward & Reverse Engineering? In Component & Deployment Diagrams

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School  
Date:

Signature of Faculty  
Date:





## TUTORIAL SHEETS - VIII

2015-16

Regulation: R12

### FACULTY DETAILS:

Name of the Faculty:: D. Jyothsna

Designation:Assistant Professor

Department::CSE

The Schedule for the whole Course / Subject  
is::OOAD

Date: 12-12-15

This Tutorial corresponds to Unit Nos. **VIII**

Time: 2:00 P.M

### CASE STUDIES:

- i. Online Book Shopping
- ii. Library Management System
- iii. Online marketing
- iv. E Seva
- v. Online School/ College management
- vi. Online Training Course
- vii. Online Auction System
- viii. Online Voting
- ix. Online Job Searching
- x. Online Mapping

Signature of Dean of School

Date:

Signature of Faculty

Date:



**ILLUSTRATIVE VERBS  
FOR STATING  
INSTRUCTIONAL OBJECTIVES**

2015-16

Regulation: R12

*These verbs can also be used while framing questions for Continuous Assessment Examinations as well as for End – Semester (final) Examinations.*

**ILLUSTRATIVE VERBS FOR STATING GENERAL OBJECTIVES**

Know Comprehend	Understand Apply	Analyze Design	Generate Evaluate
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**ILLUSTRATIVE VERBS FOR STATING SPECIFIC OBJECTIVES:**

**A. Cognitive Domain**


1	2	3	4	5	6
<b>Knowledge</b>	<b>Comprehension Understanding</b>	<b>Application</b> of knowledge & comprehension	<b>Analysis</b> of whole w.r.t. its constituents	<b>Synthesis</b> combination of ideas/constituents	<b>Evaluation</b> judgement

Define	Convert	Change	Breakdown	Categorize	Appraise
Identify	Defend	Compute	Differentiate	Combine	Compare
Label	Describe (a procedure)	Demonstrate	Discriminate	Compile	Conclude
List	Distinguish	Deduce	Distinguish	Compose	Contrast
Match	Distinguish	Manipulate	Separate	Create	Criticize
Reproduce	Estimate	Modify	Subdivide	Devise	Justify
Select	Explain why/how	Predict		Design	Interpret
State	Extend	Prepare		Generate	Support
	Generalize	Relate		Organize	
	Give examples	Show		Plan	
	Illustrate	Solve		Rearrange	
	Infer			Reconstruct	
	Summarize			Reorganize	
				Revise	

**B. Affective Domain**

**C. Psychomotor Domain (skill development)**

Adhere	Resolve	Bend	Dissect	Insert	Perform	Straighten
Assist	Select	Calibrate	Draw	Keep	Prepare	Strengthen
Attend	Serve	Compress	Extend	Elongate	Remove	Time
Change	Share	Conduct	Feed	Limit	Replace	Transfer
Develop		Connect	File	Manipulate	Report	Type
Help		Convert	Grow	Move precisely	Reset	Weigh
Influence		Decrease	Handle	Operate	Run	
Initiate		Demonstrate	Increase	Paint	Set	

	<b>LESSON PLAN</b> <b>Unit-1</b>	2015-16
		Regulation: R12

Name of the Faculty: D. Jyothsna

Subject::OOAD

Subject

Code::6756028


**Unit: I**

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	Importance of modeling, principles of modelling	50 Min	<b>The Unified Modelling Language for Designer The Ultimate Guide</b>	Black Board
2	OO modeling,	50 Min	"	"
3	Conceptual model of the UML	50 Min	"	"
4	Architecture	50 Min	"	"
5	Software development life cycle	50 Min	"	"

On completion of this lesson the student shall be able to (Outcomes)

1. Know abouts what is Modelling ?
2. Importants of modelling ?
3. Conceptual Model & Architecture
4. Software Development Life Cycle

	<b>ASSIGNMENT</b> <b>Unit-I</b>	2015-16
		Regulation: R12

**Assignment / Questions**

Q1. Define UML ? Explain its Important ?

Q2. Explain Principles of UML ? Explain Conceptual Model of UML ?

Q3. Explain Architecture of UML ?

Q4. Explain Software Development Life Cycle of UML ?

Q5. Explain The Following

- v) Structural diagrams
- vi) Behavioral Diagram
- vii) Relationships
- viii) Common Mechanism

**Signature of Faculty**

Note: Mention for each question the relevant objectives and outcomes.



**LESSON PLAN  
Unit-II**

2015-16

Regulation: R12

Name of the Faculty: D. Jyothsna

Subject::OOAD

Subject Code::6756028

**Unit: II**

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	Basic Structural modeling	50 Min	The Unified Modelling Language for Designer The Ultimate Guide	Black Board
2	Classes	"	"	"
3	Relationships	"	"	"
4	Common mechanisms	"	"	"
5	Diagrams	"	"	"
6	Advanced classes	"	"	"
7	Advanced relationships	"	"	"
8	Interfaces,	"	"	"
9	Types and roles,	"	"	"
10	Packages	"	"	"

On completion of this lesson the student shall be able to

1. To learn about the Advance Classess
2. To learn about the Advance relationships
3. Common mechanism
- 4 To learn about the Interfaces,Types , Roles & Packages.



**ASSIGNMENT  
Unit-II**

2015-16

Regulation: R12

**Assignment / Questions**

Q1. Define Class? Explain with an example?

Q2. Explain common mechanism in classes?

Q3. Define Relationship? Explain about various relationships?

Q4. Explain Common mechanism in relationships?

Q5. Explain the following

- i) Advance in classes
- ii) Advance in relationships
- iii) Interfaces
- iv) Types & role in Association Relationship
- v) Packages

**Signature of Faculty**

Note: Mention for each question the relevant objectives and outcomes.



**LESSON PLAN**  
**Unit-III**

2015-16

Regulation: R12

Name of the Faculty: D. Jyothsna

Subject: OOAD

Subject  
Code:  
6756028

**Unit:III**

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	Class and object Diagrams	50 Min	The Unified Modelling Language Guide	Black Board
2	Terms and Concepts	"	"	
3	Modelling Techniques for Class Diagrams	"	"	
4	Modelling Techniques for Object Diagrams	"	"	
5	Modelling simple collaborations	"	"	
6	Modelling Logical Database Schema	"	"	
7	Forward and Reverse Engineering	"	"	
8	Modelling Object Structures	50 Min	"	Black Board

On completion of this lesson the student shall be able to (Outcomes)

1. Learn about the class diagram
2. Learn about the object diagram
3. Learn about the class diagram common modelling techniques
4. Learn about the object diagram common modelling techniques



**ASSIGNMENT  
Unit-III**

2015-16

Regulation: R12

**Assignment / Questions**

Q1. Define Class Diagram? Explain with an example?

Q2. Define Object Diagram? Explain with an example?

Q3.Explain Common Modelling Techniques in Class Diagram?


Q4. Q3.Explain Common Modelling Techniques in Object Diagram?

Q5.Explain Forward & Reverse Engineering ? In class & Object Diagrams?

**Signature of Faculty**

Note: Mention for each question the relevant objectives and outcomes.



	<b>LESSON PLAN</b> <b>Unit-IV</b>	2015-16
		Regulation: R12

Name of the Faculty: D. Jyothsna

Subject: OOAD

Subject  
Code: 6756028

Unit :IV

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	Interactions,	50 Min	<b>The Unified Modelling Language Guide</b>	Black Board
2	Interaction diagrams Sequence Diagram	"	"	"
3	Collaboration Diagram	"	"	"
4	Modelling Techniques of Sequence Diagram	"	"	"
5	Modelling Techniques of Collaboration Diagram	"	"	"

On completion of this lesson the student shall be able to (Outcomes)

1. Learn about the Interactions
2. Learn about the Interactions Diagrams
3. Learn about the Sequence Diagram Common Modelling Techniques
4. Learn about the Collaboration Diagram Common Modelling Techniques



**ASSIGNMENT  
Unit-IV**

2015-16


Regulation: R12

**Assignment / Questions**

- 1) Define Interaction ?
- 2) Explain with an example sequence diagram?
- 3) Explain with an example collaboration diagram?
- 4) Explain with an example common modelling techniques in sequence diagram?
- 5) Explain with an example common modelling techniques in collaboration diagram?

**Signature of Faculty**

Note: Mention for each question the relevant objectives and outcomes.

	<b>LESSON PLAN</b> <b>Unit-V</b>	2015-16
		Regulation: R12

Name of the Faculty:

Subject

Subject

Code::

6756028

**Unit::V**

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	Use cases	50 Min	<b>The Unified Modelling Language Guide</b>	Black Board
2	Terms and Concepts	50 Min	"	Black Board
3	Usecases and Flow of Events	"	"	"
4	Organizing Usecases	"	"	"
5	Modeling techniques for usecase diagrams	"	"	"
6	Usecase Diagrams	"	"	"
7	Modeling techniques of activity diagrams	"	"	"
8	Activity Diagrams	50 Min	"	Black Board

On completion of this lesson the student shall be able to (Outcomes)

1. Learn about the use cases

2. Learn about the usecase diagram

3. Learn about the Activity diagram

4 Learn about the common modelling techniques in usecase & activity diagram



**ASSIGNMENT  
Unit-V**

2015-16


Regulation: R12

**Assignment / Questions**

- 1) Explain about the use cases with an example?
2. Explain about the usecase diagram?
3. Explain about the Activity diagram?
- 4 Explain about the common modelling techniques in usecase & activity diagram?

**Signature of Faculty**

Note: Mention for each question the relevant objectives and outcomes.

	<b>LESSON PLAN</b> <b>Unit-VI</b>	2015-16
		Regulation: R12

Name of the Faculty:

Subject

Subject

Code::

6756028

**Unit::VI**

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	Events and signals	50 Min	<b>The Unified Modelling Language Guide</b>	Black Board
2	State machines	50 Min	"	Black Board
3	Process & threads	50 Min	"	Black Board
4	Time & space	50 Min	"	Black Board
5	State chart diagrams	50 Min	"	Black Board
6	Transitions	50 Min	"	Black Board

On completion of this lesson the student shall be able to (Outcomes)

1. Learn about the Events & Signals In UML.
2. Learn about the State Machine In UML.
3. Learn about the Process & Threads In UML.
4. Learn about the Time & Space In UML.
5. Learn about the State Chart Diagram In UML.



**ASSIGNMENT**  
**Unit-VI**

2015-16


Regulation: R12

**Assignment / Questions**

1. Explain about the Events & Signals In UML.
2. Explain about the State Machine In UML.
3. Explain about the Process & Threads In UML.
4. Explain about the Time & Space In UML.
5. Explain about the State Chart Diagram In UML.

**Signature of Faculty**

Note: Mention for each question the relevant objectives and outcomes.

	<b>LESSON PLAN</b> <b>Unit-VII</b>	2015-16
		Regulation: R12

Name of the Faculty:

Subject

Subject

Code::

6756028

**Unit:VII**

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	Architectural Modeling	50 Min	<b>The Unified Modelling Language for Designer The Ultimate Guide</b>	Black Board
2	Component	"	"	"
3	Terms and Concepts	"	"	"
4	Components and Classes	"	"	"
5	Components and Interfaces	"	"	"
6	Deployment	50 Min	"	Black Board
7	Component diagrams	50 Min	"	Black Board
8	Deployment diagrams	50 Min	"	Black Board

On completion of this lesson the student shall be able to

1. Learn about the Software & Hardware Components
2. Learn about the Nodes & Relationships used in Deployment Diagram
3. Learn about the Component Diagram & its common modelling techniques
4. Learn about the Deployment Diagram & its common modelling techniques



**ASSIGNMENT**  
**Unit-VII**

2015-16

Regulation: R12

**Assignment / Questions**

1. Explain about the Software & Hardware Component s
2. Explain about the Nodes & Relationships used in Deployment Diagram
3. Explain about the Component Diagram & its common modelling techniques?
4. Explain about the Deployment Diagram & its common modelling techniques?

**Signature of Faculty**

Note: Mention for each question the relevant objectives and outcomes.





**LESSON PLAN**  
**Unit-VIII**

2015-16

Regulation: R12

Name of the Faculty: G Sreenivasulu

Subject Web Technologies

Subject  
Code::6756028


**Unit VIII**

**INSTRUCTIONAL OBJECTIVES:**

Session No	Topics For Case Studies	Time	Ref	Teaching Method
1	Online Book Shopping	50 Min	Internet+Books	Black Board + Note Book
2	Library Management System	50 Min	Internet+Books	Black Board + Note Book
3	Online marketing	50 Min	Internet+Books	Black Board + Note Book
4	E Seva	50 Min	Internet+Books	Black Board + Note Book
5	Online School/ College management	50 Min	Internet+Books	Black Board + Note Book
6	Online Training Course	50 Min	Internet+Books	Black Board + Note Book
7	Online Auction System	50 Min	Internet+Books	Black Board + Note Book
8	Online Voting	50 Min	Internet+Books	Black Board + Note Book
9	Online Job Searching	50 Min	Internet+Books	Black Board + Note Book
10	Online Mapping	50 Min	Internet+Books	Black Board + Note Book

On completion of this lesson the student shall be able to

- 1 Student can able to design about the case study “ Online Book Shopping”
- 2 Student can able to design about the case study “Library Management System”
- 3 Student can able to design about the case study “Online marketing”
- 4 E Seva”
- 5 Student can able to design about the case study “Online School/ College management”
- 6 Student can able to design about the case study “Online Training Course”
- 7 Student can able to design about the case study “Online Auction System”
- 8 Student can able to design about the case study “Online Voting”
- 9 Student can able to design about the case study “Online Job Searching”
- 10 Student can able to design about the case study “Online Mapping”

	<b>ASSIGNMENT</b> <b>Unit-VIII</b>	2015-16
		Regulation: R12

**Assignment / Questions**

- 1) All UML Diagram design in there respective Case Studies.

**Signature of Faculty**

Note: Mention for each question the relevant objectives and outcomes.