OBJECT ORIENTED ANALYSIS AND DESIGN

Semester	Subject Code	Category	Lecture Hrs		Theory Hrs		Practical		Credits
			Per week	Per Sem	Per week	Per Sem	Per week	Per Sem	
II		ELECTIVE -II	5	75	5	75	0	0	5

COURSE OBJECTIVE

➢ The course provides Understand the importance and basic concepts of object oriented modelling, Specify, analyze and design the use case driven requirements for a particular system.

COURSE OUTCOME

Successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level (K1-K4)
CO1	Analyse, design, document the requirements through use case driven approach.	K2
CO2	Identify, analyse, and model structural and behavioral concepts of the system	K3
CO3	Design the process into various scenarios and applications	K3
CO4	Apply the concepts of architectural design for deploying the code for software.	K4
CO5	Continuous testing of process and debugging principles	K4

Knowledge Level – K1-Remember, K2- Understand, K3-Apply, K4-Analyze

MAPPING WITH PROGRAMME OUTCOME

COS	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	S	M
CO2	S	S	M	S	S	M
CO3	S	S	S	M	S	S
CO4	S	S	S	S	M	S
CO5	S	S	S	S	M	S

S- Strong; M- Medium; L- Low

UNIT I – OVERVIEW OF OOS DEVELOPMENT   15 Hours

Object Orientation – System development – Review of objects – inheritance – Object relationship – Dynamic binding – OOSD life cycle – Process – Analysis – Design – prototyping – Implementation – Testing- Overview of Methodologies.

UNIT II – OBJECT ORIENTED METHODOLOGIES   14 Hours

OMT – Booch methodology, Jacobson methodology – Patterns – Unified approach – UML – Class diagram – Dynamic modeling.

UNIT III – USECASE MODELS   15 Hours

Use case model – Creation of classes – Noun phrase approach – responsibilities – Collaborators – Object relationships – Super-Sub class – Aggregation.

UNIT IV – OBJECT ORIENTED DESIGN   16 Hours

Object oriented Design axioms – Class visibility – Refining attributes – Methods – Access layer – Object oriented DBMS – Table – class mapping view layer

UNIT V – SOFTWARE QUALITY ASSURANCE   15 Hours

Quality assurance testing – Inheritance and testing – Test plan – Usability testing User satisfaction – Testing.

Distribution of Marks: Theory 95% and Problem 5%

TEXTBOOKS

S. NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1	Ali Bahrami	Object Oriented Systems Development	McGraw Hill International Edition	1999

REFERENCEBOOK

S. NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1	Grady Booch	Object Oriented Analysis and Design	Person Education-2nd Edition	2011
2	Carol Britton and Jill Doake	Object Oriented System Development: A Gentel Introduction	Paperback	2012
3	David West and Brett McLaughlin	Head First Object Oriented Analysis and Design	Kindle Edition	2011

WEB RESOURCES

1. https://www.tutorialspoint.com/object_oriented_analysis_design/
2. https://www.startertutorials.com/uml/category/ooad

TEACHING METHODOLOGY

- Class room teaching & Group discussions
- Seminars & Smart Class room
- Chart/Assignment & Simulation Model

SYLLABUS DESIGNER

- Mrs.G.SANGEETHA LAKSHMI, Assistant professor & HOD, Dept of Computer Science & Applications
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