



# VEMANA INSTITUTE OF TECHNOLOGY

Koramangala, Bengaluru - 34

## Department of Computer Science & Engineering



### Course Outcomes & CO-PO-PSO Mapping and Justification

Subject	SYSTEM SOFTWARE & COMPILER DESIGN	15CS63
<b>COURSE OUTCOMES:</b>		
CO No.	On completion of this course, students will be able to:	Cognitive Level
15CS63.1	Understand the system software such as assemblers and microprocessors.	L2
15CS63.2	Understand the concept of loader and linker.	L2
15CS63.3	Understand lexical analyzer and the usage of lex and yacc tools.	L2
15CS63.4	Develop top down and bottom up parsers.	L3
15CS63.5	Understand SDD, SDT, intermediate code generation and machine code generation.	L2

### CO-PO-PSO MAPPING

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
15CS63.1	2	-	-	-	-	-	-	-	-	-	-	2	-	2	-
15CS63.2	2	-	-	-	-	-	-	-	-	-	-	2	-	2	-
15CS63.3	2	1	-	-	2	-	-	-	-	-	-	2	-	2	-
15CS63.4	2	2	-	-	-	-	-	-	-	-	-	2	-	2	-
15CS63.5	1	-	-	-	-	-	-	-	-	-	-	2	-	2	-
<b>15CS63</b>	<b>1.8</b>	<b>1.5</b>	-	-	<b>2.0</b>	-	-	-	-	-	-	<b>2.0</b>	-	<b>2.0</b>	-

**CO-PO-PSO JUSTIFICATION**

<b>CO No.</b>	<b>PO/PSO</b>	<b>CL</b>	<b>Justification</b>
15CS63.1	PO1	2	Apply engineering Knowledge moderately to design assemblers for different architectures.
	PO12	2	Information acquired from the design of assembler is moderately applicable for lifelong learning in the context of system software development.
	PSO2	2	Acquired knowledge helps to provide novel approaches to design of system software.
15CS63.2	PO1	2	Apply engineering Knowledge moderately to design different loaders and linkers.
	PO12	2	Information acquired from the design of loader and linker is moderately applicable for lifelong learning in the context of system software development.
	PSO2	2	Acquired knowledge helps to provide novel approaches to design of system software.
15CS63.3	PO1	2	Apply engineering Knowledge moderately for different phases of compilation.
	PO2	1	Slightly maps as students can able to solve problems in lexical analysis.
	PO5	2	Moderately maps as students will be able to choose appropriate software tools to conduct the experiments using lex and yacc.
	PO12	2	Information acquired from the compilation phases which is moderately applicable for lifelong learning in the context of Compiler Construction.
	PSO2	2	Having the knowledge about the compiler construction tools helps strongly in the study and design of compiler.
15CS63.4	PO1	2	Knowledge of Ambiguities in the context free Grammar helps students moderately for analyzing the problems in parsing.
	PO2	2	Identifies mathematical algorithmic knowledge that helps moderately to analyze given problem for removing ambiguities in the context free Grammar.
	PO12	2	Moderately maps as student can acquire the information from bottom up and top down evaluation for lifelong learning in compilation.
	PSO2	2	Information acquired from the fundamentals of parsing leads moderately to implement the intermediate code.

15CS63.5	PO1	1	Apply engineering fundamentals slightly to learn about the Intermediate code generation and machine code generation in compilation process.
	PO12	2	Moderately maps as students can understand and implement different types Intermediate Representation of code used for generating target code.
	PSO2	2	Information acquired from the fundamentals of intermediate representation leads moderately for implementation of target code.

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