UNIT–V

S.No		Questions	BT	CO	PO
Part–A(Short Answer Questions)					
1		Define code optimization.	L1	CO5	PO1, PO2, PO5
2		What is data-flow analysis?	L2	CO5	PO1, PO2
3		Define constant propagation.	L2	CO5	PO1, PO2
4		What is dead code elimination?	L2	CO5	PO1, PO2
5		Define common subexpression elimination.	L2	CO5	PO1, PO2
6		What is a loop in flow graph?	L1	CO5	PO1, PO2
7		Define induction variable	L2	CO5	PO1, PO2
8		What is strength reduction?	L2	CO5	PO3, PO2
9		Define partial redundancy elimination.	L2	CO5	PO2, PO3
10		What is copy propagation?	L1	CO5	PO1, PO2
11	a)	Explain the principal sources of optimization.	L3	CO5	PO2, PO3, PO5
	b)	Discuss the foundations of data-flow analysis.	L4	CO5	PO2, PO4, PO5
12	a)	Discuss constant propagation with examples.	L4	CO5	PO2, PO3, PO5
	b)	Describe partial redundancy elimination techniques.	L5	CO5	PO2, PO3, PO4, PO5
13	a)	Analyze loops in flow graphs and loop optimization methods.	L4	CO5	PO2, PO3, PO4, PO5
	b)	Discuss machine-independent optimization techniques.	L5	CO5	PO2, PO4, PO5

14	a)	Discuss iterative data-flow analysis algorithms.	L5	CO5	PO2, PO3, PO5
	b)	Evaluate optimized intermediate code using compiler optimization	L5	CO5	PO2, PO3, PO5
15	a)	Discuss available expression analysis in detail.	L4	CO5	PO2, PO4, PO5
	b)	Validate machine-independent optimization strategies used in modern compilers.	L5	CO5	PO2, PO3, PO4,PO5