Roll No...................................

Name.....................................

VI Semester B. Tech Second Series Examination April-2020

CS 304 COMPILER DESIGN

Time: - 2 Hours   **Maximum Marks: 50**

Answer all questions

Q.No	Questions	Marks	CO	BTL
1	Explain about SDD. State its difference from SDT.	5	CO4	1
2	Find the post-fix expression of $2\uparrow3*5 / (2+4)$ using the grammar E→ E/T | E*T | E ↑ T | N T→ (N+N) | N N→ 2 |3 | 4| 5	5	CO4	2
3	Give an example of decorated parse tree for a grammar of your choice	5	CO4	3
4	Construct AST for $x* y - 5 + z$	5	CO5	2
5	Discuss the need and significance of run time storage management.	5	CO5	2
6	Implement the given expression using quadruples, triples and indirect triples? P=a + b × c / e ↑ f + b × c	5	CO5	2
7	Explain the scope of code optimization. Give the optimized version of the following loop a,b,c = 10,20,30 for I in range (10) c=a+b d=a-b e=a*b s*=i	5	CO6	1
8	Generate the target code using simple code generator of the expression d=(a+b) + (a-c) + (a-c)	5	CO6	2
9	Explain functional preserving transforms, its significance and type with illustration?	5	CO6	2
10	Explain the design issues of a code generator	5	CO6	2

All the Best