

Comp

College of Engineering, Pune
End Semester Examination-Nov-Dec-2012

Course- B.Tech.
Branch- Computer Engineering
Semester- V

CT-304 / System Programming

Date - / /2012
Time -

Duration : 3 hrs.
Max. Marks : 50

Instructions:

1. Answer **all** questions.
2. **Neat diagrams** must be drawn wherever necessary.
3. **Black figures** to the right indicate full marks.
4. Assume suitable data, **if necessary**.

			Marks
Q. 1	A	What are different language processing activities?	2
	B	What is forward reference problem? How is it handled in two-pass assembler? Explain the working of two-pass assembler with the help of neat flowchart.	8
Q. 2	A	How is macro defined and called? Explain the concept of macro definition within a macro.	5
	B	What are main functions of loader? Explain any two loader schemes with advantages and disadvantages.	5
Q. 3	A	What is dynamic loading ? List advantages of overlay structure.	3
	B	Distinguish between DFA and NFA.	3
	C	"Direct linking loader is a general re-locatable loader". Justify.	4
Q. 4	A	Differentiate between Top-down and Bottom-up parsing. Explain each	5

		of them with suitable example.	
	B	What is the need of DLL? What is the use of callback function in DLL?	5
Q. 5		Write a short note on following (Any 4)	10
	A	Linkage editor	
	B	Lexical analysis	
	C	Recursive macro expansion	
	D	YACC	
	E	Dynamic linking	