

LNCT UNIVERSITY

I- Mid Semester Exam

Subject Name (CS-404)

CS-404 Compiler Design.

Time 1:30 Hrs

Max. Marks 20

Note: All questions are compulsory and have internal choice.

Ques.1(a): Explain in detail the various phases of compilers with an example. (CO1- 4)

OR

Ques.1(b): Write a short note on bootstrapping. (CO1-4)

Ques .2(a): find first & follow for the following grammar

$E \rightarrow E + T \mid T$

$T \rightarrow T * F \mid F$

$F \rightarrow (E) \mid ID$ (CO1-4)

OR

Ques. 2.(b): What is a syntax directed definition in compiler design? (CO1-4)

Ques.3(a): what are the three storage allocation strategies in compiler design

OR

Ques.3(b): What is an activation record in compiler design? (CO1-4)

Ques.4(a): write quadruples, triples, and indirect triples for the expression : $(a+b) * (c+d) - (a+b+c)$

(CO2-4)

OR

Ques.4(b): What is DAG ,design a DAG for $a+b*c+d+b*c$ (CO2-4)

Ques. 5(a): What is peephole optimization in compiler design? (CO2-4)

OR

Ques.5(b): Short note on (A) Copy Propagation (B) Dead code elimination (CO2-4)