

# Government College of Engineering, Amravati

(An Autonomous Institution of Government of Maharashtra)

Class Test - II (W-2015)

Course Name – System Software

Course Code – CSU701

[5m each]

Solve any three:

Q.1] Consider the grammar and find whether the it is CLR(1) grammar or not?  $S \rightarrow AA$      $A \rightarrow aA$      $A \rightarrow b$

Q.2] A) Write & Explain types of attribute with example.

B) Give semantic rule, annotated parse trees for the SDD of production using dependency graph for the expression,  $5+3*4$  (Production:  $L \rightarrow E$  return     $E \rightarrow E1+T$      $E \rightarrow T$      $T \rightarrow T1*F$      $T \rightarrow F$      $F \rightarrow (E)$      $F \rightarrow \text{digit}$ )

Q.3] A) Write down the intermediate code for given example:    If  $x+2 > 3*(y-1)+4$  then  $z:=0$     (ii)  $(a+b) * (a+b+c)$   
B) Draw syntax tree & DAG for given example: (i) if  $(x>0)$  then  $x:=3*(y+1)$  else  $y:=y+1$

Q.4] What is the control flow and Boolean expression for intermediate code generation?