



Enrolment No. _____

HASMUKH GOSWAMI COLLEGE OF ENGINEERING, VAHELAL

MID SEMESTER EXAMINATION, SEPTEMBER-2016

Subject Code: 2170701

Date: 27th Sept 2016

Subject Name: Compiler Design

Sem: 7TH

Time: 10:00 TO 10:50

Total Marks: 20

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

QUE.1 (A) Explain the phases of compiler. 3

(B) Draw Transition diagram for unsigned operator. 3

QUE.2 (A) Construct a DFA without constructing NFA for following regular expression $(a | b)^*abb\#$. 3

(B) Construct predictive parsing table LL(1) for following grammars: 4

$S \rightarrow AaAb | BbBa$

$A \rightarrow \epsilon$

$B \rightarrow \epsilon$

OR

(B) Considering the following grammar, parse the input string **int id,id; using shift reduce parser: 4**

$S \rightarrow TL;$

$T \rightarrow \text{int} | \text{float}$

$L \rightarrow L, \text{id} | \text{id}$

QUE.3 (A) Explain Error Recovery strategy. 3

(B) Construct the LR(1) parsing table for the following grammars: 4

$S \rightarrow CC$

$C \rightarrow aC$

$C \rightarrow d$

OR

(A) What is Three Address Code? Explain triple, quadruple, indirect triples with example. 3

(B) Construct the SLR parsing table for the following grammars: 4

$S \rightarrow SS$

$S \rightarrow a$

$S \rightarrow \epsilon$

***** ALL THE BEST *****