<u>Jodhpur Institute of Engineering & Technology</u> <u>I Mid Term Examination-2009</u> <u>Subject:-Compiler Construction</u> (7CS1)

Time Duration: 90 Min.

Max. Marks:-10

Note: All questions carry equal marks.

- **Q1.**Explain phases of compiler for given expression: x = y + z * 10
- **Q2.**Explain Buffer Pair and Sentinels input buffering techniques.
- **Q3.**Calculate FIRST and FOLLOW for each nonterminal in given grammar: $S \rightarrow (L) \mid a$ $L \rightarrow L$, $S \mid S$ Also construct Predictive Parsing Table for given grammar.

OR

- **Q3.** Explain Left Recursion and Left factoring with examples.
- **Q4.**Explain Operator Precedence parsing, also write algorithm for Operator Precedence Parser.

OR

Q4.What is handle and handle pruning? Give the reduction steps of expression "id+id*id" with the help of Shift Reduce Parser for given grammar:

 $E \rightarrow E + E$ $E \rightarrow E * E$ $E \rightarrow (E)$ $E \rightarrow id$