

Dr. Yugal

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT  
(T-1 Examination Feb-2019)  
B.Tech. 6<sup>TH</sup> Semester

COURSE CODE: 10B11CI612

MAX. MARKS: 15

COURSE NAME: COMPILER DESIGN

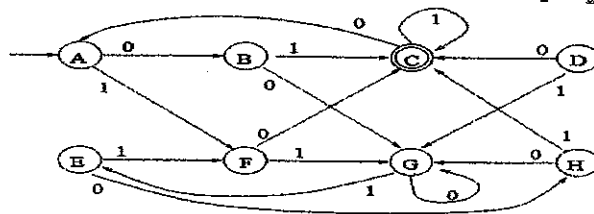
COURSE CREDITS: 4

MAX. TIME: 1 Hrs

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

Q.1 [CO 1] What are the different phases of compiler? Explain with the help of diagram. (3)

Q.2 [CO 1] Find the equivalent minimized automata to corresponding finite automata. (3)



Q.3 [CO2] what is lexeme, token and pattern? Evaluate the tokens from the given code. (3)

```
Float limitedSquare(x) float x
{
/* returns x-square, but never more than 100*/
Return(x <= 10.0 || x >= 10.0) ? 100 : x*x;
}
```

Q.4 [CO 3] Prove that the following grammar is LL(1) or not using predictive parsing table. (3)

```
S → T
T → LB | C array
L → long | ε
C → B | ε
B → real | integer
```

Q.5 [CO 3] Find the First() and Follow() sets for following grammar. (3)

```
S → a|ab|abc|abcd|abcde
```