

COMPILER DESIGN

1.

$$\begin{aligned} S &\rightarrow aA \mid *S \\ A &\rightarrow +S \mid (S \mid \varepsilon \end{aligned}$$

Set { +, (} will be in the

- | | |
|----------------|----------------|
| (a) First (A) | (b) First (E) |
| (c) Follow (E) | (d) Follow (A) |

2. Which of the following is True?

- (a) Handle of a string is a sub string that matches left hand side of production
- (b) RR conflicts never occur in LALR(1)
- (c) SR conflicts occur in LALR(1)
- (d) None of these

3. If attribute can be evaluated in depth-first order then definition is

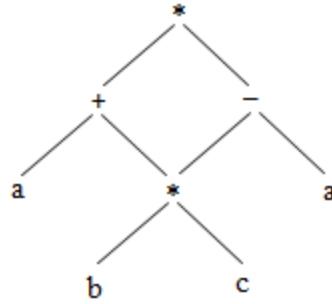
- | | |
|----------------------|--------------------|
| (a) S – attributed | (b) L – attributed |
| (c) Both (a) and (b) | (d) None of these |

4. $S \rightarrow Sa \mid b$

Which of the following is True?

- (a) There will be SR conflict during parsing
- (b) There will be RR conflict during Parsing
- (c) There will be both conflict
- (d) There will be no conflict

5. The equivalent expression for the DAG is



- (a) $((a + b) * c) * (b * (c - a))$
 (c) $(a + (b * c)) * ((b * c) - a)$

- (b) $a + (b * c - a)$
 (d) $a * (a + b * c) - a$

6.

$P \rightarrow P\alpha Q \mid Q$
 $Q \rightarrow Q\beta R \mid R$
 $R \rightarrow \text{num}$

If $2\alpha 3\alpha 4\beta 1\alpha 2\beta 1$ is evaluated to 18, then which of the following is the correct value for α and β ?

- (a) $+, *$ (b) $+, -$
 (c) $*, -$ (d) $-, +$

7. The above transition rule used to evaluate $7\alpha 4\beta 2\alpha 2\beta 1$. The result will be

- (a) 10 (b) 14
 (c) 17 (d) 20