

Unit:-4

1. What is PDA? Explain with a neat sketch and also explain how to represent graphically?
2. Design a PDA that accepts the language $L = \{ \omega \in \omega^T / \omega \in \{0,1\}^* \}$ by final state?
3. Explain the procedure for converting PDA of final state to empty stack and vice versa with an example?
4. Convert the following CFG to PDA by empty stack

$$S \rightarrow 0AA$$

$$A \rightarrow 0S \mid 1S \mid 0$$

Test 010^4 is accepted or not.

5. What is DPDA Give an example?
6. Design a PDA that accepts the language $L = \{ \omega \in \{a,b\}^* / n_a(\omega) = n_b(\omega) \}$ by empty stack. Also convert it to CFG.