

# Vending Machine

We have a task where we have to design a synchronous logic control unit of vending machine .

## Conditions of that systems are :-

- 1.) The Machine can take only two types of coins , Rs. 5 and Rs . 10 .
- 2.) It delivers the Product when it receives Rs . 15 by giving an output (out) 1 .
- 3.) If Machine receives Rs. 20 , then it gives the product (out = 1) with the change of Rs. 5( Change = 1) .

ASM Chart of the Vending Machine is as follows :-

