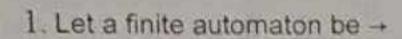
## Quiz01(65\_B\_CSE228)

## Time: 40 minute



- Q = {a, b, c}.
- $\Sigma = \{0, 1\},$
- q<sub>0</sub> = a,
- F = {c}, and
- Transition function δ as shown by the following table –

\*\* 4163

State 0 1

a

a b

b

a

\*c

b c

Find its graphical representation. It is DFA or NFA? (3)

- 2. Differentiate between DFA and NFA. (3)
- 3. Design an NFA for a language that accept all strings over {0,1} in which the second last symbol is always '1'. Then convert it to it's equivalent DFA. (5)
- 4. Prove that an NFA accepting strings that end with 01. (4)