



PES UNIVERSITY, Bangalore
(Established under Karnataka Act No. 16 of 2013)
Department of Computer Science & Engineering

Automata Formal Languages & Logic

Question Bank - Unit 1

NFA/ λ -NFA to DFA

Questions from the Prescribed Textbook

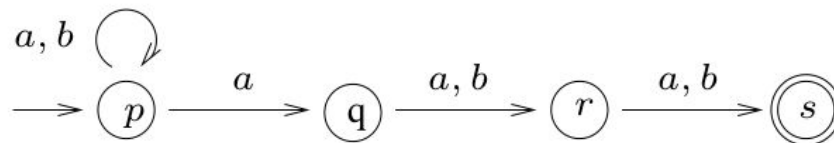
Topic	Exercise No.	Question No's
NFA/ λ -NFA to DFA	2.3	Q2 - Q5

Extra Questions

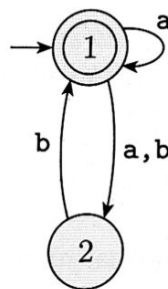
1) What happens if we apply the method of subset construction to a DFA instead of an NFA?

2) Convert the following NFA to DFA:

a)

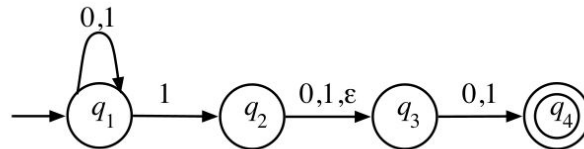


b)

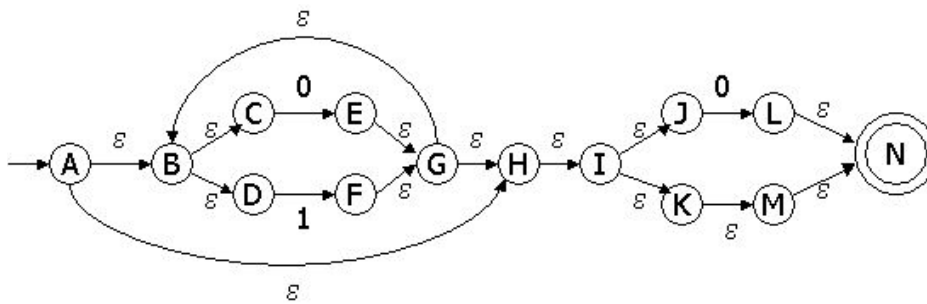


Automata Formal Languages & Logic

c)



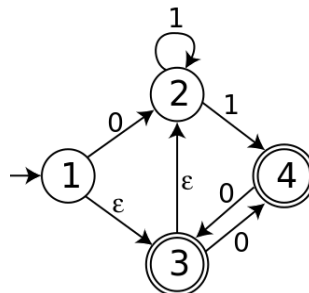
d)



e)

	a	b	ϵ
$\rightarrow 1$	\emptyset	\emptyset	$\{2,5\}$
2 F	$\{3\}$	\emptyset	\emptyset
3	\emptyset	$\{4\}$	\emptyset
4	\emptyset	$\{2\}$	\emptyset
5	$\{5\}$	\emptyset	$\{6\}$
6 F	\emptyset	$\{7\}$	\emptyset
7	$\{6\}$	\emptyset	\emptyset

f)





PES UNIVERSITY, Bangalore
(Established under Karnataka Act No. 16 of 2013)
Department of Computer Science & Engineering

Automata Formal Languages & Logic

g)

