Question 9

(i) (a) (1)

$\underset{1}{1}$	0	1		
$\underset{1}{2}$	0	1		
2	$\underset{1}{0}$	1		
2	0	$\underset{2}{1}$		
2	0	$\underset{2}{0}$		
2	0	0	$\underset{2}{0}$	

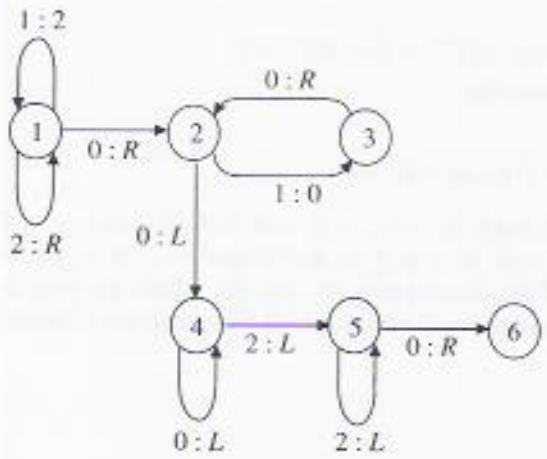
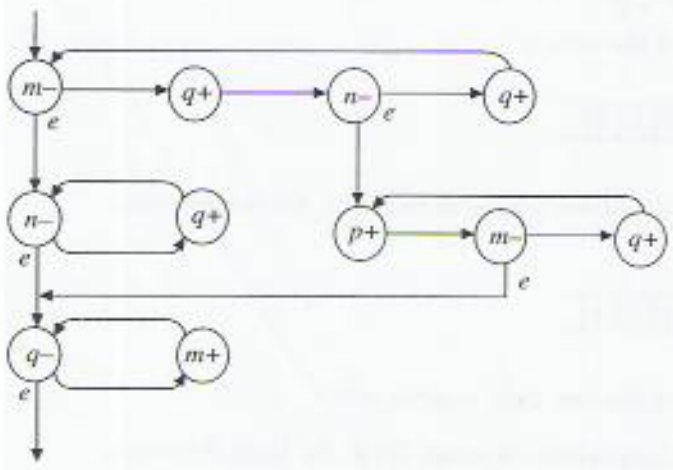
The head moves right forever

(2)

1	$\underset{1}{1}$	0	1	
	$\underset{2}{2}$	1	0	1
	2	$\underset{1}{1}$	0	1
	2	$\underset{2}{2}$	0	1
	2	2	$\underset{1}{0}$	1
	2	2	0	$\underset{3}{1}$
	2	2	0	$\underset{4}{0}$
	2	2	0	0 $\underset{3}{0}$
	2	2	0	$\underset{3}{0}$
	2	2	$\underset{3}{0}$	
	2	$\underset{3}{2}$		

Halts in the wrong position

(b)



(ii)