



10.a) Define: i) b) Find the s	State ii) State transition m	State variables atrix for the follo	iii) State space owing matrix, A =	representation. = $\begin{bmatrix} 1 & 0 \\ -1 & 1 \end{bmatrix}$.		
11. The state \dot{x}	7 y = 114 ' is the output an equation of a lin $X = \begin{bmatrix} 0 & 5 \\ -1 & -2 \end{bmatrix} X + \frac{1}{2}$	d 'u' is the input. ear-time invarian $\begin{bmatrix} 1\\1 \end{bmatrix}$ r and $y = \begin{bmatrix} 1 \end{bmatrix}$	t system is given	as,		
Find the t	rransfer function	and draw the stat	e diagram.		[10]	
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