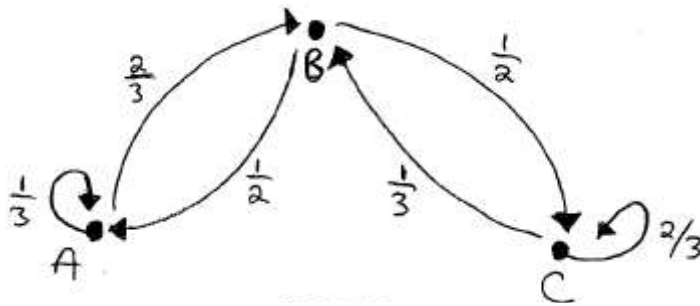


1. A
2. D
3. A
4. B
5. E
6. D
7. B
8. C
9. A
10. (a) Transition diagram



(b) Irreducible

(c) Regular

11.  $P_2 = [0.6112 \quad 0.3888]$

12. 0.6125

13a. 
$$T = \begin{matrix} & \begin{matrix} B & S & F \end{matrix} \\ \begin{matrix} B \\ S \\ F \end{matrix} & \begin{bmatrix} 0.75 & 0.15 & 0.10 \\ 0.05 & 0.75 & 0.20 \\ 0.15 & 0.05 & 0.80 \end{bmatrix} \end{matrix}$$

13b. 
$$P_1 = \begin{bmatrix} 0.34 & 0.44 & 0.22 \end{bmatrix}$$

14.  $P = \left[ \frac{1}{3} \quad \frac{2}{9} \quad \frac{4}{9} \right]$