

Sol

$X = 0, 1, 2, 3, 4$ and 5

$$P(X) = \frac{6}{36}, X=0$$

$$P(X) = \frac{10}{36}, X=1$$

$$P(X) = \frac{8}{36}, X=2$$

$$P(X) = \frac{6}{36}, X=3$$

$$P(X) = \frac{4}{36}, X=4$$

$$P(X) = \frac{2}{36}, X=5$$

$$P(X) = 0, \text{ o.w.}$$

The C.d. f. of X .

$$F(x) = \begin{cases} 0 & ; x < 0 \\ \frac{6}{36} & ; 0 \leq x < 1 \\ \frac{16}{36} & ; 1 \leq x < 2 \\ \frac{24}{36} & ; 2 \leq x < 3 \\ \frac{30}{36} & ; 3 \leq x < 4 \\ \frac{34}{36} & ; 4 \leq x < 5 \\ 1 & ; x \geq 5 \end{cases}$$

$$S = \{(1,1), (1,2), (1,3), (1,4), (1,5), (1,6), (2,1), (2,2), (2,3), (2,4), (2,5), (2,6), (3,1), (3,2), (3,3), (3,4), (3,5), (3,6), (4,1), (4,2), (4,3), (4,4), (4,5), (4,6), (5,1), (5,2), (5,3), (5,4), (5,5), (5,6), (6,1), (6,2), (6,3), (6,4), (6,5), (6,6)\}$$

