EE22BTECH11032 - Maroju Meenakshi

Question 10.13.1.22

The probability of getting a bad egg in a lot of 400 is 0.035. The number of bad eggs in the lot is

Solution: Let

$$\Pr(X = k) = \begin{cases} 1 - p & k = 0 \\ p & k = 1 \end{cases} \tag{1}$$

Bad eggs

$$= Pr(X = 1) \times n \tag{2}$$

$$= 14 \tag{3}$$

TABLE 1: Table

Parameters	Values	Description
X	0	good egg
	1	bad egg
n	400	Total number of eggs
p	0.035	Probability of getting bad egg