

BSE-3B

Quiz # 04

## Probability &amp; Statistics

Part a)

Ramada Inn = 20%

Sheraton = 50%

Lake View Motor Lodge :- ~~20%~~ 30%

faulty rooms at Ramada Inn = 0.05

faulty rooms at Sheraton = 0.04

faulty rooms at Lake View = 0.08

Solution

$$\begin{aligned}\text{Required Probability} &= (0.20)(0.05) + (0.50)(0.04) + (0.3)(0.08) \\ &= 0.054 \\ &\Rightarrow \boxed{5.4\%}\end{aligned}$$

Ans.

Part b

$$\begin{aligned}\text{Required Probability} &= \frac{0.024}{0.054} = 0.4444 \\ &\Rightarrow \boxed{44.44\%}\end{aligned}$$

Ans.