

Assignment-1

(12.13.1.2)

Jash Jhatakia
CS22BTECH11028

Question 2. Compute $\Pr(A|B)$, if $\Pr(B) = 0.5$ and $\Pr(AB) = 0.32$.

Solution: Given that,

$$\Pr(AB) = 0.32 \quad (1)$$

$$\Pr(B) = 0.5 \quad (2)$$

Now we know that,

$$\Pr(A|B) = \frac{\Pr(AB)}{\Pr(B)} \quad (3)$$

So, substituting the values in (3), we get,

$$\Pr(A|B) = \frac{0.32}{0.5} \quad (4)$$

$$\therefore \Pr(A|B) = 0.64 \quad (5)$$