

# FORMULA SHEET EXAM 1

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$$P_{k,n} = \frac{n!}{(n-k)!} \quad (1)$$

$$C_{k,n} = \binom{n}{k} = \frac{n!}{k!(n-k)!} \quad (2)$$

$$P(A_1|B) + P(A_2|B) + \dots = 1 \quad (3)$$

$$\sum_{i=1}^k P(B|A_i)P(A_i) = P(B) \quad (4)$$

$$P(A_i|B) = \frac{P(B|A_i)P(A_i)}{\sum_{i=1}^k P(B|A_i)P(A_i)} \quad (5)$$