**MEAN (SAMPLE SET)**

**VARIANCE (SAMPLE SET)**

**STANDARD DEVIATION (SAMPLE SET)**

**PERMUTATION**

**COMBINATION**

**CONDITIONAL PROBABILITY OF A GIVEN B**

**, P(B) > 0**

**MULTIPLICATIVE LAW OF PROBABILITY (DEPENDENT)**

**MULTIPLICATIVE LAW OF PROBABILITY (INDEPENDENT)**

**ADDITIVE LAW OF PROBABILITY**

**ADDITIVE LAW OF PROBABLITY (MUTUALLY EXCLUSIVE)**

**INVERSE PROBABILITY**

**THEOREM OF TOTAL PROBABILITY**

**, P(Bi) > 0, for i = 1, 2, …, k**

**BAYES’ RULE**

**, P(Bi) > 0, for i = 1, 2, …, k**

**EXPECTED VALUE OF RANDOM VARIABLE**

**VARIANCE OF RANDOM VARIABLE**

**, where μ = E(Y)**

**STANDARD DEVIATION OF RANDOM VARIABLE**

**, where σ2 = V(Y)**

**BINOMIAL DISTRIBUTION (EXPECTED VALUE AND VARIANCE)**

**, where y = 0, 1, 2, …, n and 0 ≤ p ≤ 1**

**GEOMETRIC DISTRIBUTION (EXPECTED VALUE AND VARIANCE)**

**, where y = 0, 1, 2, …, n and 0 ≤ p ≤ 1**

**(****on or before the nth trial)**

**(****before the nth trial)**

**(****on or after the nth trial)**

**(****after the nth trial)**

**HYPERGEOMETRIC DISTRIBUTION (EXPECTED VALUE AND VARIANCE)**

**, where y = 0, 1, 2, …, n**

**POISSON DISTRIBUTION (EXPECTED VALUE AND VARIANCE)**

**, y = 0, 1, 2, …, λ > 0**

**TCHEBYSHEFF’S THEOREM**

**, k > 0**

**, k > 0**