พิมพ์ต้นฉบับบทคัดย่อวิทยานิพนธ์ภายในกรอบสีเขียวนี้เพียงแผ่นเดียว

The objective of this study is to compare the interval estimation methods for the parameter of the Poisson distribution by comparing their confidence coefficients and average confidence interval lengths. The estimation methods under consideration in this study are Classical Method, Root of Quadratic Equation method, and Bayesian Estimation method by Albert. The comparison was done under conditions of sample size 1 to 50, λ ranging from 1 to 10 increasing by 1, λ ranging from 15 to 50 increasing by 5, and λ ranging from 60 to 100 increasing by 20, all of which are considered at confidence coefficients 90%, 95% and 99%. The experimental data were generated through the Monte Carlo Simulation technique. The experiment was repeated 2,000 times under each case.

Results of the study are as follows:

1. **Confidence levels**

The confidence coeffcients of the Classical method are not lower than the given confidence coeffcients when the parameter λ is not less than 15 $\left(\lambda \geq 15\right)$. The confidence coeffcients of the Root of Quadratic Equation method are not lower than the given confidence coeffcients when the parameter is not less than 4 $\left(\lambda \geq 4\right)$. The confidence coeffcients of the Bayesian Estimation method by Albert are not lower than the given confidence coeffcients for conditions under study.

2. **Average confidence interval lengths**

In most case, average confidence interval lengths of Bayesian Estimation method by Albert are shortest for all conditions under study.

The average confidence interval length varies directly with confidence level and varies indirectly with sample size.

ภาควิชา............สถิติ............ ลายมือชื่อนิสิต..

สาขาวิชา.......การประกันภัย....... ลายมือชื่ออาจารย์ที่ปรึกษา.........................

ปีการศึกษา.........2539......... ลายมือชื่ออาจารย์ที่ปรึกษาร่วม....................