

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
الجامعة المستنصرية

كلية التربية - قسم الرياضيات

خطط بيز لفحص المنتوج في حالة توزيع بيتا مع تطبيق عملي

رسالة مقدمة الى مجلس كلية التربية - الجامعة المستنصرية
وهي جزء من متطلبات نيل درجة ماجستير علوم في الرياضيات

من قبل

منتهمى خضير عباس

بأهراض

الدكتور

آباد عبد الكريم

الأستاذة الدكتورة

ضوية سلمان حسن

٢٠٠٤ م

١٤٢٥ هـ

Abstract

The purpose of this Dissertation is to derive and discuss the properties of system of single Bayesian Sampling plans obtained by minimizing the average costs under the assumptions that the sampling and decision costs are linear in lot size, and sample size, and number of defectives in the lot and in the sample. The distribution of defective in process is Binomial with parameter (n,p) , where P is random variable having prior distribution $f(P)$, so that the distribution of lot quality is a mixed Binomial distribution.

The optimum parameter (n,c) for Bayesian plan is obtained from a program written for this purpose.

Also the accuracy of the approximation plan have been evaluated numerically for the beta distribution as a prior. Some auxiliary tables are given with example of application, a short exposition of the efficiency of sampling plan has also been given .