Construction of sampling plans using intervened random effect Poisson distribution*

R. Radhakrishnan † and J. Sekkizhar ‡

Abstract

In this paper, a procedure for the construction of sampling plan indexed through maximum allowable proportion defective (MAPD) and maximum allowable average outgoing quality (MAAOQ) using an intervened random effect Poisson distribution (IRPD) is given. Tables are constructed for the selection of the plan and these plans are compared with the sampling plans constructed using the conventional Poisson distribution.

Key words and phrases: OC curve, inflection point, MAAOQ, MAPD.

^{*}Received: November 17, 2006; Accepted: March 27, 2007.

AMS 2000 subject classifications. Primary 62P30; Secondary 62E10.

[†]Mailing Address: PSG College of Arts and Science, Coimbatore - 641 014, India. Phone: 91-422-4347901. Mobile: 91-98422-95764. E-mail: rkrishnan_cbe@yahoo.com.

[‡]Mailing Address: PSG College of Arts and Science, Coimbatore - 641 014, India. *Phone:* 91-422-4347901. *Mobile:* 91-98422-46452. *E-mail:* jsekkizhar@rediffmail.com.