ten of which are applicable when inspection is non-destructive and the remaining twenty-one are applicable when inspection is destructive. The table for non-destructive inspection displays c_m/c_s which is the ratio of manufacturing cost to inspection cost; n, the number of items to be sampled; k, the accepted number; $A(n, k)$, the probability of acceptance; and c/c_m, which is the ratio of effective cost to manufacturing cost. In the tables for destructive inspection, $A(n, k)$ is replaced by $A'(n, k)$, which is the expected number of accepted items per lot.

Plans for non-destructive inspection are given only for a nominal lot size of 10,000. Plans for destructive inspection are given for lot sizes of 10,000 and 20,000. For non-destructive inspection, the process average $p_0 = .01(.01).04$, the consumer's risk point $p_1 = .03(.01).07, .09$; at which the consumer's risks are .05 and .01. For destructive inspection $p_0 = .01$ and $.02$; $p_1 = .03(.01).06$, and consumer's risks are .05 and .01. The tables, however, do not include all possible combinations of the above listed parameter values.

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53[K].—N. L. JOHNSON, "Optimal sampling for quota fulfillment," *Biometrika*, v. 44, 1957, p. 518–523.

This article contains two tables to assist with the problem of obtaining a preset quota m_i of individuals from each of k strata by selecting first a sample N of the whole population and then completing quotas by sampling from separate strata. Individual cost in the first case is c and in the second c_i. Table I gives for $m_i = m$ optimal values of N for $k = 2(1)10$; $mk \doteq 50, 100, 200, 500$; $d = c_i/c = 1.25, 1.5(.5)3.0$; $d' = c_i'/c = .9, .7, .25, 0$. Here c_i' is the worth of first sample individuals in excess of quota. The tabulated values of N are solutions of the equation $Pr(N_i < m) = (c - c_i')/(c_i - c_i)$.

Table 2 gives ratio of minimized cost to cost of choosing the whole sample by sampling restricted to each stratum. This quantity is

$$\frac{1}{d} + \left(1 - \frac{d'}{d}\right)\left(1 - \frac{1}{k}\right)^{N+1} \binom{N}{m} (k - 1)^{-m}$$

and is tabulated for $k = 2(1)5, 10$; $km \doteq 50, 100, 500$; $d = 1.5, 2.5, 3$; $d' = .5, .1, 0$.

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54[K].—P. G. MOORE, "The two-sample t-test based on range," *Biometrika*, v. 44, 1957, p. 482–489.

This paper provides a sample statistic for unequal sample sizes for a two-sample t-test based on observed sample ranges instead of sums of squares. The statistic used by the author is simply

$$u = \frac{|\bar{x}_1 - \bar{x}_2|}{w_1 + w_2},$$