$n = 12$ and 15, variances and efficiencies relative to best linear systematic estimates are given for alternate estimates proposed by Gupta [2] for $n > 10$, and generalized in [1] to doubly censored samples, are given to 8D and 4D respectively for all r_1, r_2. The authors state that extensions of Tables I, II, III to 8D for $16 \leqq n \leqq 20$ are available upon application.

C. C. CRAIG

University of Michigan
Ann Arbor, Michigan

1. A. E. SARHAN & B. G. GREENBERG, "Estimation of location and scale parameters by order statistics from singly and doubly censored samples. Part I. The normal distribution up to samples of size 10," *Ann. Math. Stat.*, v. 27, 1957, p. 427–451. [*MTAC*, Review 141, v. 12, 1958, p. 289.]
2. A. K. GUPTA, "Estimation of the mean and standard deviation of a normal population from a censored sample." *Biometrika*, v. 39, 1952, p. 88–95.

85[K].—J. M. SENGUPTA & NIKHILESH BHATTACHARYA, "Tables of random normal deviates," *Sankhya*, v. 20, 1958, p. 250–286.

As explained by the editor in a foreword, this is a reissue of an original table of random normal deviates which appeared in 1934 in *Sankhya* [1]. Since errors had been discovered in the earlier tables, the new set was reconstructed by conversion of Tippett's random numbers [2] to random normal deviates, as was the case before. After the present table was prepared, in 1952, as stated by the editor, it was learned that an identical table had been constructed in 1954 at the University of California. On comparison it was found that the two tables checked perfectly. As discussed in the text, rather extensive tests of the hypothesis that the entries were random drawings from $N(0, 1)$ were applied with satisfactory results. These tables contain 10,400 3D numbers.

C. C. CRAIG

University of Michigan
Ann Arbor, Michigan

1. P. C. MAHARANOBIS, S. S. BOSE, P. R. ROY & S. K. BANNERJEE, "Tables of random samples from a normal population," *Sankhya*, v. 1, 1934, p. 289–328.
2. L. H. C. TIPPETT, *Random Sampling Numbers*, Tracts for Computers, No. XV, Cambridge University Press, London, 1927.

86[K].—MINORU SIOTANI, "Note on the utilization of the generalized Student ratio in analysis of variance or dispersion," *Ann. Inst. Stat. Math.*, v. 9, 1958, p. 157–171.

In samples from a p-dimensional normal universe an important statistic, applications of which are discussed in this paper, is $T_0^2 = m \operatorname{tr} L^{-1}V$ in which L and V are two independent unbiased estimates of the population variance matrix with n and m degrees of freedom respectively. Tables are given for the 5% and 1% points of the distribution of T_0^2 to 2D for $m = 1(1)10(2)20$ and

$$n = 10(2)30(5)50, 60, 80, 100.$$

C. C. CRAIG

University of Michigan
Ann Arbor, Michigan