



**Figure. 1.6.** Unordered Samples with Replacement. The number of different sequences of  $r$  numbers that can be formed from the numbers  $1, 2, \dots, n$  when numbers can be repeated within the sequence and the order in which the numbers appear does not matter is given by the number of ways that  $r$  balls can be placed in  $n$  bins. From Cassela and Berger (1990).