



Figure 1: An example of our lower bound construction in Theorem ?? where $m = 18$. Hence, we set $t = 4$ and $n = t^2 = 16$, resulting in the profile P shown above. In every agent's ranking (horizontal bars), the example mentions the top-ranked alternative. Additionally, we marked alternatives 11 and 12 in every ranking to showcase the symmetry of P . Alternatives 17 and 18 are shown for two agents of every cohort. Notice that these alternatives appear in the exact same positions of every agent's ranking.