

Table S1. Objective, gap, and CT values of small-size instances

(L, m, n)	Objective value/ s					Gap		CT/ms		
	CPLEX(CP)	FCFS	FCFS+TSA(FT)	NN	NN+TSA(NT)	Gap1	Gap2	CPLEX	FCFS+TSA	NN+TSA
(54, 2, 2)	13.00	39.00	13.96	14.00	13.24	7.42%	1.85%	286.00	2.00	1.40
(54, 2, 3)	19.03	41.02	20.94	22.00	19.85	10.24%	4.49%	1991.60	3.00	5.60
(54, 3, 2)	25.00	54.00	26.43	29.00	25.51	5.72%	2.02%	1212.20	3.40	11.80
(54, 3, 3)	28.00	56.00	30.68	33.00	29.17	9.57%	4.19%	184245.60	9.40	8.90
(96, 2, 2)	17.00	47.00	18.71	18.00	17.58	10.07%	3.45%	514.20	4.70	5.20
(96, 2, 3)	20.00	50.00	26.26	21.00	20.87	32.62%	4.38%	9239.70	12.00	7.30
(96, 3, 2)	23.01	62.00	24.18	26.00	24.18	14.18%	5.13%	4139.80	15.20	9.80
(96, 3, 3)	26.00	81.00	32.55	31.00	29.15	25.21%	12.13%	1522760.80	28.20	23.20
(150, 2, 2)	19.00	69.00	24.81	23.00	19.27	30.57%	1.41%	991.70	11.30	13.70
(150, 2, 3)	20.00	74.00	26.96	22.00	21.13	34.81%	5.67%	30274.50	24.00	21.00
(150, 3, 2)	32.00	81.00	38.55	44.00	32.94	20.46%	2.93%	20904.70	39.90	36.40
(150, 3, 3)	29.00	92.00	42.86	30.00	30.73	47.79%	5.95%	2761558.10	73.50	68.50

* $gap1 = \frac{FT - CP}{CP} \times 100\%$, $gap2 = \frac{NT - CP}{CP} \times 100\%$, where CP, FT and NT represent the average objective value of CPLEX, FCFS+TSA and NN+TSA for 10 instances respectively.