

TABLE I: TASK ALLOCATIONS AND ITERATIONS PERFORMANCE OF PI-MAXASS WITH SWAP DISTANCE = 2 STARTING WITH PI-MINAVG SOLUTION COMPARED WITH PI-MINAVG AND CBBA OVER 50 SIMULATIONS (AVERAGE AND STANDARD DEVIATION)

Ratio	Vehicles Tasks		Task Allocations (Avg)						Iterations (Avg)					
			CBBA	std dev	MinAvg	std dev	MaxAss	std dev	CBBA	std dev	MinAvg	std dev	MaxAss (only)	std dev
$p = 2$ deadlines	6	12	10.4	0.9	11.4	0.9	11.4	0.9	3.8	1.4	7.2	2.2	0.1	0.7
	8	16	13.8	1.2	15.2	1.0	15.3	1.0	5.6	1.9	11.3	2.8	0.3	1.1
	10	20	17.4	1.4	19.2	1.0	19.3	0.8	7.3	2.1	15.3	3.6	0.8	2.2
	12	24	20.9	1.4	22.9	0.9	23.1	0.9	8.6	2.6	21.7	6.1	1.3	3.3
	14	28	24.4	1.6	26.9	1.0	26.9	0.9	12.1	3.3	28.5	6.5	0.8	2.7
$p = 4.6$ deadlines	6	28	19.3	1.7	21.9	1.5	24.2	1.6	4.8	1.5	6.8	2.1	6.3	2.3
	8	36	25.2	1.9	29.5	2.1	31.9	1.7	6.9	2.7	11.8	3.4	9.4	6.4
	10	46	32.3	2.2	38.2	2.1	41.3	2.0	10.2	2.9	16.7	5.0	19.8	19.5
	12	56	39.1	2.9	46.7	2.5	50.8	2.3	13.3	4.1	21	12.6	16.9	13.5
	14	64	45.3	2.8	54.3	2.6	58.8	2.3	15.6	4.7	26.3	7.8	25.7	23.8
$p = 4.6$ battery	6	28	24.5	1.9	24.6	1.8	25.2	1.8	6.0	2.4	4.9	2.8	1.9	2.2
	8	36	32.9	2.1	33.4	2.1	33.8	1.9	9.6	3.9	8.2	3.8	2.0	2.6
	10	46	42.0	2.6	42.8	2.1	43.4	2.0	12.4	4.7	9.7	4.3	3.5	5.9
	12	56	51.2	2.4	51.9	2.2	52.6	2.1	18.6	7.6	14.6	8.5	3.2	3.9
	14	64	59.7	2.3	60.5	2.2	61.3	2.1	23.6	7.9	16.2	8.5	4.6	3.9
$p = 4.6$ battery deadlines	6	28	19.0	2.0	21.0	1.6	22.5	1.4	4.4	1.7	5.0	1.5	7.4	12.2
	8	36	24.6	1.7	28.1	1.5	30.4	1.6	7.7	2.7	9.8	6.6	8.8	7.9
	10	46	32.0	2.4	36.6	2.1	39.5	2.1	9.7	2.9	11.9	4.7	10.9	6.9
	12	56	38.8	2.4	44.7	2.3	48.4	2.0	12.7	4.6	20.7	16.3	14.7	12.0
	14	64	45.0	2.3	52.1	2.0	56.4	2.2	16.5	4.9	21.1	7.6	20.4	15.2