Problem			Constructive Algorithm			Local Search		GRASP			Known best solution or upper bound	GRASP Accuracy	Average accuracy with local search	Relative improvement with GRASP iterations	Construction-only Accuracy		
Input Filename	|V|	|E|	randomised	simple_greedy	semi-greedy	Iterations	Best Value	Iterations	Best Value	Constructive Algorithm					random	greedy	semi-greedy
set1/g1.rud	800	19176	11025	11297	11106	163	11358		11420	randomised	12078	94.55%	94.04%	0.55%	91.28%	93.53%	91.95%
						74	11394	50	11463	simple_greedy	12078	94.91%	94.34%	0.61%			
						124	11375		11462	semi-greedy	12078	94.90%	94.18%	0.76%			
set1/g2.rud	800	19176	11009	11236	11113	162	11367		11461	randomised	12084	94.84%	94.07%	0.83%	91.10%	92.98%	91.96%
						74	11405	50	11474	simple_greedy	12084	94.95%	94.38%	0.60%			
						118	11369		11459	semi-greedy	12084	94.83%	94.08%	0.79%			
set1/g3.rud	800	19176	11035	11276	11107	160	11353		11414	randomised	12077	94.51%	94.01%	0.54%	91.37%	93.37%	91.97%
						69	11395	50	11474	simple_greedy	12077	95.01%	94.35%	0.69%			
						123	11374		11463	semi-greedy	12077	94.92%	94.18%	0.78%			
set1/g4.rud	800	19176	11037	11272	11132	171	11383		11489	randomised							
						74	11405	50	11472	simple_greedy							
						125	11391		11522	semi-greedy							
set1/g5.rud	800	19176	11007	11285	11088	165	11355		11462	randomised							
						72	11414	50	11490	simple_greedy							
						124	11382		11480	semi-greedy							
set1/g6.rud	800	19176	1532	1738	1577	175	1906		1975	randomised							
						84	1936	50	2009	simple_greedy							
						149	1913		2000	semi-greedy							
set1/g7.rud	800	19176	1376	1573	1415	173	1743		1807	randomised							
						94	1781	50	1856	simple_greedy							
						145	1740		1823	semi-greedy							
set1/g8.rud	800	19176	1379	1580	1456	180	1756		1846	randomised							
						84	1771	50	1859	simple_greedy							
						146	1751		1858	semi-greedy							
set1/g9.rud	800	19176	1420	1634	1497	169	1780		1877	randomised							
						88	1823	50	1901	simple_greedy							
						154	1799		1886	semi-greedy							
set1/g10.rud	800	19176	1353	1630	1425	176	1739		1810	randomised							
						86	1765	50	1834	simple_greedy							
						145	1738		1819	semi-greedy							
set1/g11.rud	800	1600	409	464	423	16	441		462	randomised	627	73.68%	70.33%	4.76%	65.23%	74.00%	67.46%
						6	484	50	502	simple_greedy	627	80.06%	77.19%	3.72%			
						13	455		494	semi-greedy	627	78.79%	72.57%	8.57%			
set1/g12.rud	800	1600	397	448	413	16	428		454	randomised	621	73.11%	68.92%	6.07%	63.93%	72.14%	66.51%
						5	473	50	492	simple_greedy	621	79.23%	76.17%	4.02%			
						14	439		476	semi-greedy	621	76.65%	70.69%	8.43%			
set1/g13.rud	800	1600	418	474	428	19	456		476	randomised	645	73.80%	70.70%	4.39%	64.81%	73.49%	66.36%
						6	498	50	518	simple_greedy	645	80.31%	77.21%	4.02%			
						15	467		508	semi-greedy	645	78.76%	72.40%	8.78%			
set1/g14.rud	800	4694	2865	2943	2933	49	2936		2957	randomised	3187	92.78%	92.12%	0.72%	89.90%	92.34%	92.03%
						21	2971	50	2992	simple_greedy	3187	93.88%	93.22%	0.71%			
						25	2965		2984	semi-greedy	3187	93.63%	93.03%	0.64%			
set1/g15.rud	800	4661	2845	2915	2913	50	2919		2942	randomised	3169	92.84%	92.11%	0.79%	89.78%	91.98%	91.92%
						21	2947	50	2962	simple_greedy	3169	93.47%	92.99%	0.51%			
						25	2946		2969	semi-greedy	3169	93.69%	92.96%	0.78%			
set1/g16.rud	800	4672	2854	2940	2917	49	2922		2956	randomised	3172	93.19%	92.12%	1.16%	89.97%	92.69%	91.96%
						23	2954	50	2980	simple_greedy	3172	93.95%	93.13%	0.88%			
						26	2949		2977	semi-greedy	3172	93.85%	92.97%	0.95%			
set1/g17.rud	800	4667	2854	2932	2907	51	2919		2953	randomised							
						23	2949	50	2963	simple_greedy							
						26	2949		2971	semi-greedy							
set1/g18.rud	800	4694	694	839	721	78	831		866	randomised							
						31	881	50	919	simple_greedy							
						65	845		901	semi-greedy							
set1/g19.rud	800	4661	611	795	642	77	746		798	randomised							
						32	799	50	836	simple_greedy							
						70	757		805	semi-greedy							
set1/g20.rud	800	4672	652	785	673	73	770		816	randomised							
						32	830	50	878	simple_greedy							
						65	787		845	semi-greedy							
set1/g21.rud	800	4667	634	755	669	82	771		813	randomised							
						34	820	50	862	simple_greedy							
						69	782		838	semi-greedy							
set1/g22.rud	2000	19990	12365	12775	12620	260	12805		12880	randomised	14123	91.20%	90.67%	0.59%	87.55%	90.46%	89.36%
						98	12958	50	13044	simple_greedy	14123	92.36%	91.75%	0.66%			
						169	12882		13011	semi-greedy	14123	92.13%	91.21%	1.00%			
set1/g23.rud	2000	19990	12352	12784	12631	257	12822		12936	randomised	14129	91.56%	90.75%	0.89%	87.42%	90.48%	89.40%
						94	12955	50	13043	simple_greedy	14129	92.31%	91.69%	0.68%			
						174	12881		12984	semi-greedy	14129	91.90%	91.17%	0.80%			
set1/g24.rud	2000	19990	12354	12819	12642	256	12818		12925	randomised	14131	91.47%	90.71%	0.83%	87.42%	90.72%	89.46%
						97	12952	50	13018	simple_greedy	14131	92.12%	91.66%	0.51%			
						173	12897		12991	semi-greedy	14131	91.93%	91.27%	0.73%			
set1/g25.rud	2000	19990	12368	12807	12629	254	12820		12915	randomised							
						93	12950	50	13033	simple_greedy							
						175	12885		12991	semi-greedy							
set1/g26.rud	2000	19990	12347	12790	12609	255	12811		12930	randomised							
						97	12945	50	13030	simple_greedy							
						175	12883		13006	semi-greedy							
set1/g27.rud	2000	19990	2302	2594	2405	270	2811		2912	randomised							
						126	2907	50	2975	simple_greedy							
						236	2834		2958	semi-greedy							
set1/g28.rud	2000	19990	2298	2673	2394	276	2784		2897	randomised							
						127	2871	50	2985	simple_greedy							
						231	2801		2893	semi-greedy							

Problem			Constructive Algorithm			Local Search		GRASP			Known best solution or upper bound	GRASP Accuracy	Average accuracy with local search	Relative improvement with GRASP iterations	Construction-only Accuracy		
Input Filename	|V|	|E|	randomised	simple_greedy	semi-greedy	Iterations	Best Value	Iterations	Best Value	Constructive Algorithm					random	greedy	semi-greedy
set1/g29.rud	2000	19990	2352	2769	2499	270	2868	50	2994	randomised							
						134	2963		3032	simple_greedy							
						236	2898		3026	semi-greedy							
set1/g30.rud	2000	19990	2384	2785	2489	265	2864	50	2981	randomised							
						125	2967		3053	simple_greedy							
						234	2888		3003	semi-greedy							
set1/g31.rud	2000	19990	2280	2606	2384	274	2777	50	2889	randomised							
						133	2885		2961	simple_greedy							
						230	2818		2948	semi-greedy							
set1/g32.rud	2000	4000	1021	1192	1058	41	1099	50	1152	randomised	1560	73.85%	70.45%	4.82%	65.45%	76.41%	67.82%
						13	1209		1242	simple_greedy	1560	79.62%	77.50%	2.73%			
						33	1120		1216	semi-greedy	1560	77.95%	71.79%	8.57%			
set1/g33.rud	2000	4000	977	1152	1021	43	1068	50	1102	randomised	1537	71.70%	69.49%	3.18%	63.57%	74.95%	66.43%
						12	1196		1226	simple_greedy	1537	79.77%	77.81%	2.51%			
						36	1092		1192	semi-greedy	1537	77.55%	71.05%	9.16%			
set1/g34.rud	2000	4000	974	1148	1032	45	1066	50	1106	randomised	1541	71.77%	69.18%	3.75%	63.21%	74.50%	66.97%
						12	1194		1218	simple_greedy	1541	79.04%	77.48%	2.01%			
						36	1083		1226	semi-greedy	1541	79.56%	70.28%	13.20%			
set1/g35.rud	2000	11778	7185	7377	7355	126	7358	50	7392	randomised	8000	92.40%	91.98%	0.46%	89.81%	92.21%	91.94%
						53	7446		7478	simple_greedy	8000	93.48%	93.08%	0.43%			
						64	7434		7471	semi-greedy	8000	93.39%	92.93%	0.50%			
set1/g36.rud	2000	11766	7166	7359	7355	124	7354	50	7400	randomised	7996	92.55%	91.97%	0.63%	89.62%	92.03%	91.98%
						54	7438		7476	simple_greedy	7996	93.50%	93.02%	0.51%			
						62	7429		7486	semi-greedy	7996	93.62%	92.91%	0.77%			
set1/g37.rud	2000	11785	7190	7378	7365	127	7364	50	7409	randomised	8009	92.51%	91.95%	0.61%	89.77%	92.12%	91.96%
						53	7447		7482	simple_greedy	8009	93.42%	92.98%	0.47%			
						63	7439		7478	semi-greedy	8009	93.37%	92.88%	0.52%			
set1/g38.rud	2000	11779	7181	7375	7366	129	7355	50	7382	randomised							
						53	7445		7479	simple_greedy							
						66	7434		7471	semi-greedy							
set1/g39.rud	2000	11778	1677	2095	1745	196	2014	50	2065	randomised							
						75	2131		2180	simple_greedy							
						177	2029		2151	semi-greedy							
set1/g40.rud	2000	11766	1640	1978	1714	201	1979	50	2063	randomised							
						76	2118		2199	simple_greedy							
						174	2005		2118	semi-greedy							
set1/g41.rud	2000	11785	1661	1996	1731	192	1994	50	2098	randomised							
						74	2119		2156	simple_greedy							
						169	2020		2146	semi-greedy							
set1/g42.rud	2000	11779	1730	2120	1799	195	2075	50	2158	randomised							
						77	2199		2255	simple_greedy							
						174	2093		2214	semi-greedy							
set1/g43.rud	1000	9990	6179	6422	6316	128	6396	50	6476	randomised	7027	92.16%	91.02%	1.25%	87.93%	91.39%	89.88%
						50	6459		6508	simple_greedy	7027	92.61%	91.92%	0.76%			
						82	6435		6498	semi-greedy	7027	92.47%	91.58%	0.98%			
set1/g44.rud	1000	9990	6174	6373	6319	123	6390	50	6450	randomised	7022	91.85%	91.00%	0.94%	87.92%	90.76%	89.99%
						50	6461		6530	simple_greedy	7022	92.99%	92.01%	1.07%			
						80	6433		6505	semi-greedy	7022	92.64%	91.61%	1.12%			
set1/g45.rud	1000	9990	6162	6416	6312	123	6395	50	6465	randomised	7020	92.09%	91.10%	1.09%	87.78%	91.40%	89.91%
						50	6463		6535	simple_greedy	7020	93.09%	92.07%	1.11%			
						81	6437		6498	semi-greedy	7020	92.56%	91.70%	0.95%			
set1/g46.rud	1000	9990	6170	6392	6336	128	6399	50	6464	randomised							
						48	6462		6508	simple_greedy							
						77	6437		6497	semi-greedy							
set1/g47.rud	1000	9990	6184	6395	6336	123	6397	50	6470	randomised							
						50	6465		6519	simple_greedy							
						79	6437		6495	semi-greedy							
set1/g48.rud	3000	6000	4913	6000	6000	74	5084	50	5178	randomised	6000	86.30%	84.73%	1.85%	81.88%	100.00%	100.00%
						1	5993		6000	simple_greedy	6000	100.00%	99.88%	0.12%			
						1	5984		6000	semi-greedy	6000	100.00%	99.73%	0.27%			
set1/g49.rud	3000	6000	4891	6000	6000	75	5068	50	5126	randomised	6000	85.43%	84.47%	1.14%	81.52%	100.00%	100.00%
						1	5994		6000	simple_greedy	6000	100.00%	99.90%	0.10%			
						1	5988		6000	semi-greedy	6000	100.00%	99.80%	0.20%			
set1/g50.rud	3000	6000	4918	5874	5843	76	5080	50	5182	randomised	5988	86.54%	84.84%	2.01%	82.13%	98.10%	97.58%
						1	5871		5878	simple_greedy	5988	98.16%	98.05%	0.12%			
						2	5846		5876	semi-greedy	5988	98.13%	97.63%	0.51%			
set1/g51.rud	1000	5909	3588	3709	3685	62	3688	50	3712	randomised							
						28	3729		3754	simple_greedy							
						33	3726		3756	semi-greedy							
set1/g52.rud	1000	5916	3610	3711	3691	63	3693	50	3722	randomised							
						27	3735		3755	simple_greedy							
						32	3731		3757	semi-greedy							
set1/g53.rud	1000	5914	3599	3704	3694	63	3689	50	3709	randomised							
						27	3732		3756	simple_greedy							
						32	3724		3755	semi-greedy							
set1/g54.rud	1000	5916	3608	3683	3688	60	3692	50	3728	randomised							
						27	3731		3752	simple_greedy							
						32	3727		3755	semi-greedy							