

|                 | 5% CS |     | 10% CS |       | 15% CS |       | 20% CS |        |
|-----------------|-------|-----|--------|-------|--------|-------|--------|--------|
|                 | ML    | CL  | ML     | CL    | ML     | CL    | ML     | CL     |
| Appendicitis    | 13    | 2   | 39     | 16    | 71     | 49    | 164    | 67     |
| Breast Cancer   | 216   | 190 | 876    | 720   | 1,965  | 1,690 | 3,487  | 2,954  |
| Bupa            | 79    | 74  | 323    | 272   | 699    | 627   | 1,201  | 1,145  |
| Circles         | 50    | 55  | 208    | 227   | 502    | 488   | 853    | 917    |
| Ecoli           | 30    | 106 | 163    | 398   | 357    | 918   | 609    | 1,669  |
| Glass           | 11    | 44  | 52     | 179   | 139    | 389   | 259    | 644    |
| Haberman        | 76    | 44  | 304    | 161   | 634    | 401   | 1,135  | 756    |
| Hayesroth       | 12    | 16  | 39     | 81    | 102    | 174   | 177    | 319    |
| Heart           | 41    | 50  | 178    | 173   | 396    | 424   | 744    | 687    |
| Ionosphere      | 92    | 61  | 330    | 300   | 732    | 646   | 1,299  | 1,186  |
| Iris            | 6     | 22  | 25     | 80    | 57     | 196   | 94     | 341    |
| Led7Digit       | 25    | 275 | 126    | 1,099 | 267    | 2,508 | 460    | 4,490  |
| Monk2           | 101   | 130 | 473    | 473   | 979    | 1,101 | 1,917  | 1,824  |
| Moons           | 55    | 50  | 200    | 235   | 494    | 496   | 900    | 870    |
| Movement Libras | 6     | 147 | 27     | 603   | 112    | 1,319 | 158    | 2,398  |
| Newthyroid      | 25    | 30  | 108    | 123   | 270    | 258   | 449    | 454    |
| Saheart         | 152   | 124 | 595    | 486   | 1,292  | 1,123 | 2,330  | 1,948  |
| Sonar           | 29    | 26  | 100    | 110   | 245    | 251   | 436    | 425    |
| Spectfheart     | 56    | 35  | 233    | 118   | 543    | 277   | 965    | 466    |
| Spiral          | 52    | 53  | 224    | 211   | 487    | 503   | 918    | 852    |
| Soybean         | 0     | 3   | 4      | 6     | 6      | 22    | 12     | 33     |
| Tae             | 8     | 20  | 40     | 80    | 82     | 171   | 151    | 314    |
| Vehicle         | 221   | 682 | 874    | 2,696 | 1,955  | 6,046 | 3,589  | 10,776 |
| Wine            | 8     | 28  | 31     | 122   | 70     | 281   | 143    | 487    |
| Zoo             | 7     | 8   | 21     | 34    | 29     | 91    | 41     | 169    |

Table W1: Number of must-link (ML) and cannot-link (CL) constraints in the different constraint sets of collection COL1.

|            | 5% CS  |        | 10% CS |         | 15% CS  |         | 20% CS  |         |
|------------|--------|--------|--------|---------|---------|---------|---------|---------|
|            | ML     | CL     | ML     | CL      | ML      | CL      | ML      | CL      |
| n500-k2    | 147    | 153    | 607    | 618     | 1,380   | 1,395   | 2,465   | 2,485   |
| n500-k5    | 56     | 244    | 233    | 992     | 594     | 2,181   | 999     | 3,951   |
| n500-k10   | 26     | 274    | 134    | 1,091   | 280     | 2,495   | 482     | 4,468   |
| n500-k20   | 16     | 284    | 58     | 1,167   | 129     | 2,646   | 270     | 4,680   |
| n500-k50   | 6      | 294    | 28     | 1,197   | 45      | 2,730   | 105     | 4,845   |
| n500-k100  | 4      | 296    | 7      | 1,218   | 23      | 2,752   | 46      | 4,904   |
| n1000-k2   | 607    | 618    | 2,494  | 2,456   | 5,559   | 5,616   | 10,007  | 9,893   |
| n1000-k5   | 245    | 980    | 989    | 3,961   | 2,249   | 8,926   | 3,966   | 15,934  |
| n1000-k10  | 127    | 1,098  | 449    | 4,501   | 1,119   | 10,056  | 1,996   | 17,904  |
| n1000-k20  | 50     | 1,175  | 229    | 4,721   | 522     | 10,653  | 929     | 18,971  |
| n1000-k50  | 26     | 1,199  | 91     | 4,859   | 203     | 10,972  | 404     | 19,496  |
| n1000-k100 | 1      | 1,224  | 55     | 4,895   | 104     | 11,071  | 189     | 19,711  |
| n2000-k2   | 2,472  | 2,478  | 9,984  | 9,916   | 22,405  | 22,445  | 39,612  | 40,188  |
| n2000-k5   | 972    | 3,978  | 3,860  | 16,040  | 8,943   | 35,907  | 15,928  | 63,872  |
| n2000-k10  | 472    | 4,478  | 1,978  | 17,922  | 4,405   | 40,445  | 7,950   | 71,850  |
| n2000-k20  | 229    | 4,721  | 950    | 18,950  | 2,175   | 42,675  | 4,009   | 75,791  |
| n2000-k50  | 90     | 4,860  | 363    | 19,537  | 860     | 43,990  | 1,594   | 78,206  |
| n2000-k100 | 58     | 4,892  | 201    | 19,699  | 411     | 44,439  | 807     | 78,993  |
| n5000-k2   | 15,632 | 15,493 | 62,161 | 62,589  | 140,016 | 140,859 | 249,040 | 250,460 |
| n5000-k5   | 6,252  | 24,873 | 24,892 | 99,858  | 56,001  | 224,874 | 99,497  | 400,003 |
| n5000-k10  | 3,106  | 28,019 | 12,458 | 112,292 | 27,954  | 252,921 | 49,307  | 450,193 |
| n5000-k20  | 1,546  | 29,579 | 6,075  | 118,675 | 14,097  | 266,778 | 25,003  | 474,497 |
| n5000-k50  | 607    | 30,518 | 2,440  | 122,310 | 5,536   | 275,339 | 9,762   | 489,738 |
| n5000-k100 | 292    | 30,833 | 1,229  | 123,521 | 2,694   | 278,181 | 4,854   | 494,646 |

Table W2: Number of must-link (ML) and cannot-link (CL) constraints in the different constraint sets of collection COL2.

|           | 0.5% CS |        | 1% CS   |         | 5% CS     |           |
|-----------|---------|--------|---------|---------|-----------|-----------|
|           | ML      | CL     | ML      | CL      | ML        | CL        |
| Banana    | 160     | 191    | 707     | 671     | 17,797    | 17,183    |
| Letter    | 190     | 4,760  | 743     | 19,157  | 19,165    | 480,335   |
| Shuttle   | 27,099  | 14,806 | 108,254 | 59,656  | 2,707,873 | 1,495,677 |
| Cifar 10  | 4,511   | 40,339 | 17,840  | 161,860 | 450,153   | 4,048,347 |
| Cifar 100 | 467     | 44,383 | 1,760   | 177,940 | 44,792    | 4,453,708 |
| Mnist     | 6,074   | 55,001 | 24,592  | 220,058 | 612,630   | 5,510,620 |

Table W3: Number of must-link (ML) and cannot-link (CL) constraints in the different constraint sets of collection COL3.