

# Appendix A

```
1 PROCEDURE genbcsp_cclass(n, m, p1, p2, s1, s2)
2 BEGIN
3   num_edges =  $n(n-1)/2 \times p1$ 
4   num_ones =  $m \times m \times p2$ 
5   seed_random_generator(s1)
6   select num_edges randomly → Edges
7   seed_random_generator(s2)
8   FOREACH edge e in Edges
9     generate constraint matrix M
10    set all compound labels in M to 0
11    randomly set num_ones compound labels to 1
```

**Figure A.1** - Random generator for binary CSPs in the same c-class, genbcsp\_cclass

```
1 PROCEDURE genbcsp(n, m, p1, p2, s)
2 BEGIN
3   num_edges =  $n(n-1)/2 \times p1$ 
4   num_ones =  $m \times m \times p2$ 
5   seed_random_generator(s)
6   select num_edges randomly → Edges
7   FOREACH edge e in Edges
8     generate constraint matrix M
9     set all compound labels in M to 0
10    randomly set num_ones compound labels to 1
```

**Figure A.2** - Random generator for binary CSPs, genbcsp