**SUSPENSION BRIDGE AND CABLE**

**PROCEDURES**

1. Clamp the two fixed bearing (4) with the pulleys on the vertical sides of the testing frame at 80mm distance from the top side.
2. Hang the two suspension cables (1) on the pulleys and hook the 4 weight hangers (6) to them, each loaded with 5N weight.
3. Hang the 12 connecting rods (3) according to their lengths in the rings of the suspension cable. The short connecting rods are in the middle.
4. Insert the bridge roadway (2) in the connecting rods where cross ends of the rods sit in the cross grooves of the roadway.
5. Load the bridge roadway with three 5N-weights (two at the ends and one in the middle).
6. Add weights with 1N step to the weight hangers at the end of the suspension cables until the two parts of the bridge roadway become aligned horizontally. This will be achieved when a total of approximately 2 x 7N are on each side.

**RESULTS**

A comparison with the theory it is found that:

Own Weight = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_N

Loading = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_N

Total Loading = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_N

**DISCUSSION/ANALYSIS**

Discuss your observation during experiment.

**CONCLUSION**

Refer to the objective.