

PROBLEM 10

1. A rectangular frame is subjected to a uniformly distributed load of 10 kN/m acting vertically downwards on the top horizontal member. The frame consists of two vertical columns of height 4 m and two horizontal members of length 4 m . The left column is fixed at its base. The right column is supported by a roller. The top horizontal member is supported by a roller at its right end. The frame is divided into four quadrants by a diagonal member connecting the top-left corner to the bottom-right corner. The diagonal member is supported by a roller at its midpoint. The frame is shown in the figure below.

