## Part 3 ( 35 Points, 30 Minutes)

## Question 7

a) The double-angle bracing diagonal is subjected to axial force consisting of the service dead and live load as shown. Design a bolted connection with the $7 / 8$ " gusset plate using $3 / 4$ "-A $325-\mathrm{N}$ bolts.
b) Detail the connection and
 check whether the diagonal member is still adequate.

