

Q4a. EQUATION FOR THE GIVEN NEURAL NETWORK

$$Y(x_1, x_2, x_3) = \frac{1}{1 + e^{-\left[ \begin{aligned} & (10.32045098) * \frac{1}{1 + e^{-[x_1 * (5.42528022) + x_2 * (5.70808771) + x_3 * (-0.90768267)]}} + \\ & (-9.82575226) * \frac{1}{1 + e^{-[x_1 * (7.3600876) + x_2 * (-3.0020293) + x_3 * (-0.18642696)]}} + \\ & (4.65760254) * \frac{1}{1 + e^{-[x_1 * (1.96396178) + x_2 * (2.34302462) + x_3 * (1.98738418)]}} + \\ & (-9.83285897) * \frac{1}{1 + e^{-[x_1 * (-5.19346698) + x_2 * (7.69309775) + x_3 * (1.80612328)]}} \end{aligned} \right]}}$$