$$\int_{\text{Ase}} (\theta) = \frac{1}{\text{lm}} \sum_{i=1}^{m} \left( \gamma^{\omega} - \left( \sum_{k=1}^{n} \omega_{2,k,0} \left( \omega_{i,k} \cdot \mathbf{x}^{\omega} + b_{\omega,k} \right) + b_{2} \right) \right)^{2}$$

$$\begin{split} \frac{\int \underline{J}_{05\varepsilon}}{\int \omega_{a,h}} &= \frac{\Lambda}{2m} \cdot \sum_{i=1}^{m} \underbrace{\frac{\delta}{\delta \omega_{a,h}}} \left( \gamma^{(i)} - h(x^{(i)}) \right)^{2} \\ &= \frac{\Lambda}{2m} \cdot \sum_{i=1}^{m} \underbrace{2} \left( \gamma^{(i)} - h(x^{(i)}) \right) \cdot \underbrace{\frac{\delta}{\delta \omega_{a,h}}} \left( \gamma^{(i)} - h(x^{(i)}) \right) \\ &= -\frac{\omega_{a,h}}{m} \cdot \sum_{i=1}^{m} \left( \gamma^{(i)} - h(x^{(i)}) \right) \cdot \sigma(\omega_{a,h} \cdot x^{(i)} + b_{a,h}) \cdot (\Lambda - \sigma(\omega_{a,h} \cdot x^{(i)} + b_{a,h})) \cdot x^{(i)} \end{split}$$

$$\begin{cases} \frac{\int h(\mathbf{x}^{\omega})}{\int \omega_{a,h}} = \omega_{2,h} \cdot \frac{\int u_{a,h}}{\int \omega_{a,h}} \left( \sigma(\omega_{a,h} \cdot \mathbf{x}^{\omega} + b_{a,h}) \right) \\ = \omega_{2,h} \cdot \sigma(\omega_{a,h} \cdot \mathbf{x}^{\omega} + b_{a,h}) \cdot (1 - \sigma(\omega_{a,h} \cdot \mathbf{x}^{\omega} + b_{a,h})) \cdot \mathbf{x}^{(a)} \end{cases}$$

$$\frac{\int \underline{I}_{dSe}}{\int \omega_{j,h}} = \frac{\Lambda}{2m} \cdot \sum_{i=1}^{m} \underbrace{\int_{S\omega_{i,h}} \left( \gamma^{\omega} - h(x^{\omega}) \right)^{2}}_{i=1}$$

$$= \frac{\Lambda}{2m} \cdot \sum_{i=1}^{m} \underbrace{\chi(\gamma^{\omega} - h(x^{\omega}))}_{S\omega_{i,h}} \cdot \underbrace{\left( \gamma^{\omega} - h(x^{\omega}) \right)}_{S\omega_{i,h}} \cdot \underbrace{\left( \gamma^{\omega} - h(x^{\omega}) \right)}_{S\omega_{i,h}}$$

$$= \frac{-\Lambda}{m} \cdot \sum_{i=1}^{m} \left( \gamma^{\omega} - h(x^{\omega}) \right) \cdot \sigma\left( \omega_{i,h} \cdot x^{\omega} + b_{i,h} \right)$$

$$\begin{cases} \frac{\int h(x^{(i)})}{\delta \omega_{2,k}} = \sigma(\omega_{i,k}, x^{(i)}, b_{A,k}) \end{cases}$$

$$\begin{split} \frac{\underline{\underline{S}}\underline{\underline{I}}_{MSF}}{\underline{\underline{S}}} &= \frac{\underline{\underline{A}}}{\underline{\lambda}_{m}} \cdot \sum_{i=1}^{m} \frac{\underline{\underline{S}}}{\underline{\underline{S}}\underline{b}_{A,k}} \left( \underline{\underline{\gamma}}^{(i)} - \underline{h}(\underline{\underline{x}}^{(i)}) \right)^{2} \\ &= \underbrace{\underline{\underline{A}}}_{2m} \cdot \sum_{i=1}^{m} \underline{\underline{Y}} \left( \underline{\underline{\gamma}}^{(i)} - \underline{h}(\underline{\underline{x}}^{(i)}) \right) \cdot \underbrace{\underline{\underline{S}}}_{\underline{\underline{S}}\underline{b}_{A,k}} \left( \underline{\underline{\gamma}}^{(i)} - \underline{h}(\underline{\underline{x}}^{(i)}) \right) \\ &= -\underline{\underline{w}}_{A,k} \cdot \underbrace{\underline{\underline{S}}}_{i=1}^{m} \left( \underline{\underline{\gamma}}^{(i)} - \underline{h}(\underline{\underline{x}}^{(i)}) \right) \cdot \underline{\sigma}(\underline{w}_{A,k} \cdot \underline{\underline{x}}^{(i)} + \underline{b}_{A,k}) \cdot (\underline{A} - \underline{\sigma}(\underline{w}_{A,k} \cdot \underline{\underline{x}}^{(i)} + \underline{b}_{A,k})) \end{split}$$

$$\begin{cases} \frac{5h(x^{\omega})}{\delta b_{A,k}} = \omega_{2,k} \cdot \frac{\delta}{\delta b_{A,k}} \left( \sigma(\omega_{A} \cdot x^{\omega} + b_{A,k}) \right) \\ = \omega_{2,k} \cdot \sigma(\omega_{A} \cdot x^{\omega} + b_{A,k}) \left( A - \sigma(\omega_{A} \cdot x^{\omega} + b_{A,k}) \right) \end{cases}$$

$$\frac{\xi \int_{\text{ms}}}{\xi b_{2}} = \frac{\Lambda}{2m} \cdot \sum_{i=1}^{m} \frac{\xi}{\xi b_{2}} \left( y^{(i)} - h(x^{(i)})^{2} \right)$$

$$= \frac{\Lambda}{2m} \cdot \sum_{i=1}^{m} \chi(y^{(i)} - h(x^{(i)})) \cdot \frac{\xi}{\xi b_{2}} \left( y^{(i)} - h(x^{(i)}) \right)$$

$$= -\frac{\Lambda}{m} \cdot \sum_{i=1}^{m} \left( y^{(i)} - h(x^{(i)}) \right)$$