

Question 2

For m -layer, local induced gradient δ_m will be:

$$\delta_{m_1} = \phi'(v_{m_1}) \sum \delta_p w_{pm_1}$$

$$\delta_{m_2} = \phi'(v_{m_2}) \sum \delta_p w_{pm_2}$$

$$\delta_{m_3} = \phi'(v_{m_3}) \sum \delta_p w_{pm_3}$$

$$\delta_{m_4} = \phi'(v_{m_4}) \sum \delta_p w_{pm_4}$$

$$\delta_{m_5} = \phi'(v_{m_5}) \sum \delta_p w_{pm_5}$$

$$\delta_{m_6} = \phi'(v_{m_6}) \sum \delta_p w_{pm_6}$$

For p -layer,

$$\delta_{p_1} = \phi'(v_{p_1}) \sum \delta_h w_{hp_1}$$

$$\delta_{p_2} = \phi'(v_{p_2}) \sum \delta_h w_{hp_2}$$

$$\delta_{p_3} = \phi'(v_{p_3}) \sum \delta_h w_{hp_3}$$

$$\delta_{p_4} = \phi'(v_{p_4}) \sum \delta_h w_{hp_4}$$

$$\delta_{p_5} = \phi'(v_{p_5}) \sum \delta_h w_{hp_5}$$

For h-layer,

$$\delta_{h_1} = \phi'(v_{h_1}) \sum \delta_f w_{fh_1}$$

$$\delta_{h_2} = \phi'(v_{h_2}) \sum \delta_f w_{fh_2}$$

$$\delta_{h_3} = \phi'(v_{h_3}) \sum \delta_f w_{fh_3}$$

$$\delta_{h_4} = \phi'(v_{h_4}) \sum \delta_f w_{fh_4}$$

$$\delta_{h_5}$$

For f-layer,

$$\delta_{f_1} = e_{f_1} \phi'(v_{f_1})$$

$$\delta_{f_2} = e_{f_2} \phi'(v_{f_2})$$

$$\delta_{f_3} = e_{f_3} \phi'(v_{f_3})$$