COLLABORATORS: YASH KANT, PAVEL GOLIKOV

Q1) a)	h = 6	(Z)					
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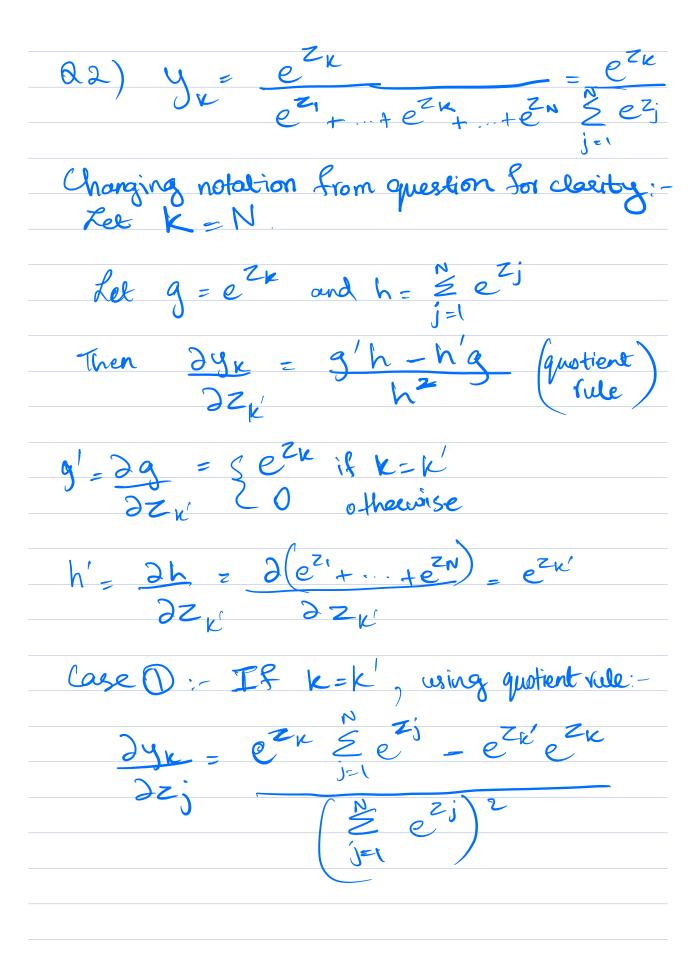
$$\frac{h}{dx_1} = 6\left(\frac{Z_1}{dx_1}\right)$$

$$\frac{Z_{2} - h + \chi}{dx_{1}} = \frac{h + \chi}{dx_{1}} = \frac{2 c R^{d}}{dx_{1}}$$

$$y = W^{(2)} = Z_2 = W^{(2)} \in \mathbb{R}^{1\times d}$$

b) Number & parameters. = Total number of elements in
$$w^{(1)}$$
 and $w^{(2)} = d^2 + d$

C)
$$y = \partial L = (y - t)$$
 $W^{(2)} = \partial L = y \partial y = (y + t) Z_{1}^{T}$
 $V^{(2)} = \partial L = y \partial y = (y + t) Z_{2}^{T}$
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$$= e^{2k} \left(\underbrace{5e^{2j} - e^{2k}} \right)$$

$$= \frac{e^{2k}}{5e^{2j}} \left(\underbrace{5e^{2j} - e^{2k'}}_{5e^{2j}} \right)$$

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$$= \frac{e^{2k}}{5e^{2j}} \left(\underbrace{1 - e^{2k'}}_{5e^{2j}} \right)$$

$$\int_{CE} = -\frac{1}{3} t_{3} \left[\log \left(\frac{e^{z_{3}}}{2} \right) - \log \left(\frac{e^{z_{4}}}{2} + \frac{e^{z_{1}}}{2} \right) \right]$$

$$- t_{1} \left[\log \left(\frac{e^{z_{3}}}{2} \right) - \log \left(\frac{e^{z_{4}}}{2} + \frac{e^{z_{1}}}{2} \right) \right]$$

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$$- t_{2} \left[\log \left(\frac{e^{z_{3}}}{2} \right) - \log \left(\frac{e^{z_{4}}}{2} + \frac{e^{z_{1}}}{2} \right) \right]$$

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$$- t_{2} \left[\log \left(\frac{e^{z_{4}}}{2} + \frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{2} \right) \right]$$

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$$- t_{2} \left[\log \left(\frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{2} \right) \right]$$

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$$- t_{2} \left[\log \left(\frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{2} + \frac{e^{z_{1}}}{$$

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$\frac{\partial z_{k}}{\partial w_{k}} = x$
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2L = 2L 2Z, = (4-t)2
DL = DL DZK = (y-t)22 DWK DZK DWK
or or a du duy