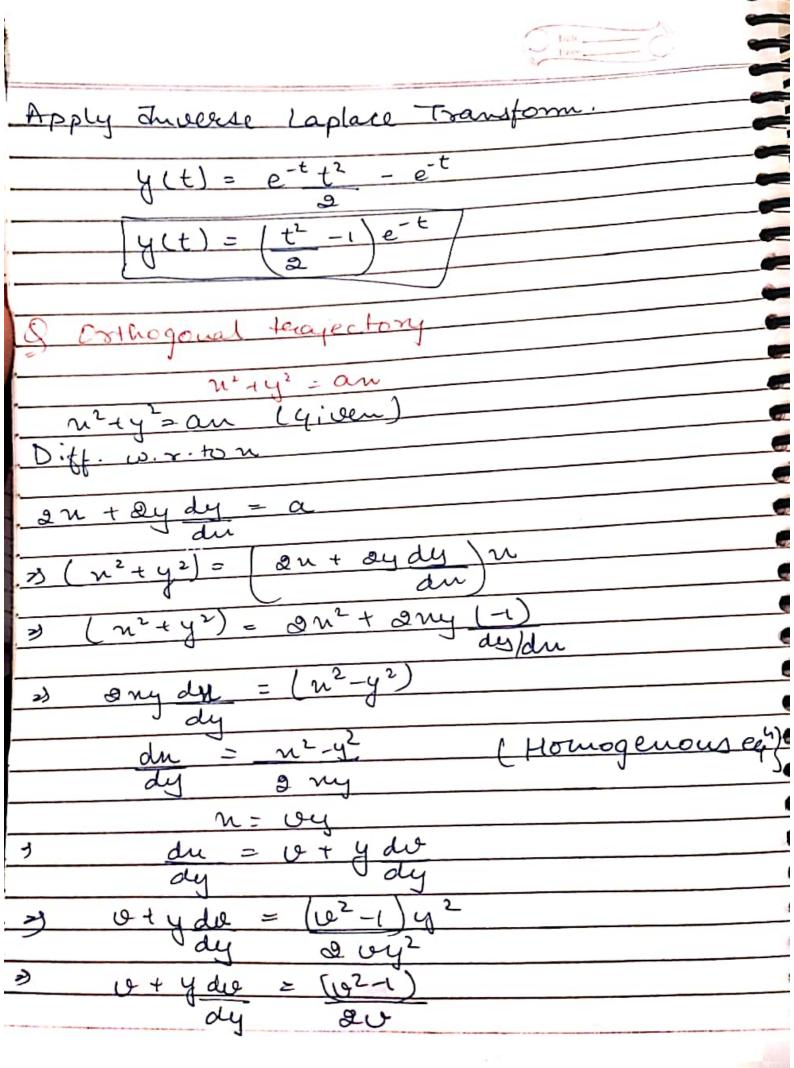


 $P = - (3n-1) \qquad Q = 9$ $N(n-1) \qquad N(n-1)$ ·· 2 + 2 Pn + Qn² = 0 ·· u = n² is known integral Complete Solution = 310gu - log (u-1) + log

Data Data = n+c1 - c1 + c1 n+c-c+c1)n 23 + cn + (122 - C aplace teansfrom y" + ay' + y = e-t, y(0) = -1, y'(0) 3 Apply laplace Lly"+ 2y'+y) = L(e-t) 3P2L(y)- Py(o)-y'(o)+2PL(y)- &y(o)+l(y .. y(0)=-1 y'(0)=1 P2L(y)+P-1+2PL(y)+2+L(y)=1+P 2) (P2+2P+1) L(y)+(P+1)=1+P (1+P)2L(y) = 1 - (P+1) L(y) = (1+P) = (1+P) 23

Scanned with CamScanner



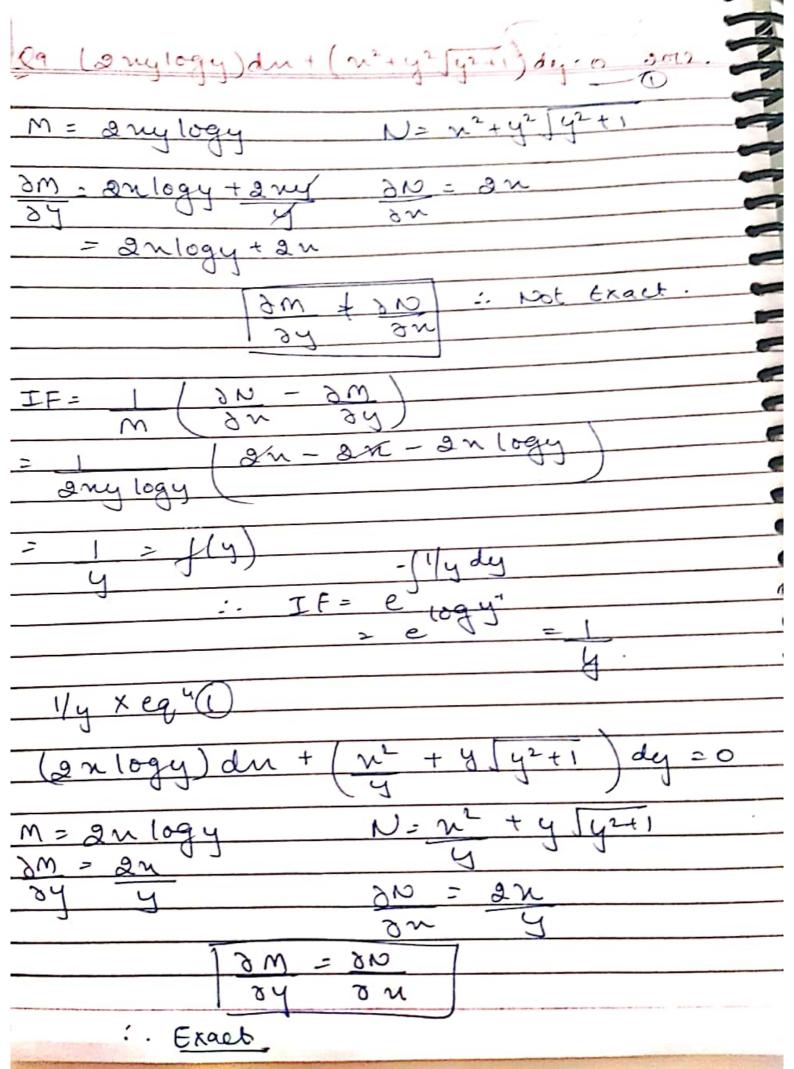
```
a) y du = u^{2} - u

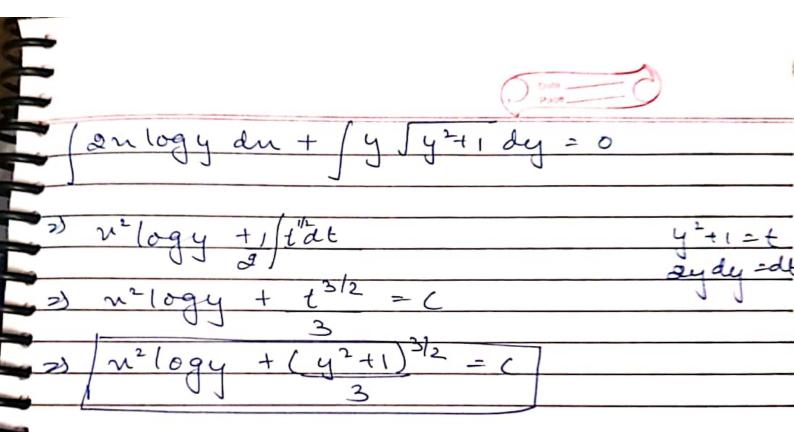
a) y du = u^{2} - 1 - u

b) y du = u^{2} - 1 - u^{2}

d) y du = -(1 + u^{2})

y du = -(1 + u^{2})
```





 $\frac{dy}{dn} = \frac{2nye}{(n/y)^2}$ $\frac{dy}{dn} = \frac{y^2(1+e^{(n/y)^2})}{(2012)}$ $\frac{dy}{dn} = \frac{y}{n}$ $\frac{dy}{dn} = \frac{dy}{dn}$ $\frac{dy}{dn} = \frac{y}{n}$ $\frac{dy}{dn} = \frac{y}{n}$ $\frac{dy}{dn}$

 $\frac{\partial u}{\partial u} = \frac{\partial e^{(1/a)^2}}{\partial u} + (\frac{\partial e^{(1/a)^2}}{\partial u}) + (\frac{\partial$