(2)

Given: - prior is or e - a topind: - P(x10) in P(x10) in multi variable

P(x10)= x; 0 (1-x;)1-0

P(X10) *P(0)

 $F(0) = \frac{1}{2} P(x|0) \times P(0)$

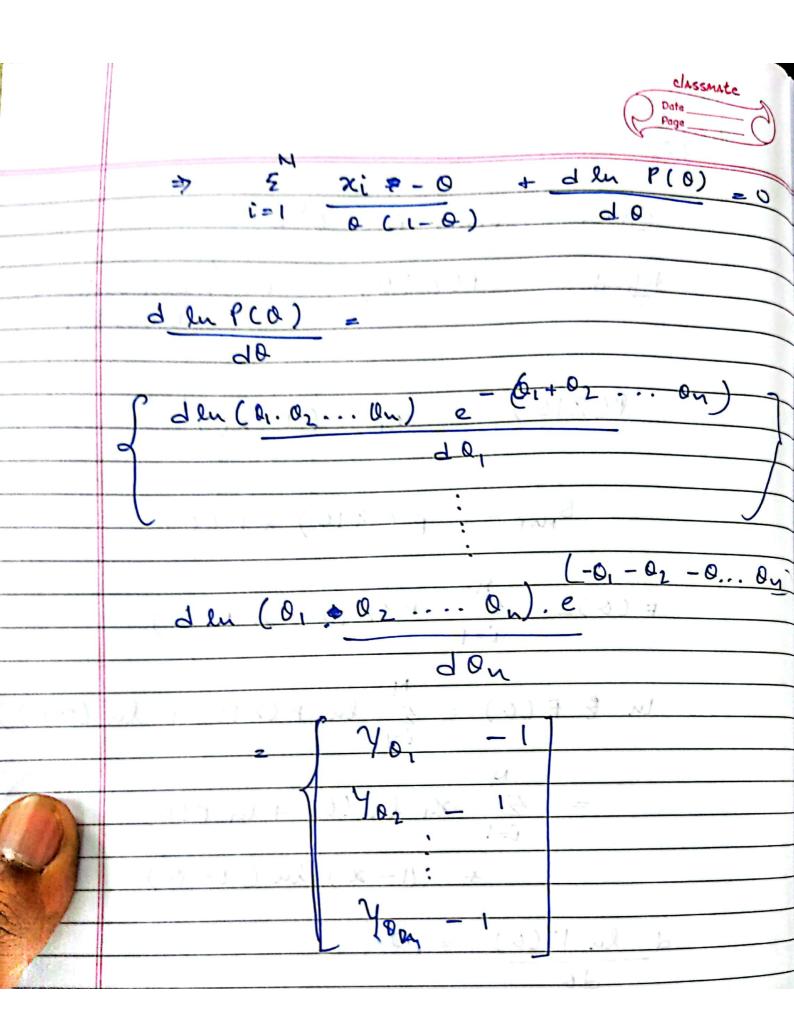
In & F(0) = 5 ln P(x10) + ln (P(0))

xi lu (0) + lu P(0)

(1-x) lu (1-0)

d_ln F(0) =

21 - 1-21 + dlup(0)



dln (10) = 1 -1 - @

$$\frac{N}{z} = \frac{\alpha_i - 0}{0(1 - 0)} = -1$$

$$\sum_{i=1}^{N} x_i - \sum_{i=1}^{N} 0 = (1-1)0 * (1-0)$$

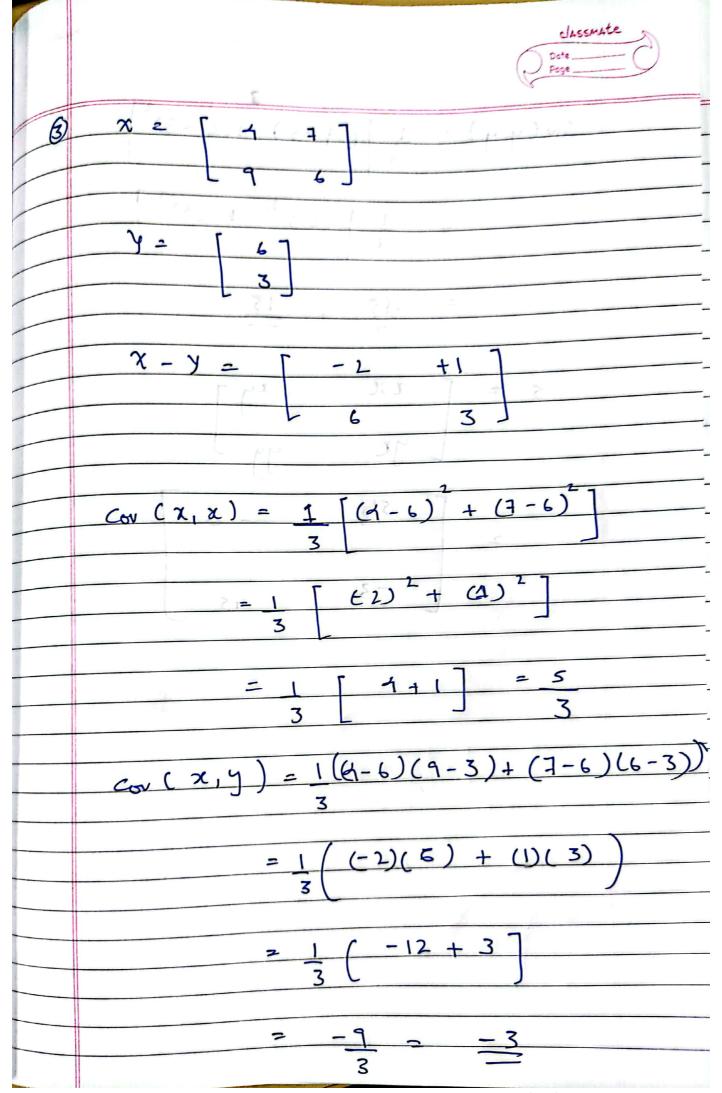
$$\xi'' \chi_{i} = -(1+0^{2}-20) + N0$$

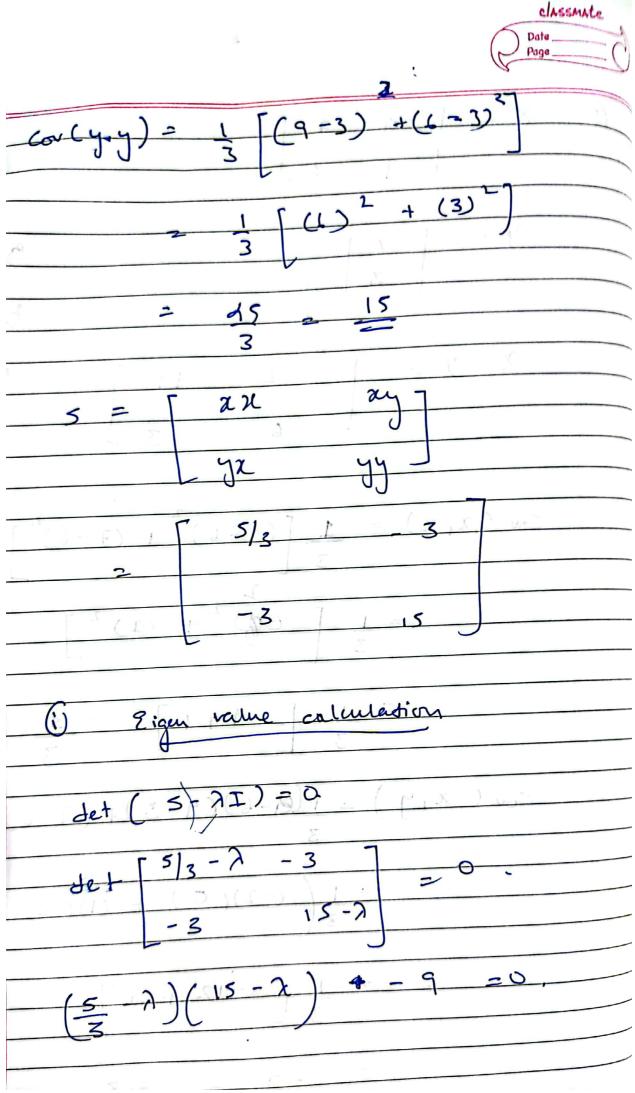
$$6 \times = \begin{bmatrix} 1 & 0 & 1 & 1 \\ 0 & 1 & 0 & 0 \end{bmatrix}$$

from
$$@$$
 $0,^2 - (4+2)0 + 4 = 0$

$$\theta_1 = 5.23$$
 or $\theta_1 = 0.76$

Q	is prob.	⇒	(01) =	0.76	
		Prob.			





$$25 - \frac{5}{3}\lambda - 15\lambda + \lambda^{2} - 9 = 0.$$

$$\begin{cases} \lambda_1 = 15.6 \\ 0 \\ \lambda_2 = 1.022 \end{cases}$$

$$\begin{bmatrix} 5/3 - \lambda & -3 \\ -3 & 15 - \lambda \end{bmatrix} \begin{bmatrix} H & 1 \\ H & 1 \end{bmatrix}$$

$$\left(\frac{5}{3}-\lambda\right)$$
 gy $H_1-3H_2=0$



$$\frac{H_2}{3} = \frac{M_1}{(15-\lambda)} = 1$$

det to 1

$$\frac{H_1}{3}$$
 $\frac{H_1}{|15-2|}$

8

Eight verdor M, 5)
$$\lambda_1 = \begin{bmatrix} 3 \\ 15 \\ 1 \end{bmatrix}$$

Generally
$$\lambda = 15.1$$

