

0	TP	FN	
1			
2	FP		

for '0'

0	TN	FP	TN
1	FN		FN
2	TN	FP	TN

for '1'

0	TN	FP	
1			
2	FN		

for '2'

$$\text{Precision} = \frac{TP}{TP+FP}$$

$$\text{Recall} = \frac{TP}{TP+FN}$$

$$\text{Accuracy} = \frac{TP+TN}{TP+FP+TN+FN}$$

$$= \frac{TP+TN}{\sum \text{Row Sum}}$$

(or)

$$= \frac{TP+TN}{\sum \text{Column Sum}}$$

for '0'

$$0^{\text{th}} \text{ Row Sum} = 39$$

$$\sum \text{Row Sum} = 360$$

$$\text{diagonal sum} = 345$$

$$TP = 38$$

$$FN = 1$$

$$FP = 2$$

$$\text{Precision} = \frac{38}{38+2}$$

$$= \frac{38}{40} = 0.95$$

$$TN = \sum \text{Row Sum} - FP - \text{that Row Sum}$$

$$= 360 - 2 - 39 = 319$$

$$\text{Recall} = \frac{38}{38+1}$$

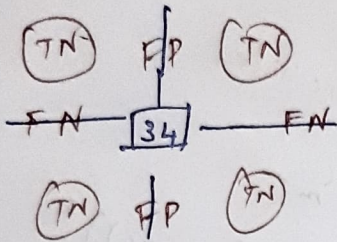
$$= \frac{38}{39} = 0.974$$

$$\text{Accuracy} = \frac{TP+TN}{\sum \text{Row Sum}}$$

$$= \frac{38+319}{360}$$

$$= 0.99$$

for "b"



$$\sum \text{Row Sum} = 360$$

$$\text{Row Sum} = 34$$

$$\text{Diagonal Sum} = 345$$

$$FP = 0$$

$$TP = 34$$

$$FN = 0$$

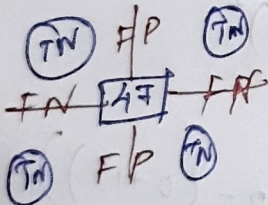
$$TN = \sum \text{Row Sum} - FP - \text{that Row Sum} = 360 - 0 - 34 = 326$$

$$\text{Precision} = \frac{TP}{TP + FP} = \frac{34}{34 + 0} = \frac{34}{34} = 1$$

$$\text{Recall} = \frac{TP}{TP + FN} = \frac{34}{34 + 0} = 1$$

$$\text{Accuracy} = \frac{TP + TN}{\sum \text{Row Sum}} = \frac{34 + 326}{360} = 1$$

for "f" :-



$$\sum \text{Row Sum} = 360$$

$$\text{Row Sum} = 48$$

$$\text{Diagonal Sum} = 345$$

$$FP = 2$$

$$TP = 47$$

$$FN = 1$$

$$TN = \sum \text{Row Sum} - FP - \text{that Row Sum}$$

$$= 360 - 2 - 48 = 300$$

$$TN = 300$$

$$\text{Precision} = \frac{TP}{TP + FP} = \frac{47}{47 + 2} = 0.959$$

$$\text{Recall} = \frac{TP}{TP + FN} = \frac{47}{47 + 1} = 0.979$$

$$\text{Accuracy} = \frac{47 + 300}{360} = 0.96$$