

Practice Question of Confusion Matrix

1. For an AI model developed to check if a painting is authentic or not, its confusion Matrix is given below (0 means False and 1 means True).

N = 192	Predicted 0	Predicted 1
Actual 0	118	12
Actual 1	47	15

As per given Confusion matrix: find Precision, Recall, Accuracy rate and F1 Score

Ans – 1. Accuracy Rate =45.54%, 2. Precision =55.55% 3. Recall =24.19%
4. F1 Score =0.33

Q2. Given an AI model to classify emails in spam and non-spam classes, having the following Confusion Matrix. Evaluate the model as per its accuracy, Precision, recall and f-measure.

		Predicted Class	
		Spam	Non-Spam
Actual Class	Spam	TP=45	FN=20
	Non-Spam	FP=5	TN=30

Q3. Given an AI model to test the collected test sample for covid-positive and covid-negative classes, having the following confusion matrix. Evaluate the model as per its accuracy, Precision, recall and f-measure.

N=100	Predicted No	Predicted Yes
Actual No 60	50	10
Actual Yes 40	5	35

Q4. An AI Model made the following sales prediction for a new mobile phone when they have recently launched. 1. Identify total number of wrong Prediction by the Model. 2. Calculate Precision, Recall, F1 Score and Accuracy Rate.

Confusion Matrix N=100		Reality	
		Yes	No
Prediction	Yes	50	10
	No	5	35