

## Machine Learning – Classification

Evaluation Parameter for various models :

S.No	Question	Parameter		SVC	DT	RF
1	What is the percentage of correct classification of (P & NP) to the total i/p of the test set? (Overall Performance of the model)	Accuracy	-	0.79	0.91	0.89
2	What is the percentage of correct classification of an output to the total i/p of the same in the test set?	Recall	NP	0.97	0.90	0.92
			P	0.44	0.93	0.83
3	What is the percentage of correct classification to sum of correct and false classification of a particular class?	Precision	NP	0.77	0.96	0.91
			P	0.90	0.83	0.85
4	What is the overall performance of a particular class?	F1-Measure	NP	0.86	0.93	0.92
			P	0.59	0.87	0.84
5	What is the Average performance of Precision, Recall and F1-measure?	Macro Average	Precision	0.83	0.89	0.88
			Recall	0.71	0.91	0.88
			F1Measure	0.73	0.90	0.88
6	What is the sum of product of proportional rate of each class?	Weighted Average	Precision	0.81	0.91	0.89
			Recall	0.79	0.91	0.89
			F1Measure	0.77	0.91	0.89

**SVC** – Support Vector Classifier, **P**-Purchased, **NP** – Not Purchased

**RF**-Random Forest

**DT** – Decision Tree