Total No. of Questions - [04]

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P118-133(TL)

G.R. No.	

## OCTOBER 2018 / IN - SEM (T1)

## F. Y. M. TECH. (Computer Engineering) (SEMESTER -I)

## **COURSE NAME: Machine Learning**

COURSE CODE: CSPA11183A

(PATTERN 2018)

Time: [1 Hour]

Q.1)

[Max. Marks: 20]

## Instructions to candidates:

- 1) Answer Q.1 OR Q.2, Q.3 OR Q.4
- 2) Figures to the right indicate full marks.
- 3) Use of scientific calculator is allowed
- 4) Use suitable data where ever required
- learning with respect to training data

  b) Justify role of Machine Learning in recent trends application

  OR

  [4]

a) Differentiate supervised ,unsupervised and semi supervised

Q.2) What is decision tree? Consider a scenario where person may reach on time to the office or may reach late to the office.. Identify features and their type. A Person may be late if he gets up late or faced a traffic jam or road side accidents etc. Consider various parameters and draw multiple decision trees .Identify class labels and write down various rules

P.T.O

[6]

Q.3) What is market basket analysis. Justify how association rules form falls under unsupervised category. Find out various frequent patterns for the following data set. Assume support = 3

TID	Items
1	ABC
2	ABCD
3	BCE
4	ACDE
5	DE

OR

Q.4) For the above problem build FP-tree and find out frequent patterns [10] for varying support.