Scheme of Valuation/Answer Key

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SIXTH SEMESTER B.TECH DEGREE EXAMINATION, APRIL 2018

Course Code: IT 304

Course Name: Data Warehousing and Mining

Max. Marks: 100 | Duration: 3 Hours

PART A

		Answer any two full questions, each carries 15 marks.	Marks
1	a)	For 5 ways of handling missing values 5*1=5	(5)
	b)	Data cleaning definition – 1 mark Binning – 1 marks Types of binning methods with example – 3 marks	(5 marks)
	c)	Concept(3),diagram(1),Explanation(3)	(7)
2	a)	DESCRIPTION ABOUT ANY 5 DATA MINING APPLICATIONS , FIVE MARKS EACH (5*2=10)	(10)
	b)	DEFINITION and four methods - 5	(5)
3	a)	Context and Definion - 2 marks Structure of Data Warehouses with figure, Data Marts - 5 marks ETL - 1 mark Data cube with figure - 3 marks Schedule of how data is extracted from OLTP with figure - 4 marks.	(15 marks)
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PART B

Answer any two full questions, each carries 15 marks.

4	a)	Calculation of gain in the first step to find root(3) Info. gain calculation on sub trees(5) Final decision tree(2)	(10)
	b)	Concept(2) algorithm of Naive Bayes classifier(2) explanation(1)	(5)
5	a)	Defintion(1),perceptron(2), Activation function(1), multilayer networks(4), training, learning(2)	(10)
	b)	Definition & Concept (1 mark) Listing Any four prediction methods (4 marks)	(5)
6	a)	Basic concepts of SVM – 2 marks	(15

		Maximizing distance between two maximal margin hyper planes – 1 mark Quadratic Program and Minimization– 4 marks Lagrangian function – 2 marks Kernels – 2 marks Training an SVM classifier – 2 marks Classifying new data with an SVM classifier – 2 marks.	marks)
PART C			
Answer any two full questions, each carries20 marks.			
7	a)	APRIORI ALGORITHM STEPS-5 EXAMPLE 5	(10)
	b)	Initial cluster elements - (3) Final cluster centroids - (2) Graphical representation - (2) No. of iterations - (3)	(10)
8	a)	Role of R package in data mining – (5) Five salient features of R software – (5) Clustering, classification, association rules, time series, data manipulation	(10)
	b)	Classifier model preparation steps in Weka– (7)	(7)
	c)	Concepts(1) explanation(2)	(3)
9	a)	Life cycle(7.5),architecture(7.5)	(15)
	b)	Weighted graph partitioning (4)+figure(1)	(5)
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