

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)**

**CLASS: MBA  
BRANCH: MANAGEMENT**

**SEMESTER : III<sup>rd</sup>  
SESSION : MO/2025**

**SUBJECT: MT549R1 DATA MINING**

**TIME: 3 Hours**

**FULL MARKS: 50**

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Briefly discuss role of data Mining in business with suitable examples.	[5] 1	1
Q.1(b)	Explain different Data Mining Techniques with their significance.	[5] 2	3
Q.2(a)	How does Data mining helpful for customer relationship management. Discuss it with any suitable example.	[5] 2	2
Q.2(b)	Using any case study, show the importance of Data Mining to improve business.	[5] 3	4
Q.3(a)	Describe Apriori Algorithm using flow diagram with any suitable example.	[5] 4	4
Q.3(b)	Differentiate Incremental algorithm from border algorithms and also write uses of both algorithms in business prospective.	[5] 3	3
Q.4(a)	Design a grading system for students using decision tree algorithm on the basis of following conditions: marks>=90(Excellent),Marks>=80 and less than 90(Good),and in similar pattern like Appreciable, Satisfactory, Pass etc but in case of marks <=49 (Fail).	[5] 5	5
Q.4(b)	Implement K-Means clustering (a centroid based Technique) to group the visitors in a technical Institute using just their age as mentioned: 16, 16, 17, 20, 20, 21, 21, 22, 23, 29, 36, 41, 42, 43, 44, 45, 61, 62, 66.	[5] 5	5
Q.5(a)	Briefly discuss web mining and its role in e-business.	[5] 4	4
Q.5(b)	Elaborate different text mining techniques with relevant example.	[5] 4	3

:::24/11/2025:::M