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

CLASS: BBA   SEMESTER : V
BRANCH: BBA   SESSION : MO/2023

SUBJECT: MT314 INTRODUCTION TO BUSINESS ANALYTICS

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.

			CO	BL
Q.1(a)	Explain the business analytics process and its significance in organizational decision-making.	[5]	1	1,2
Q.1(b)	Discuss why business analytics is important, providing insights into how it answers questions, contributes to competitive advantage, and addresses new sources of data.	[5]	1,2	2,3
Q.2(a)	Discuss the role of business analytics personnel and data in supporting the business analytics process.	[5]	1,2	2,3
Q.2(b)	Explore the alignment of resources within an organization to support business analytics, considering organizational structures and management issues.	[5]	2,3	2,3,4
Q.3(a)	Briefly explain measures of central tendency such as mean, median, mode, variance, and standard deviation. Comment upon their importance.	[5]	3	3,4
Q.3(b)	Provide a detailed overview of commonly employed data visualization techniques, including examples of their application.	[5]	2,3	3,4
Q.4(a)	Define Clustering and clearly explain the working mechanism of k-means clustering algorithm.	[5]	3,4	4,5
Q.4(b)	Differentiate between clustering and classification. Outline the steps involved in KNN classification.	[5]	4	3,4,5
Q.5(a)	Define statistical decision analysis and discuss its applications in decision-making under risk and uncertainty.	[5]	4,5	3,4,5
Q.5(b)	Clearly discuss the concept of decision making under conflict using game theory.	[5]	3,4,5	4,5

::::::28/11/2023::::::M