

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

**CLASS: BBA  
BRANCH: BBA**

**SEMESTER : V  
SESSION : MO/2024**

**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)	Discuss some of the challenges of implementing Business Analytics in an organization.	[5]	1 2																			
Q.1(b)	Explain Business Analytics process and its significance in organisational decision making process.	[5]	1 2																			
Q.2(a)	Discuss about the alignment of resources to support Business Analytics within an organisation.	[5]	2 2																			
Q.2(b)	What are the data related issues in implementing Business Analytics in an organisation?	[5]	2 3																			
Q.3(a)	Discuss with an example how Summary table and Contingency table are used in descriptive Analytics?	[5]	3 4																			
Q.3(b)	Discuss benefits of Data visualization tools in Business Analytics.	[5]	3 3																			
Q.4(a)	Discuss logic driven model with help of an example.	[5]	4 4																			
Q.4(b)	Discuss data driven model with help of an example.	[5]	4 4																			
Q.5(a)	The research department of HUL has recommended the market department to launch a shampoo of three different types. The marketing manager has to decide one of the three types of shampoo to be launched under the following estimated payoffs for various levels of sales.	[5]	5 4																			
	<table><tr><th rowspan="2">Types of shampoo</th><th colspan="3">Estimated level of sales (units)</th></tr><tr><th>15000</th><th>10000</th><th>5000</th></tr><tr><td>Egg shampoo</td><td>30</td><td>10</td><td>10</td></tr><tr><td>Clinic shampoo</td><td>40</td><td>15</td><td>5</td></tr><tr><td>Delux shampoo</td><td>55</td><td>20</td><td>3</td></tr></table>	Types of shampoo	Estimated level of sales (units)			15000	10000	5000	Egg shampoo	30	10	10	Clinic shampoo	40	15	5	Delux shampoo	55	20	3		
Types of shampoo	Estimated level of sales (units)																					
	15000	10000	5000																			
Egg shampoo	30	10	10																			
Clinic shampoo	40	15	5																			
Delux shampoo	55	20	3																			
	What will be the marketing manager's decision if (a) maximin (b) minimax (c) maximax (d) Hurwicz Criterion ( $\alpha = 0.6$ ) (e) Laplace and (f) Regret criterion is applied?																					
Q.5(b)	What techniques are used to solve decision-making problems under Risk? Explain EMV, EOL, EPPI and EVPI in brief.	[5]	5 3																			

:::27/11/2024:::M