

Name. _____				Printed Pages:02																										
Student Admn. No.: _____																														
School of Business Backlog Examination, June 2023 [Programme: BBA] [Semester: II] [Batch:]																														
Course Title: Data Analysis				Max Marks: 100																										
Course Code: I210101T				Time: 3 Hrs.																										
Instructions:		1. All questions are compulsory. 2. Assume missing data suitably, if any.																												
				K Level	COs	Marks																								
SECTION-A (15 Marks)			5 Marks each																											
1.	Explain various types of data collection techniques used by data analysts.			K1	CO1	5																								
2.	Explain what are Index Numbers and their uses in area of data analysis.			K2	CO2	5																								
3.	Differentiate between Data and Information with examples.			K2	CO2	5																								
SECTION-B (40 Marks)			10 Marks each																											
4.	Explain the challenges and opportunities presented by big data in today's digital age.			K2	CO1	10																								
5.	Calculate price index number for 2005 by (a) Laspeyre's (b) Paasche's method <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Commodity</th> <th colspan="2">1995</th> <th colspan="2">2005</th> </tr> <tr> <th>Price</th> <th>Quantity</th> <th>Price</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>5</td> <td>60</td> <td>15</td> <td>70</td> </tr> <tr> <td>B</td> <td>4</td> <td>20</td> <td>8</td> <td>35</td> </tr> <tr> <td>C</td> <td>3</td> <td>15</td> <td>6</td> <td>20</td> </tr> </tbody> </table>			Commodity	1995		2005		Price	Quantity	Price	Quantity	A	5	60	15	70	B	4	20	8	35	C	3	15	6	20	K4	CO2	10
Commodity	1995		2005																											
	Price	Quantity	Price	Quantity																										
A	5	60	15	70																										
B	4	20	8	35																										
C	3	15	6	20																										
6.	Describe the decision-making process in different environments, including certainty, uncertainty, and risk.			K3	CO3	10																								
7.	The given table represents the patient's body temperature recorded every hour in a hospital. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Time</th> <th>9 am</th> <th>10 am</th> <th>11 am</th> <th>12 noon</th> <th>1 pm</th> <th>2 pm</th> </tr> </thead> <tbody> <tr> <td>Temperature</td> <td>34°C</td> <td>35°C</td> <td>38°C</td> <td>37°C</td> <td>34.5 °C</td> <td>35.5°C</td> </tr> </tbody> </table> (a) Draw the line graph for the given information: (b) What is the average temperature during the day between 9 a.m. to 2 p.m.? OR Explain the Gantt chart with the help of an example.			Time	9 am	10 am	11 am	12 noon	1 pm	2 pm	Temperature	34°C	35°C	38°C	37°C	34.5 °C	35.5°C	K4	CO4	10										
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SECTION-C (45 Marks)			15 Marks each																											
8.	Explain the significance of Online Analytical Processing (OLAP) and its relevance in decision-making.			K4	CO3	15																								
9.	Define Data Visualization. Describe four advanced data visualization techniques and their applications.			K5	CO2	15																								

A machine is set to deliver packets of a given weight. Ten samples of size five each were recorded. Below are given relevant data:

Sample number	1	2	3	4	5	6	7	8	9	10
\bar{X}	15	17	15	18	17	14	18	15	17	16
R	7	7	4	9	8	7	12	4	11	5

Calculate the control limits for mean chart and the range chart and then comment on the state of control. (Conversion factors for $n = 5$, $A_2 = 0.58$, $D_3 = 0$ and $D_4 = 2.115$).

OR

Case Study: Read the following case and answers question below

Gillette began its global operations in 1905 when it opened a manufacturing plant in Germany. This global strategy and success saw the firm extending its operation to Latin America. Argentina was a potential market after tariffs and business policies were revised. Having operated under unfavourable regime, the firm perceived future competition and decided to create competitive advantages. Key figures in the firm such as Carlos Rotundo and Jorge Micozzi suggested better quality as the solution to the market issues.

The management lay to change the organizational culture which was not strategic for the future market circumstances. Rotundo had already began creating a new organizational culture when Micozzin came up with the idea of total quality management (TQM) that made Gillette Argentina the most successful affiliate in Latin America. Gillete endeavored to meet the challenges of quality that the employees faced. Initially, Rotundo responded quickly to the employee complaints about the contract approach by delegating responsibility to investigate them to Victor Walker. The newly hired quality manager emerged to be a successful preparer of the team members and organizer of TQM process. As competition threat continued to intensify in the Argentine market, Gillette embarked on a TQM system to counter the competition. The challenge the firm faced of getting the employees to take on the system was solved by extensive training, workshops, consultation and proper response to the quality challenges perceived.

Questions:

- How Gillette has succeeded in getting employees to take on the new system?
- Explain the ways to involve teams in the TQM process.
- What is the role of work culture in Gillette's success?

K5

10

CO5

15