KUMARAGURU
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character is life

B.E/B.TECH DEGREE EXAMINATIONS: APRIL / MAY 2024

(Regulation 2018)

Sixth Semester

INFORMATION TECHNOLOGY

U18ITE0003: Data Visualization

COURSE OUTCOMES

CO1: Explain principles of visual perception

CO2: Apply core skills for visual analysis

CO3: Explain visualization for time-series analysis and ranking analysis

CO4: Outline visualization for deviation ,distribution , correlation and multivariate analysis

CO5: Demonstrate the skills in information dashboard design

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-
PART A (10 x 2 = 20 Marks)
(Answer not more than 40 words)

1.	List the traits of meaningful data.	CO1	[K$_3$]
2.	What are three types of goals of visualization?	CO1	[K$_2$]
3.	Differentiate bar chart and histogram	CO2	[K$_3$]
4.	Give an example for pareto chart.	CO2	[K$_3$]
5.	What are the drawbacks of pie chart?	CO3	[K$_2$]
6.	Find the maximum, minimum, median, first quartile, third quartile for the given data set. 23, 42, 12, 10, 15, 14, 9.	CO3	[K$_3$]
7.	Give an example for bump chart.	CO4	[K$_2$]
8.	What is the specialty of heatmap?	CO4	[K$_2$]
9.	What are the different types of memory?	CO5	[K$_2$]
10.	Compare analytical and operational dashboard.	CO5	[K$_2$]

Answer any FIVE Questions:-
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

11.		List and explain different analytical interaction methods.	16	CO1	[K_2]
12.		Discuss in detail about the techniques and best practices to be followed in time series analysis.	16	CO2	[K_2]
13.	a)	What are the key characteristics of correlation analysis. Explain in detail.	8	CO3	[K_3]
	b)	Explain in detail about deviation analysis.	8	CO3	[K_3]
14.		Explain in detail about the distribution patterns, displays and best practices.	16	CO3	[K_2]
15.		What do you mean by multivariate analysis. Explain in detail with an example.	16	CO4	[K_2]
16.		Explain the common mistakes in Dashboard Design.	16	CO5	[K_2]

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