UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2018

Course: MBA (BA)
Semester: III

Programme: Data Visualization (DSBA 8001)

Time: 03 hrs.   **Max. Marks: 100**

Instructions: Kindly use the Superstore database available with Tableau software

SECTION A

S. No.		Marks	CO
Q 1	**Answer these questions using the Superstore sample data**. 1. For items shipped in July of 2012, what percent of sales were sent in a Large Box? A. 13.27% B. 11.46% C. 11.95% D. None of these 2. Find the top product subcategories by Sales within each delivery method. The second highest subcategory for Regular Air sales is ranked _____ for Express Air. A. 1 B. 2 C. 3 D. 4 E. 5	10X2=20	CO1

3. In the furniture category, which unprofitable state is surrounded by only profitable states?

    A. Vermont

    B. Iowa

    C. Utah

4. A dimension is a field that typically holds

    A. numerical data

    B. discrete qualitative data

5. Dates are typically treated as

    A. dimensions

    B. measures

6. The icon next to a field means that field is

    A. numerical

    B. qualitative

    C. geographic

    D. date or time

7. Which of the following charts types always includes bars sorted in descending order?

    A. Gantt Chart

    B. Pareto Chart

    C. Combo Chart

    D. Bar in Bar

8. Which of the following charts uses binned data?

A. Pie Chart

B. Box Plot

C. Histogram

D. Bullet Graphs

9. If a field has a blue background, that means the field is

A. continuous

B. discrete

C. dimension

D. measure

10. This type level of detail expression computes total sales for the region, regardless of what dimensions are shown in the view.

A. {SUM([Sales])}

B. { FIXED [Region] : SUM([Sales]) }

C. { ONLY [Region] : SUM([Sales]) }

D. { EXACT [Region] : SUM([Sales]) }

	SECTION B		
Q1.	**Answer these questions using the Superstore sample data.** 1. Create a trend line for profit as a linear function of sales. What is the R^2 value? A. 0.0738416 B. 0.138074 C. 0.147809 D. None of these	3X5=15	CO3

	2. Create a trend line for profit as a linear function of sales. According to the trend line, how much does profit increase for each dollar of sales? A. 0.142809 B. 0.966844 C. 155.864 D. 0.261169 E. None of these 3. Create a trend line for profit as a function of sales. Based on the R^2 value, which model type results in the best fit? A. Linear B. Exponential C. Logarithmic D. Polynomial with degree two		
	SECTION-C		
Q1.	What is the difference between .twb and .twbx extension?	5	CO1
Q2.	What are the different types of joins in Tableau?	5	CO1
Q3.	What is the difference between a tree map and heat map?	5	CO1
Q4.	Describe the following functions with example: a) SQRT b) IF c) CASE **d)** ZN	5	CO2
Q5.	Differentiate between univariate, bivariate and multivariate analysis.	**5**	**CO2**

SECTION-D			
	Instructions: • The questions have to be attempted on Tableau on the allocated Computer Terminal. • Write interpretation of each visualization in answer sheet. • Before leaving the examination hall, kindly rename your response workbook as your SAP ID; and save the same at the instructed location.		

Q1.	**Data Source: Sample – Superstore Subset (Excel)**
	
	a) Create a graph to identify potential products based on Sales amount, Quantity Sold and Profit.
	
	b) Create Bar chart for top 10 Products by Sales amount.
	
	c) Create a tree map to identify the top customer by region.
	
	d) Create a simple table that shows following information.
	
	    i. Product category and Sub Category
	    ii. Average, Max, Min Sales
	    iii. Calculate Sum(Sales)/Total(Sales)
	
	e) Choose appropriate view to show following information to user
	
	    i. Year wise trends for all three product categories for sales and profit
	    ii. Use Segment as quick filter
		5X5=25	**CO3**

Q2.	Draw a dash board in Tableau to identify the items having less sale in different states and different time periods using Sample Super store.	**15**	**CO2**