	PES University, Bengaluru (Established under Karnataka Act No. 16 of 2013)	**UE20CS906**
	SAMPLE: END SEMESTER ASSESSMENT (ESA) **M TECH DATA SCIENCE AND MACHINE LEARNING_ SEMESTER I** **UE20CS906 - Data Visualization using Tableau**	
	Answer All Questions	Max Marks: 100

INSTRUCTIONS

- All questions are compulsory.
- Please enter your Name and SRN number in the beginning of the .twbx file.
- The compressed file contents to be uploaded in Olympus strictly should be a .twbx file.

SECTION A – 30 MARKS

1	a)	Using the billionaires dataset, understand the data variable description and answer the following questions accordingly.
		
		   a. Create a calculated field on Total Net Wealth to remove the special characters in the data. Name the calculated field as Net Wealth. (2 marks)
		   b. Using a Word Cloud, find the industry sources which have the highest number of billionaires. (3 marks)
		   c. Using a bar chart, find the top N Billionaires. Use a parameter to customize the input. (5 marks)
			10

	b)	a. Using a filled map, find the country with the highest number of billionaires. [Make sure that there are no unknowns in your visualization] (10 marks)
		   b. Display the age distribution of the billionaires. Find the youngest and oldest billionaire. (10 marks)
		   c. Create a visualization chart on the relationship between Industry and Avg. of Networth and the average age of the billionaire. Find the average line for each category. (10 marks)
		
		Compute the age into following groups:
		
		Age: 0-20, 21-45, 46-60, 61-80 and 80+
			30

		SECTION B – 30 MARKS	

2	a)	a. Create a map chart using the billionaire dataset. Display the count of billionaires in each country. Find the count of Billionaires with self made status. [Please note there are no unknowns in the map] (15 marks)
		b. Create a Dashboard displaying the following data :
		    ● Industry
		    ● Wealth
		    ● Self Made Billionaires
		    ● Top 5 Billionaires
		differentiating Indian billionaires and other world billionaires [Using an appropriate visualization] (15 marks)
			30

		SECTION C – 40 MARKS	
3	a)	Create a Dashboard containing the following data details a. Create a calculated field to differentiate the marital status as Married or not Married. Create a donut chart display on marital status. Use country and industry filters to customize the view. b. Create a box plot chart displaying their children count. c. Display the average age and net worth. d. Create a bubble chart with Top 5 Industry with networth which are self made. Keep the Bubble chart as the master filter for Dashboard. e. Find a relation between the top 5 Industry and Age using an appropriate visualization. Compute the age into following groups: Age: 0-20, 21-45, 46-60, 61-80 and 80+ Mention your insights using summary .	30