

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER- VI EXAMINATION – SUMMER 2026****Subject Code:3164302****Date:29-05-2026****Subject Name: Data Visualization****Time: 10:30 AM TO 01:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) What is data visualization library?	03
	(b) How Python be used for data visualization?	04
	(c) What are the steps to use Python libraries for data visualization? Explain any two Python libraries in detail.	07
Q.2	(a) What is Power BI? What are different components of Power BI?	03
	(b) List down different data sources supported by Power BI. Explain it in short.	04
	(c) What are advantages and disadvantages of using DirectQuery in Power BI.	07
	OR	
	(c) Explain various Power BI dashboard options in detail.	07
Q.3	(a) What is Tableau? What are different features of Tableau?	03
	(b) What are different steps for Tableau installation?	04
	(c) Differentiate Power BI Vs Tableau	07
	OR	
Q.3	(a) What is Matplotlib? What is pyplot?	03
	(b) Write down a code for Scatter plots using Matplotlib with Python and draw it	04
	(c) What is Histogram? What is Pie chart? Write down code for both Histogram and Pie chart using Matplotlib with Python and draw it.	07
Q.4	(a) What is the Waffle chart? What are its advantages?	03
	(b) What is Word clouds? List Python libraries that needed to install Word clouds	04
	(c) What is Seaborn? Write a code for Bar plot using Seaborn in Python.	07
	OR	
Q.4	(a) Write a code for a Waffle chart using Python	03
	(b) Write a code for a Word clouds using Python.	04
	(c) What is Box plot? Write a code for Box plot using Seaborn in Python.	07
Q.5	(a) What are different basic sorting in Tableau? Explain in short.	03
	(b) What is Data interpreter in Tableau? Explain it.	04
	(c) What is Bullet graph? What are the steps to create it in Tableau?	07
	OR	
Q.5	(a) What are different Tableau basic filters? Explain in short.	03
	(b) List out various Menu options of Tableau. Explain in short.	04
	(c) What is Gantt chart? What are the steps to create it in Tableau?	07
