# Class Test 2 – Units 3, 4 & 5 – Solutions

Answer to Q1 (2 Marks):

Line charts and bar charts with time on the x-axis are commonly used to display trends over time.

Answer to Q2 (2 Marks):

A Pivot Chart is a graphical representation of data in a Pivot Table that updates automatically as the underlying Pivot Table changes.

Answer to Q3 (3 Marks):

Select the Pivot Table, choose PivotTable Analyze > Insert Slicer, choose the fields to filter and click OK. The slicer provides buttons to filter the Pivot Table.

Answer to Q4 (3 Marks):

In a terminal or command prompt, run: pip install matplotlib. In Jupyter notebooks, precede it with an exclamation mark: !pip install matplotlib.

Answer to Q5 (4 Marks):

Import or enter data into a table, use formulas or pivot tables to summarise key metrics, insert charts based on the summary data, arrange them neatly on a sheet and add slicers or filters.

Answer to Q6 (4 Marks):

Select the chart and drag it to a new location; resize it by dragging corner handles. To move to a separate sheet, right-click and choose Move Chart and select New Sheet.

Answer to Q7 (6 Marks):

Arrange the dataset with columns Region, Product and Sales; select the range and insert a Pivot Table; drag Region to Rows, Product to Columns and Sales to Values (Sum). This summarises total sales for each region-product combination.

Answer to Q8 (6 Marks):

import matplotlib.pyplot as plt  
x = [1, 2, 3, 4, 5]  
y = [2, 4, 5, 7, 11]  
plt.figure(figsize=(6,4))  
plt.scatter(x, y)  
plt.title('Scatter Plot Example')  
plt.xlabel('X value')  
plt.ylabel('Y value')  
plt.xlim(0,6)  
plt.ylim(0,12)  
plt.savefig('scatter\_example.png', dpi=300)  
plt.show()

The code creates a scatter plot with labels, sets axis limits and saves the figure before displaying it.