



**Application of Excel in Big Data Analytics**  
**Assessment: 08.2025**



**Instructions**

1. Use the '**Assessment Workbook**' (sent on WhatsApp) file for the entire assessment.
2. All work should be done on the worksheets provided.
3. Use **YOUR NAME** to save the Excel workbook.
4. When done, advise the facilitator for them to collect your assessment
5. The assessment carries **50 Marks**.
6. Time allocated for the assessment is **2 hours**.
7. Work independently and quietly.

Use the '**Sales**' worksheet to answer questions **1 – 4**.

1. Given that the total product cost was calculated as 83% of the Sales. Calculate and complete the worksheet values for the following columns and cells in yellow:
  - a) Total Cost. [2]
  - b) Profit. [2]
  - c) Total sales for the product with product ID 13. [2]
  - d) Total number of products sold. [2]
  - e) Overall total sales for the 3<sup>rd</sup> lowest product price. [2]
2. Suppose the business categorizes profit according to various categories. Populate the Profit Category column using the following categories.
  - Less than R100,000: Low Profit.
  - R100,000 – R299,000: Medium Low Profit.
  - R300,000 – R499,000: Medium High Profit.
  - More than R500,000: High Profit [10]
3. Show in a bar graph the distribution of sales per city? [10]

4. Use the '**Sales**' worksheet to retrieve the entire record of any customer whose Customer ID is '**selected**' in cell **N19**. The customer record should be displayed in the provided cells **M23 – S23** under the given headings. [10]
5. a. Calculate and fill-in the Cost and Total Cost in the '**Projects**' worksheet. [2]  
b. Analyse the '**Projects**' worksheet and distribute a budget of R65,000 across the projects given the following supporting information:
- Extra costs should not exceed R1,000 per project.
  - Fixed costs must remain at R2,000 per project.
  - Total project cost for each project should not exceed R9,600. [8]