

Data Visualization with Python

(Part B Programs)

Design and Develop the Dashboard using appropriate Data visualization Python library for any one of the following:

1. Dashboard for Analysis of COVID-19 vaccination coverage globally: Use appropriate Data Sets and develop the program which can answer the following questions:

- **Q1:** What countries have the highest and lowest vaccination coverage?
- **Q2:** How has vaccination coverage changed over time?

2. Healthcare analytics dashboard to visualize patient admission trends: Use appropriate Data Sets and develop the program which can answer the following questions:

- **Q1:** How do monthly admission rates vary? Utilize Bokeh to create an interactive time series plot.
- **Q2:** Using Seaborn, represent the distribution of patient ages in different medical specialties.

3. Educational analytics dashboard to visualize student performance trends: Use appropriate Data Sets and develop the program which can answer the following questions:

- **Q1:** How do students' GPAs change over semesters?
- **Q2:** Create a graph/map to analyse course difficulty and average grades.

4. Dashboard for Analysis of product sales performance in a retail business: Use appropriate Data Sets and develop the program which can answer the following questions:

- **Q1:** What are the top-selling products in different regions?
- **Q2:** How do sales vary by season? Use seasonal line charts.