Data: An Overview

Unit 1:
1. Identify different sources and nature of data, distinguishing between population and sample. (Knowledge)
2. Compare and contrast random and nonrandom sampling techniques. (Comprehension)
3. Analyze the differences between primary and secondary data sources. (Analysis)

Unit 2:
1. Formulate simple research questions and develop well-designed questionnaires for data collection. (Synthesis)
2. Execute the collection of primary data using questionnaires effectively. (Application)
3. Demonstrate proficiency in data compilation, tidying, and scrutiny processes. (Application)

Unit 3:
1. Classify data based on scales of measurement and differentiate between variables and attributes. (Analysis)
2. Calculate and interpret summary measures such as mean, median, mode, range, standard deviation, IQV, and quartile deviation. (Analysis)

Unit 4:
1. Apply data summarization techniques to create graphical representations of data. (Application)
2. Evaluate the significance of summary measures in different application areas such as social science, health science, economics, etc. (Evaluation)

Overall Course Outcome:
1. Develop skills in report writing and creating impactful audio-visual presentations based on data analysis. (Creation)