**ASSIGNMENT**

ROLE: DATA

Sample data - <https://docs.google.com/spreadsheets/d/1IN1e4j-mm3Hy1aJgxebCMuAI1Z8A2dyu/edit#gid=484939604>

**QUESTION 1**- Using the above data, build an interactive dashboard (using either Power BI or Tableau)

* Using a visual of your choice, show a comparison between indicators **(1 point)**
* Create a map to show all the states and their values for the selected indicator, gender, and source (**1 point).**
* Show the trend analysis of indicators across periods using appropriate visuals **(1 point).**
* Use visual(s) of your choice to represent the disaggregation type (age and gender) that also shows the comparison between the categories of each disaggregation type **(2 points).**
* Use DAXs to create a simple analysis (For Power BI users) **OR** Use Calculated fields to make a simple analysis (For Tableau users)**(3 points)**
* Create a user manual (PowerPoint slide) showing chart title, charts, their respective filters or slicers, and instructions on using each chart and the dashboard (Not more than 7 slides). Also, provide interpretations to the dashboard/analysis **(2 points)**

**(10 points total)**

**QUESTION 2 -** Use the above charts. Answer the following:

* Define the concept of an indicator. **(2 points)**
* Identify the top 10 states in Nigeria with the highest and lowest contraceptive prevalence rates according to MICS, NDHS, and NHMIS for 2016, 2018, and 2019 respectively. **(2 points)**
* Determine the specific time period when there was a noticeable increase in HIV prevalence. **(2 points)**
* Calculate the ratio of males to females aged 15-49 years who have been tested for HIV and are aware of their results. **(2 points)**
* Determine which states in Nigeria exhibited the highest and lowest proportions of condom usage. **(2 points)**

**(10 points total)**

**PLEASE NOTE:**

* + Ensure the dashboard design is simple and clear and fulfills the above criteria (make a rough personal sketch if need be as a guide).
  + Avoid clustering of charts and visuals with too much information.
  + Use filters appropriately to avoid aggregation of values.
  + Check for functionality and ensure charts and filters work fine.
  + Format the charts and dashboard appropriately.
  + Thoroughly review the dashboard to ensure everything works fine.
  + Publish the dashboard(include the link in the email) and share the dashboard file as well.
  + Provide answers to Question 2 in the slides

GOOD LUCK!