Curriculum Plan

Paper Name: **IT Skills and Data Analysis II**
Class Type: SEC
Semester: VI
Teacher Name: Ms. Neha Singh

S.N.	Schedule (Approximate)	Topic
1.	January	**Unit 1: Functions and their graphical representations** Understanding the definition of a function; graphical representation of a function and vertical line test; visualising various kinds of functions (Linear, quadratic and cubic functions). Reciprocal, exponential and logarithmic functions; Interpreting and visualising the concept of slope of a function through graphical representations.
2.	February	Unit 2: **Relationship between Variables** Scatter Diagrams; Correlation analysis - measure and Interpretation of correlation coefficient and coefficient of determination. Hypotheses, model specification and testing; Understanding Bi- variate Regression analysis: Method of Least Squares Assignment/ Presentations/Test (Unit 1)
3.	March	Unit 2: **Relationship between Variables** Curve of best fit as a model for prediction, Multiple Regression Analysis Assignment/ Presentations/Test (Unit 1)
4.	April	Project Presentations and Viva Revision

Essential/recommended readings

1. Rowntree, D., Statistics without tears - A primer for non-mathematicians, Allyn and Bacon, 2018.
2. Levin, Rubin, Rastogi and Siddiqui, Statistics for Management, 7th Edn, 2014.
3. Boundless Algebra: https://courses.lumenlearning.com/boundless-algebra/

Suggested Data Sources
The following data sets are suggested to carry out the activities
1. https://data.worldbank.org/
2. https://www.statista.com/
3. https://data.gov.in/
4. https://censusindia.gov.in/
5. https://www.kaggle.com/
6. http://data.un.org/