Semester	**ONE**	
Paper Number	**M1ST230211T**	
Paper Title	**Data: An Overview**	
No. of Credits	**3**	
Theory/Composite	**Theory**	
No. of periods assigned	3	
Modules	Single	
Course description/objective	*At the end of this course a student should have a knowledge of* o Sources of data o Types of data o Presentation of data o Summarising data	
Syllabus	**Unit 1:** **Source and nature of data:** Population and Sample. Random and non-random sampling. Primary, secondary data. [6] **Unit 2:** **Collection of Data**: Framing simple research questions and preparing well designed questionnaires. Collection of primary data using questionnaire. Compilation of data and data tidying. Data Scrutiny. [4] **Classification of data:** Scales of measurement. Variables and attributes. [4] **Unit 3:** **Summarization of data:** Graphical representation, Summary measures: Mean, Median, Mode, Range, Standard deviation, Index of qualitative variation (IQV), Quartile deviation (Concept and formula only). [13] Report Writing, audio-visual presentations. [5] **Unit 4:** **Some Application Areas:** Social science, Health Science, Biological Science, Astronomy, Economics, Genetics, Epidemiology, Meteorology, Marketing and Business. [7]	
Reading/Reference Lists	1. Fundamentals of Statistics, Vol-I; A.M Gun, M.K Gupta, B. Dasgupta. 2. Statistics: The Art And Science Of Learning From Data: Alan Agresti, Christine A. Franklin, Bernhard Klingenberg. 3. Statistics Without Tears: A Primer for Non-Mathematicians: Derek Rowntree; Allyn and Bacon, A Simon & Schuster Company. 4. Writing and Identity: The Discoursal Construction of Identity in Academic Writing: Ivanic, R. (1998), Amsterdam and Philadelphia: Benjamins. 5. Latex beginner's Guide: Stefan Kottwitz, 2011. 6. Beyond Bullet points; Using Power points to tell a compelling story that gets results; Cliff Atkinson; Pearson Education; Edition 4; 2020.	
Evaluation	Theory CIA:15 Semester Exam: 35	Practical Exam (Not applicable)
Paper Structure for Theory Semester Exam	5 Marks Questions	7 out of 10