

Semester	ONE
Course	Multidisciplinary
Paper Code	M1ST230111T
Paper Title	Data: An Overview
No. of Credits	3
Theory / Practical / Composite	Theory
Minimum No. of preparatory hours per week a student has to devote	3
Number of Modules	1
Syllabus	<p>Unit 1: Source and nature of data: Population and Sample. Random and non-random sampling. Primary, secondary data. [6]</p> <p>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]</p> <p>Classification of data: Scales of measurement. Variables and attributes. [4]</p> <p>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]</p> <p>Report Writing, audio-visual presentations. [5]</p> <p>Unit 4: Some Application Areas: Social science, Health Science, Biological Science, Astronomy, Economics, Genetics, Epidemiology, Meteorology, Marketing and Business. [7]</p>
Learning Outcomes	<p><i>At the end of this course a student should have a knowledge of</i></p> <ul style="list-style-type: none"> • Sources of data • Collection of data • Types of data in social and natural sciences • Presentation of data • Summarising data
Reading/Reference Lists	<ol style="list-style-type: none"> 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.

	<ol style="list-style-type: none"> 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 (Not applicable) CA: Semester Exam:
Paper Structure for Theory Semester Exam	5 Marks Questions	7 out of 10