# Multidisciplinary Course (MDC) offered by the Department of Statistics

## STSHMD101M/ STSGMD101M/ STSHMD201M/ STSGMD201M/ STSHMD301M / STSGMD301M–Statistics for Practitioners

[Credit3]	[45 Lecture Hours]
Unit1: Statistical Data	[10 Lecture Hours]

Population and Sample. Random and non-random sampling. Primary, secondary data. Scales of measurement: Variables and attributes; nominal and ordinal.

#### **Unit2: Collection of Data**

Framing simple research questions and preparing well-designed questionnaires. Collection of primary data using a questionnaire. Compilation of data and data tidying. Data Scrutiny.

### Unit3: Summarizationofdata

[20 Lecture Hours]

[15 Lecture Hours]

Graphical representation, Summary measures: Mean, Median, Mode, Range, Standard deviation, Index of qualitative variation (IQV), Quartile deviation (Concept and formula only).

Social science, Health Science, Biological Science, Astronomy, Economics, Genetics, Epidemiology, Meteorology, Marketing and Business.

## **Reference Books**

- Goon, A.M., Gupta, M.K. and Dasgupta, B.(2002):Fundamentals of Statistics, Vol.I&II,8<sup>th</sup>Edition, World Press, Kolkata.
- Statistics: The Art and Science of Learning from Data: Alan Agresti, Christine A. Franklin, Bernhard Klingenberg.
- Statistics without Tears: A Primer for Non-mathematicians: Derek Rowntree; Allyn and Bacon, A Simon & Schuster Company.