1.	Title of the course	Non-parametric Statistics
2.	Course number	MA610L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To MA6028/7
6.	To be offered by	Department of Mathematics and Statistics
7.	To take effect from	July 2022
8.	Prerequisite	CoT
9.	**Course Objective(s):** To introduce useful nonparametric methods of estimating the unknown cumulative distribution function, density function, quantiles, and order statistics. To learn nonparametric regression and nonparametric tests. To study different smoothing techniques.	
10.	**Course Content:** Order Statistics, Quantiles, Empirical Distribution Function, Jackknife and bootstrap tests of Randomness, Tests of Goodness of fit, One sample, and paired sample procedure, Two and k samples procedures, Linear rank Statistics, Smoothing, Nonparametric regression, Density estimation, Introduction of M estimation.	
11.	**Textbook(s):** 1. Gibbons J D, and Chakraborti S, *Nonparametric Statistical Inference*, Springer (2003). 2. Wasserman L A, *All of Nonparametric Statistics*, Springer (2006).	
12.	**Reference(s):** 1. Kloke J, and McKean J W, *Nonparametric Statistical Methods Using R*, CRC Press (2015). 2. Hollander M, Wolfe D A and Chicken E, *Nonparametric Statistical Methods*, John Wiley & Sons (2013).	