1.	Title of the course	Time Series Modelling
2.	Course number	HS625L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To HS6040/21
6.	To be offered by	Department of Humanities and Social Sciences
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	**Course Objective(s):** To introduce time series modeling concepts and methods. To introduce a programming language that helps to visualize and analyze time-series data.	
10.	**Course Content:** Time series analysis: univariate time series analysis and forecasting; Linear time series analysis, autocorrelation function and partial autocorrelation function; Autoregressive (AR) models, Moving Average (MA) models, ARMA and ARIMA models; Identification, estimation, and forecasting with ARIMA models; Modelling of volatility: ARCH and GARCH models.	
11.	**Textbook(s):** 1. Cooray T M J A, *Applied Time Series – Analysis and Forecasting*, 1st Edition, Narosa Publications (2008). 2. Gujarati D N and Porter D C, *Basic Econometrics*, 5th Edition, Tata McGraw-Hill Education (2009).	
12.	**Reference(s):** 1. Greene W, *Econometric Analysis*, 8th Edition, Pearson Education (2018). 2. Johnston J, *Econometric Methods*, 3rd Edition, McGraw Hill (1984).	