

I – Academic Planner

A. Teaching Plan* (Year: 2020, Semester: ODD-AUG to NOV.)

Teacher's Name **DR. VANDANA SARIN WALIA** Department **STATISTICS**

S. No.	UPC	Paper Name	Core/AECC /GE / SEC	Topic/Unit	Start Date	End Date
1.	32377905	Time Series Analysis	STAT-DSE1(A)	Introduction to times series data, application of time series from various fields, Components of a times series, Decomposition of time series.	10 th Aug., 2020	14 th Aug., 2020
				Estimation of trend by free hand curve method, method of semi averages, fitting mathematical curve and growth curves. Practical work.	18 th Aug., 2020	21 st Aug., 2020
				Estimation of trend by method of moving averages. Detrending: Effect of elimination of trend on other components of a time series. Practical work.	24 th Aug., 2020	4 th Sep., 2020
				Estimation of seasonal component by the methods of: Simple averages, Ratio to Trend, Ratio to Moving Averages and Link Relative method. Deseasonalization. Practical work.	7 th Sep., 2020	18 th Sep., 2020
				Harmonic Analysis. Variate difference method. Practical work.	21 st Sep., 2020	28 th Sep., 2020
				Stationary Time series, Weak stationarity, autocorrelation function and the correlogram. Special Processes: Moving-average (MA) process and Autoregressive (AR) processes. Estimation of the parameters of AR (1) and AR (2). Introduction to ARMA and ARIMA models. Practical work.	29 th Sep., 2020	13 th Oct., 2020
				Introduction to methods of Forecasting a time series. Exponential smoothing. Practical work.	14 th Oct., 2020	21 st Oct., 2020
				Short-term forecasting methods: Brown's discounted regression, Box-Jenkin method, Bayesian forecasting. Practical Work.	22 nd Oct., 2020	9 th Nov. 2020
				Revision work and Group Project Presentations	10 th Nov, 2020	17 th Nov., 2020
				2.	32371101	Descriptive Statistics (Practical Lab)
Graphical representation of data- a) Frequency curve, frequency polygon and histogram b) Ogives		Week 3				
Measures of Central tendency-a)AM: Formulae (Direct Method) Change of Origin and Scale b)Median and partition values: Formulae (Direct Method) and Graphically c)Mode: Formulae (Direct Method), Graphically and by grouping.		Week 4-5				
Measures of Dispersion - a) Quartile deviation: formulae and graphically b) Mean Deviation c) Standard deviation and variance: Formulae (direct method) and Change of origin & Scale		Week 6				
Coefficient of dispersion and variation. Combined mean and combined variance		Week 7				
Raw moments. Moments about any arbitrary point. Central Moments		Week 8-9				
Moments: relation between Raw moments, Moments about any arbitrary point and Central Moments. Correct moments involving wrong data		Week 10-11				
Skewness based on mean, median, mode and standard deviation. Skewness and kurtosis based on moments		Week 12-13				
Problem based on missing frequencies		Week 14				
Theory of attributes- a) word problems in the form of class frequencies b) Fundamental set of class frequencies c) Association and independence of attributes.		Week 15				

*Online Teaching

**From commencement of Practical Classes

B. Internal Assessment: House Exam (Test/Presentation etc.) & Assignment*

Course Code	Course Name	Unique Paper Code	Topic Name	Day and Date	Date/s of Exhibiting the Assessment Sheet to students, Discussing the marks, Returning/Retaining
568	Statistics	32377905	UNIT I (Test)	Monday, 17 th Aug., 2020	Monday, 17 th Aug., 2020 (Returning)
568	Statistics	32377905	UNIT I & II (Assignment)	Saturday, 12 th Sep., 2020	Thursday, 1 st Oct., 2020 (Returning)
568	Statistics	32377905	UNITS III (Test)	Monday, 19 th Oct. 2020	Monday, 26 th Oct., 2020 (Returning)
568	Statistics	32377905	UNIT I-IV (Project)	Monday, 23 rd Nov., 2020-Thursday, 26 th Nov. 2020	Monday, 23 rd Nov., 2020-Thursday, 26 th Nov. 2020 (Returning)
568	Statistics	32371101	UNITS I-IV	Week 15	Practical Test

