

# I – Academic Planner

## A. Teaching Plan (Year : 2020 Semester: Odd)

Teacher's Name: Ms. Savitri Sharma Department: STATISTICS

S. No.	UPC	Paper Name	Core/AEC C/GE/SEC	Topic/Unit	Start Date	EndDate
1	32371303	Mathematical Analysis	Core	Real Analysis: Representation of real numbers as points on the line and the set of real numbers as complete ordered field. Bounded and unbounded sets, neighbourhoods and limit points, Supremum and infimum, derived sets, open and closed sets	11/08/2020	02/09/2020
				Sequences and their convergence, limits of some special sequences and Cauchy's general principle of convergence, Cauchy's first theorem on limits,	04/09/2020	16/09/2020
				Monotonic sequences, limit superior and limit inferior of a bounded sequence.	18/09/2020	23/09/2020
				Series: Infinite series, positive term series and their convergence, Comparison test, D'Alembert's ratio test, Cauchy's nth root test, Raabe's test. Gauss test, Cauchy's condensation test and integral test	25/09/2020	20/10/2020
				Absolute convergence of series, Leibnitz's test for the convergence of alternating series, Conditional convergence	24/10/2020	28/10/2020
				Review of limit, continuity and differentiability, uniform continuity and boundedness of a function.	30/10/2020	13/11/2020
				Rolle's and Lagrange's Mean Value theorems. Taylor's theorem with Lagrange's and Cauchy's form of remainder (without proof). Taylor's and Maclaurin's series expansions	17/11/2020	19/11/2020
				Difficulties and Presentations	20/11/2020	24/11/2020
2	32371101	Descriptive Statistics	Core	Definition and scope of Statistics, concepts of statistical population and sample. Data: quantitative and qualitative, attributes, variables, scales of measurement-nominal, ordinal, interval and ratio.	20/11/2020	05/12/2020
				Tabular and graphical presentation, including histogram and Ogives.	07/12/2020	11/12/2020
				Theory of attributes, consistency and independence of data with special reference to attributes. Mathematical and positional measures of Central Tendency, Partition values.	12/12/2020	26/12/2020
				Measures of Dispersion: range, quartile deviation, mean deviation, standard deviation, coefficient of variation. Moments, absolute moments, factorial moments, skewness and kurtosis, Sheppard's corrections.	28/12/2020	09/01/2021

				Probability introduction, random experiments, sample space, events and algebra of events.	11/01/2021	06/02/2021
				Classical, statistical, and axiomatic definitions of Probability, Conditional Probability. Addition and multiplication theorem of probability, independent events, Theorem of Total probability. Two dimensional random variables: Joint, marginal and conditional pmf/pdf.	08/02/2021	27/02/2021
				Bayes' theorem and its applications. Discrete and continuous random variables, illustrations and properties of random variables. pmf, pdf and cdf.	01/03/2021	13/03/2021
				Independence of random variables. Univariate transformations. Expectation of random variables and its properties	15/03/2021	22/03/2021
3	32371303	Mathematical Analysis	Core	Practical: Formation of difference table, fitting of polynomial and missing terms for equal interval of differencing.	25/08/2020	
				Practical: Newton's Gregory forward difference interpolation formula. Newton's backward difference interpolation formula. Newton's divided difference and Lagrange's interpolation formula.		
				Practical: Gauss forward, Gauss backward central difference interpolation formula. Stirling's central difference interpolation formula.	To	
				Practical: Lagrange's Inverse interpolation formula. Method of successive approximation or iteration. Method of reversion of series.		
				Practical: Trapezoidal Rule, Simpson's one-third rule, Simpson's three-eighth rule, Weddle's rule.		
				Practical: sum by Euler-Maclaurin summation formula.		10/11/2020
4.	32371101	Descriptive Statistics	Core	Practicals	05/12/2020	27/03/2021

**B. FDP/Seminar/Workshops/Lectures to be attended and/or to be conducted by Teachers**

<b>Event Topic</b>		Google classroom, Microsoft Teams- Conducting online classes, Microsoft Teams- Conducting online classes series II, Microsoft Teams session			
<b>Type / Nature (FDP/Webinar/Workshop etc.)</b>		Webinar			
<b>Organizing In-charge</b>		Kirori Mal College			
<b>Details regarding invited Resource Person</b>		Google Team			
<b>Nature of Participation (e.g. Invited Speaker, Participant etc.)</b>		Participant			
<b>Date/s</b>	08/08/2020	<b>Timing/s</b>	10:30 to 1:30	<b>Mode</b>	Online/ Hand - on
<b>Event Topic</b>		Conducting online classes series & Microsoft Teams session			
<b>Type / Nature (FDP/Webinar/Workshop etc.)</b>		Webinar			
<b>Organizing In-charge</b>		Kirori Mal College			
<b>Details regarding invited Resource Person</b>		Microsoft Teams			
<b>Nature of Participation (e.g. Invited Speaker, Participant etc.)</b>		Participant			
<b>Date/s</b>	21/08/2020, 04/09/2020 & 12/09/2020	<b>Timing/s</b>	3:00 pm – 4:00pm, 3:00 pm – 4:00pm, 11 am- 12:30 pm respectively	<b>Mode</b>	Online

**C. 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	B.Sc (Hons) Statistics	32371303	(TEST) Infinite Series	Friday 23/10/2020	30/10/2020
568	B.Sc (Hons) Statistics	32371303	(TEST) Mean Value thm	Wednesday 04/11/2020	10/11/2020
568	B.Sc (Hons) Statistics	32371101	(TEST) Measures of Dispersion	Monday 07/12/2020	14/12/2020
568	B.Sc (Hons) Statistics	32371101	(TEST) Probability theory	Saturday 16/11/2021	23/01/2021

**\*Marks of the Internal Assessment to be submitted to the College 15 days before the last working day of every semester**

**D. Organization of Department/College Society Meetings by Staff Advisor/Convener**

Department/Society	Meeting Date	Purpose

**E. College Functions**

College Function	Function Date	Role to be played



**C. FDP/Seminar/Workshops/Lectures to be attended and/or to be conducted by Department**

<b>Event Topic</b>					
<b>Type / Nature (FDP/Webinar/Workshop etc.)</b>					
<b>Organizing In-charge</b>					
<b>Details regarding invited Resource Person</b>					
<b>Nature of Participation (e.g. Invited Speaker, Participant etc.)</b>					
<b>Date/s</b>		<b>Timing/s</b>		<b>Mode</b>	