

I – Academic Planner

A. Teaching Plan (Year :2018 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	Week 1	Week 3
				Sequences and their convergence, limits of some special sequences and Cauchy's general principle of convergence, Cauchy's first theorem on limits,	Week 4	Week 6
				Monotonic sequences, limit superior and limit inferior of a bounded sequence.	Week 7	Week 8
				Series: Infinite series, positive termed 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	Week 9	Week 11
				Absolute convergence of series, Leibnitz's test for the convergence of alternating series, Conditional convergence	Week 12	Week 13
				Review of limit, continuity and differentiability, uniform Continuity and boundedness of a function.	Week 14	Week 15
				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	Week 16	Last working day
				Difficulties and Presentations		
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.	Week 1	Week 3
				Tabular and graphical presentation, including histogram and Ogives.	Week 4	Week 5
				Theory of attributes, consistency and independence of data with special reference to attributes. Mathematical and positional measures of Central Tendency, Partition values.	Week 6	Week 7
				Measures of Dispersion: range, quartile deviation, mean deviation, standard deviation, coefficient of variation. Moments, absolute moments, factorial moments, skewness and kurtosis, Sheppard's corrections.	Week 8	Week 9

				Probability introduction, random experiments, sample space, events and algebra of events.		
				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.	Week 10	Week 13
				Bayes' theorem and its applications. Discrete and continuous random variables, illustrations and properties of random variables. pmf, pdf and cdf.		
				Definition, scatter diagram, Karl Pearson's coefficient of correlation. Spearman's rank correlation coefficient. Practical work Principle of least squares and fitting of polynomials and exponential curves. (Theory+ Practical work) Linear regression. Partial and multiple correlation (3 variables only)	Week 14	Last working day
3	32371303	Mathematical Analysis	Core	Practical: Formation of difference table, fitting of polynomial and missing terms for equal interval of differencing.	Week 1	
				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.		Last working day
4.	32371101	Descriptive Statistics	Core	Practicals	Week 3	Last working day

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

Event Topic					
Type / Nature (FDP/Webinar/Workshop etc.)		Seminar			
Organizing In-charge		Kirori Mal College			
Details regarding invited Resource Person					
Nature of Participation (e.g. Invited Speaker, Participant etc.)		Participant			
Date/s		Timing/s		Mode	Online/ Hand - on
Event Topic					
Type / Nature (FDP/Webinar/Workshop etc.)		Seminar			
Organizing In-charge		Kirori Mal College			
Details regarding invited Resource Person					
Nature of Participation (e.g. Invited Speaker, Participant etc.)		Participant			
Date/s		Timing/s		Mode	

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	October 2018	
568	B.Sc (Hons) Statistics	32371303	(TEST) Supremum and Infimum		
568	B.Sc (Hons) Statistics	32371101	(TEST) Probability Theory	October 2018	
568	B.Sc (Hons) Statistics	32371101	Total Course (Presentation) Measures of Dispersion		

***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

For Departments

A. Department activities for students – Election/Freshers/Welcome/Farewell/Department Seminars/Society functions

Event	Date	Timing	Venue	Event In-charge / Supervisor
Department Election	August 2018			Dr. Shrawan Kumar
Fresher's Welcome				
Farewell				
Department Society functions				
Department Seminars				
Any Other ()				

B. Outstation Field Visit for Students

Project Name / Paper Name			
Destination		Travel Mode	
Departure Month		Return	
Faculty-in-Charge		Number of Students going	

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

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