

I – Academic Planner

A. Teaching Plan (Year : 2021 -22, Semester: Odd)

Teacher's Name Dr. Renu Garg Department STATISTICS

S. No.	UPC	Paper Name	Core/A ECC/G E/SEC	Topic/Unit	Start Date	End Date
1	32371303	Mathematical Analysis	CORE	<p>Theory and Practical Work</p> <p>Bounded and unbounded sets, neighbourhoods and limit points, Supremum and infimum, derived sets, open and closed sets.</p>	15/9/21	2/9/21
				<p>Sequences and their convergence, limits of some special sequences such as $r^n, \left(1 + \frac{1}{n}\right)^n$ and $n^{\frac{1}{n}}$ and Cauchy's general principle of convergence, Cauchy's first theorem on limits, monotonic sequences, limit superior and limit inferior of a bounded sequence.</p>	24/9/21	12/10/21
				<p>Series: Infinite series, positive termed series and their convergence, Comparison test, D'Alembert's ratio test, Cauchy's n^{th} root test, Raabe's test. Gauss test, Cauchy's condensation test and integral test (Statements and Examples only). Absolute convergence of series, Leibnitz's test for the convergence of alternating series, Conditional convergence.</p>	13/10/21	4/11/21
				<p>Review of limit, continuity and differentiability, uniform Continuity and boundedness of a function. 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 of $\sin x, \cos x, e^x, (1+x)^n, \log(1+x)$.</p>	4/11/21	4/12/21
2	32371101	Descriptive Statistics	CORE	<p>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.</p>	27.11.21	4/12/21
				<p>Tabular and graphical presentation, including histogram and Ogives.</p>	6/12/21	11/12/21
				<p>Theory of attributes, consistency and independence of data with special reference to attributes.</p>	13/12/21	18/12/21

			Mathematical and positional measures of Central Tendency, Partition values.	20/12/21	21/12/21
			Measures of Dispersion: range, quartile deviation, mean deviation, standard deviation, coefficient of variation.	28/12/21	31/12/21
			Moments, absolute moments, factorial moments, skewness and kurtosis, Sheppard's corrections.	1/1/22	6/1/22
			Probability introduction, random experiments, sample space, events and algebra of events.2	8/1/22	15/1/22
			Classical, statistical, and axiomatic definitions of Probability, Conditional Probability.	17/1/22	22/1/22
			Addition and multiplication theorem of probability, independent events, Theorem of Total probability. Bayes' theorem and its applications.	24/1/22	1/2/22
			Discrete and continuous random variables, illustrations and properties of random variables.	2/2/22	8/2/22
			pmf, pdf and cdf.	9/2/22	19/2/22
			Two dimensional random variables: Joint, marginal and conditional pmf/pdf.	21/2/22	2/3/22
			Independence of random variables. Univariate transformations.	3/2/22	9/3/22

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

Event Topic	2-Week Refresher Course on Research Methodology				
Type / Nature (FDP/Webinar/Workshop etc.)	Refresher Course				
Organizing In-charge	Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi				
Details regarding invited Resource Person					
Nature of Participation (e.g. Invited Speaker, Participant etc.)					
Date/s	23 October –06 November 2021	Timing/s		Mode	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	BSc.(H), Statistics	32371303	Class Test	16/11/2021	20/11/21- 22/11/2021
568	BSc.(H), Statistics	32371303	Assignment	25/11/2021	28/11/21- 30/11/2021
568	BSc.(H), Statistics	32371101	Assignment	24/1/22	26/1/22-28/1/22
568	BSc.(H), Statistics	32371101	Assignment	24/2/22	26/2/22-28/2/22
568	BSc.(H), Statistics	32371101	Class Test	5/3/22	7/3/22 -9/3/22

***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

