PG Department of Economics

MCM DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans Session – (2024-25) Odd

Semester

Name of the Teacher/s –Ms.Madhvi Bajaj, Ms.ChrisBindra, Ms. Anchal Mehta and Ms. Nistha Pattar

Department – Economics Class –BAI

Sem I

Subject –MICROECONOMICS

Section (s) – A,B,C,D

S.No	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	То		
1	August 2024	31st August 2024	*Differentiation: Review of Simple differentiation (derivative of a function, techniques of differentiation, derivative of power function, constant, multiplicative constant, sum, product of two functions, quotient of two functions, derivative of function of	Lecture method, flipped classes and Group Discussion

- a function, implicit functions, parametric equations)
- * Matrices: Review of adjoint and inverse of matrices; Solutions of Equations (upto three) by Matrix Inverse and Gauss elimination Methods; Consistency of Equations; Quadratic Forms Types and Properties. Simple Economic Applications

2 2nd September 2024

30th September 2024

- *Differentiation: concept and properties of logarithms in derivatives, derivatives of exponential functions, logarithmic differentiation, second order derivatives.
- * Economic applications of simple differentiation.
- *Partial Differentiation and its economic

Applications: techniques of Partial derivatives, second order partial derivatives, change of order of differentiation, homogenous function, Euler's theorem, deductions of Euler's theorem.

*Correlation and Regression Analysis:

Multiple and Partial Correlation involving three Variables. The Linear regression Model; Finding the Multiple Linear Regression Equation and Coefficients upto two explanatory variables: Interpretation of the Coefficients, R2 and adjusted R2. Time Series Analysis: Definition and components.

Methods of Trend Measurement: Quadratic, Exponential and Modified Exponential. Lecture method, Group discussion and practice in the class.

Seasonal Indices by Methods of Simple Average, Ratio to moving Average and Ratio to trend

3 1st October 2024 30th October 2024

Total Differentials: rules of total differentials, second order total differentials.

- *Total Derivatives, differential of Implicit functions using Total Differentials.
- * Economic applications of Partial Derivatives and total derivatives.

*Maxima and Minima of a function: Maxima and Minima of a function of single variable, conditions and working rules of maxima and minima, second method to find maxima and minima, economic applications of maxima and minima of function of single variable.

*Maxima and minima of function of two variables.

*Index Numbers: Concepts of Price Relative, Quantity Relative and Value Relative.

Laspeyer's, Paasche's and Fisher Index Numbers. Test of an Ideal Index Number.

Base shifting, Splicing and deflating of Index Numbers. Problems in the Construction and Limitation of Index Numbers. Probability theory

4 1st November 2024

November 2024

*Economic applications of maxima and minima of function of two variables.

*constrained optimization, economic applications of constrained optimization.

*Lagrange's method.

Lecture method, Group Discussion, class tests.

Lecture method, Group Discussion, doubt session,

*Growth Rate and its Measurement; research paper Present Value and its Applications. writing.