SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline:

Subject: mathematics -II	Semester: 2nd	Name of the Teaching Faculty: Miss,Sradhanjali Mishra
No of Days/per week class allotted: 5		Semester from Date: ୨୯·୦୧·୨୦୨୪ to Date: ୧୪·୦୫·୨୦୨୪No of Weeks:

Week	Class Day	Theory/Practical Topics
1st	1st	Introduction to vector space
	2nd	Types of vectors (null vector, parallel vector , collinear vectors)
	3rd	Types of vectors in component form
	4th	Representation of vector and Magnitude and direction of vectors
	5th	Addition and subtraction of vectors
2nd	1st	Position vector
	2nd	Scalar product of two vectors and Geometrical meaning of dot product
	3rd	Angle between two vectors
	4th	Scalar and vector projection of two vectors
	5th	Vector product and geometrical meaning (Area of triangle and parallelogram)
3rd	1st	Definition of function, based on set theory
	2nd	Types of functions
	3rd	i)Constant function ii) Identity function iii) Absolute value function
	4th	iv)The Greatest Integer function v) Trigonometric function
	5th	vi) Exponential function vii) Logarithmic function
4th	1st	Introduction of limit
	2nd	Existence of limit
	3rd	Methods of evaluation of limit
	4th	Definition of continuity of a function at a point
	5th	problems based on continuity
5th	1st	Derivative of a function at a point
	2nd	Algebra of derivative
	3rd	Derivative of standard functions
	4th	Derivative of composite function (Chain Rule)
	5th	Methods of differentiation

Sign of Faculty	HOD	Principal

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Descipline:	Semester: II
Subject: Math ~ II	No of Days/per week class allotted:
	Name of the Teaching Faculty: Sradhanjali Mishra
	Semester from Date: 29·01·2024 to Date:17·05· No of Weeks: 2024

Week	Class Day	Theory/Practical Topics
1st	1st	Parametric function
	2nd	Implicit function
	3rd	Logarithmic function
	4th	a function with respect to another function
	5th	Applications of Derivative
2nd	1st	Successive Differentiation (up to second order)
	2nd	Partial Differentiation (function of two variables up to second order)
	3rd	Problems based on differentiation
	4th	Problems based on differentiation
	5th	Problems based on differentiation
3rd	1st	Definition of integration as inverse of differentiation
	2nd	Integrals of standard functions
	3rd	Methods of integration
	4th	Integration by substitution
	5th	Integration by substitution
4th	1st	Integration by parts
	2nd	Integration by parts
	3rd	Integration of the various forms
	4th	Integration of the various forms
	5th	various formula of intergration
5th	1st	pratice question for substition and by parts method
	2nd	pratice question for substitution and by parts method
	3rd	exercise question of integration
	4th	exercise question of integration
	5th	Definite integral

Sign of Faculty

HOD

Principal 29/1/24

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Desicipline:

Semester: 1)

Subject: Math -1)

No of Days/per week class allotted:

Name of the Teaching Faculty: Sradhanjali Mishra

Semester from Date: 29.01.2024 to Date: 14.05.2024   No of Weeks:

Week	Class Day	Theory/Practical Topics
1st	1st	Definite integral
	2nd	problems of definite integral
	3rd	exersice question of definite integral
	4th	, properties of definite integrals
	5th	properties of definite integrals
2nd	1st	Application of integration
	2nd	real life example of application integrals
	3rd	Area enclosed by a curve and X – axis
	4th	problems related to area enclosed by curve and x axis
	5th	Area of a circle with centre at origin
3rd	1st	problems related to Area of a circle with centre at origin
	2nd	introduction to differential equation
	3rd	question regarding differential equation
	4th	order and degree
	5th	question regarding differential equation
4th	1st	question regarding order and degree
	2nd	Solution of differential equation
	3rd	problems related to find the solution of DE by various method
	4th	variable separab;le method
	5th	1st order and 1st degree equation by the method of separation of variables
5th	1st	introduction to linear differential equation
	2nd	linear differential equation
	3rd	problems on linear differential equation
	4th	exersice question
	5th	exersice question