

Academic Year	2021-22
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**B.P.H.E. Society's
Ahmednagar College, Ahmednagar
Internal Quality Assurance Cell
CO, PO, and PSO Attainment Sheet**

Department Name	Mathematics
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Program Name	B.Sc.
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Program Outcomes(PO)

PO1	Promotion of thinking
PO2	Confidence
PO3	Problem solving
PO4	Understanding Concepts
PO5	Development of writing, listening skills
PO6	Group Discussion
PO7	Learnng values from teachers
PO8	Skill of team work.
PO9	
PO10	
PO11	
PO12	

Program Specific Outcome(PSO)

PSO1	To enable the students to cultivate a mathematical way of thinking, that is making conjectures, verifying them with
PSO2	To enable the students to quantify their experiences in other subjects they study.
PSO3	To enable the students to study mathematics for themselves.

Academic Year :	2021-22
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Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code		MT-112		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name		Calculus-I	CO1	1	2	1	1	2	1	1	2	2	1	2
Semester No		1	CO2	1	1	2	1	2	1	1	2	2	1	1
Teacher Name		Mr.S.A.Ghule	CO3	1	2	1	1	2	1	2	1	1	2	1
Course Outcomes			CO4											
	CO1	Be able to recognize odd, even, periodic, increasing, decreasing functions	CO5											
	CO2	Understand the operation of composition of functions	Average	1.00	1.67	1.33	1.00	2.00	1.00	1.33	1.67	1.67	1.33	1.33
	CO3	Be able to calculate limits by substitution and by eliminating zero denominators												
	CO4													
	CO5													

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code		MT-111		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name		Algebra	CO1	1	2	1	2	2	1	2	2	1	1	2
Semester No		1	CO2	0	1	2	1	2	1	1	1	2	2	1
Teacher Name		Mr.A.E.Lagad	CO3	1	2	1	1	2	1	2	1	1	1	2
Course Outcomes			CO4	1	1	2	1	2	1	1	1	1	2	1
	CO1	Prove results involving divisibility and greatest common divisors	CO5											
	CO2	To learn applications of Modular Arithmetics	Average	0.75	1.50	1.50	1.25	2.00	1.00	1.50	1.25	1.25	1.50	1.50

	CO3	Apply Euler-Fermat's Theorem to prove relations involving prime numbers
	CO4	To learn polynomial addition, subtraction, division, multiplication, roots of polynomials
	CO5	

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs			
Subject Code	Subject Name	Semester No		Teacher Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
MT-122	Calculus-II	2	Mr. S.A. Ghule	CO1	2	2	1	1	2	1	1	2	1	2	1
				CO2	1	1	1	1	2	2	1	2	2	1	1
				CO3	1	1	1	1	2	1	2	1	1	2	1
				CO4	2	1	1	2	1	1	2	1	2	1	0
	CO1	Be able to calculate limits at infinity of rational functions	CO5												
	CO2	Be able to calculate limits in indeterminate forms by a repeated use of l'Hopital's rule	Average	1.50	1.25	1.00	1.25	1.75	1.25	1.50	1.50	1.50	1.50	0.75	
	CO3	Be able to use derivatives to find intervals on which the given function is increasing or decreasing													
	CO4	Be able to calculate limits at infinity of rational functions													
	CO5														

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs			
Subject Code	Subject Name	Semester No		Teacher Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
MT-121	Analytical Geometry	2	Mr. A.E.Lagad	CO1	1	1	1	1	2	1	1	2	2	1	2
				CO2	1	1	2	1	2	1	1	1	2	1	2
				CO3	1	2	1	1	2	1	1	1	2	2	2
				CO4	2	1	1	2	1	2	1	2	1	2	1
	CO1	To learn the concept of Transformation, translation and reflection	CO5												

	CO2	Used cut-out shapes as a means to develop the mental transformation of geometric shapes.	Average	1.25	1.25	1.25	1.25	1.75	1.25	1.00	1.50	1.75	1.50	1.75
	CO3	Perform translations and rotations of the coordinate axes to eliminate certain terms from equations.												
	CO4	Students will able to find nature of general conics												
	CO5													

Academic Year :	2021-22	
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Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	Subject Name	Semester No		Teacher Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
MT-231	Calculus of several variables	3	Mr.R.R.Devadhe	2	1	2	1	2	1	2	0	1	1	1
				1	2	1	1	1	2	2	1	2	1	1
				1	2	2	1	2	2	2	1	2	2	1
				1	1	2	2	2	1	2	2	1	2	2
	CO1	Identify trigonometric functions and their features	CO5											
	CO2	Interpret the epsilon-delta definition of a limit	Average	1.25	1.50	1.75	1.25	1.75	1.50	2.00	1.00	1.50	1.50	1.25
	CO3	Interpret the derivative of a function at a point												
	CO4	Identify extrema and critical points of a function												
	CO5													

Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	Subject Name	Semester No		Teacher Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
MT-232(A)	Numerical Methods	3	Mr.S.A.Ghule	1	2	2	2	2	1	2	0	2	1	2
				1	1	1	1	1	1	2	1	2	1	1
				2	2	2	1	2	2	2	2	2	2	1
				1	1	1	1	2	1	2	1	1	1	2
	CO1	Students will able to find solution of algebraic and transcendental equations	CO5											
	CO2	Students will able to learn the concept of interpolation	Average	1.25	1.50	1.50	1.25	1.75	1.25	2.00	1.00	1.75	1.25	1.50

	CO3	To learn the concept of numerical differentiation and integration.
	CO4	Numerical solution of first order ordinary differential equation.
	CO5	

Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-241			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Linear Algebra		CO1	2	1	2	1	2	1	2	2	1	1	2
Semester No	4		CO2	1	2	1	1	1	2	2	1	2	1	1
Teacher Name	Mr.A.E.Lagad		CO3	1	1	2	1	2	2	2	1	2	2	1
Course Outcomes			CO4	2	1	1	2	1	2	2	1	1	1	1
	CO1	Provide an axiomatic description of an abstract vector space	CO5											
	CO2	Given a linear transformation and bases, find a matrix representation for the linear transformation	Average	1.50	1.25	1.50	1.25	1.50	1.75	2.00	1.25	6.25	1.25	1.25
	CO3	Understand rank-nullity theorem and its application												
	CO4	Find the eigenvalues and eigenvectors of a matrix												
	CO5													

Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-242(A)			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Vector Calculus		CO1	2	1	2	2	2	1	1	1	2	1	2
Semester No	4		CO2	1	2	1	1	1	2	2	1	2	1	1
Teacher Name	Mr.S.B.Gandhale		CO3	2	1	2	2	2	1	2	2	1	2	1
Course Outcomes			CO4											
	CO1	Calculate areas and volumes using double and triple integrals.	CO5											

	CO2	Compute curve and surface integrals, and use them to calculate lengths, areas and volumes.	Average	1.67	1.33	1.67	1.67	1.67	1.33	1.67	1.33	1.67	1.33	1.33
	CO3	Use differential calculus for computing tangential plane and normal on surface and in optimization problems of (local) extremes of multivariable functions.												
	CO4													
	CO5													

Academic Year :	2021-22	
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Class		T.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-351	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Metric Spaces	CO1	1	2	1	2	1	2	2	2	2	1	1	
Semester No	5	CO2	1	1	1	2	1	2	1	2	2	2	2	
Teacher Name	Mrs.Kale P.R.	CO3	2	1	2	2	1	1	2	2	2	2	1	
Course Outcomes		CO4	1	2	1	2	1	2	1	2	2	2	1	
	CO1	To deal with various examples of metric spaces	CO5											
	CO2	Have some familiarity with continuous maps	Average	1.25	1.50	1.25	2.00	1.00	1.75	1.50	2.00	2.00	1.75	1.25
	CO3	To work with compact sets in Euclidean space												
	CO4	To work with completeness												
	CO5													

Class		T.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-352	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Real Analysis-I	CO1	1	2	2	2	2	1	2	2	1	1	2	
Semester No	5	CO2	1	2	1	1	1	2	1	1	2	2	1	
Teacher Name	Mr.S.A.Ghule	CO3	1	1	1	2	2	1	2	2	1	1	2	
Course Outcomes		CO4												
	CO1	To explain the completeness of a system of real numbers: a least upper bound, a greatest lower bound	CO5											
	CO2	To elaborate on the topological concepts of the real numbers: open sets, closed sets, accumulation points, closure, open covers, compact sets.	Average	1.00	1.67	1.33	1.67	1.67	1.33	1.67	1.67	1.33	1.33	1.67
	CO3	To Justify the convergence/divergence of a given number series												
	CO4													
	CO5													

Class	T.Y.B.Sc.	Course	Program Outcomes								PSOs		
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Subject Code	MT-353	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Group Theory	CO1	2	2	2	1	1	1	2	1	2	1	1
Semester No	5	CO2	1	1	1	2	2	2	1	2	2	2	2
Teacher Name	Mr.A.E.Lagad	CO3	1	1	1	1	1	1	1	1	1	1	1
Course Outcomes		CO4	1	1	1	2	2	1	1	2	1	2	2
	CO1	To demonstrate when a binary algebraic structure forms a group	CO5										
	CO2	To determine possible subgroups of a group	Average	1.25	1.25	1.25	1.50	1.50	1.25	1.25	1.50	1.50	1.50
	CO3	To Identify cyclic subgroups and their generators											
	CO4	Explain group and subgroup orders using Lagrange's theorem											
	CO5												

Class	T.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs			
Subject Code	MT-354		PO1	PO2	PO3	po4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Ordinary differential equations	CO1	2	2	1	2	1	2	2	1	1	1	2	
Semester No	5	CO2	1	1	1	2	1	2	1	2	2	2	2	
Teacher Name	Mr.S.A.Ghule	CO3	2	1	2	1	1	1	2	2	1	2	1	
Course Outcomes		CO4	1	1	1	1	1	2	1	1	1	1	2	
	CO1	Distinguish between linear, nonlinear, partial and ordinary differential equations.	CO5											
	CO2	State the basic existence theorem for 1st order ODE's and use the theorem to determine a solution interval.	Average	1.50	1.25	1.25	1.50	1.00	1.75	1.50	1.50	1.25	1.50	1.75
	CO3	Recognize and solve a linear differential equation by use of an integrating factor												
	CO4	To find particular solutions to initial value problems												
	CO5													

Class	T.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs			
Subject Code	MT-355(A)		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Operation reseach	CO1	2	2	1	2	2	2	2	2	2	1	1	
Semester No	5	CO2	1	1	1	1	1	1	1	1	2	2	2	
Teacher Name	Mr.R.R.Devadhe	CO3	2	2	2	2	2	1	2	2	2	2	1	
Course Outcomes		CO4												
	CO1	Apply the techniques used in operations research to solve real life problem in minimization	CO5											
	CO2	Industry select an optimum solution with profit maximization	Average	1.67	1.67	1.33	1.67	1.67	1.33	1.67	1.67	2.00	1.67	1.33

	CO3	Have complete understand of the significant role operation research play in mining
	CO4	
	CO5	

Class		T.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-356(A)			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Machine Learning-I		CO1	1	2	1	2	1	2	2	2	2	1	1
Semester No	5		CO2	1	1	1	2	1	2	1	2	2	2	2
Teacher Name	Mr.U.M.Patere		CO3	2	1	2	2	1	1	2	2	2	2	1
Course Outcomes			CO4	1	2	1	2	1	2	1	2	2	2	1
	CO1	To introduce students to the basic concets and technique of machine learning	CO5											
	CO2	To become familiar with discover and visualize data to gain insights	Average	1.25	1.50	1.25	2.00	1.00	1.75	1.50	2.00	2.00	1.75	1.25
	CO3	To become familiar with fine turning the model grid,random search												
	CO4	To develop the ability to write database application in python.												
	CO5													

Class		T.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-361			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Complex Analysis		CO1	1	2	1	1	1	2	1	1	1	2	1
Semester No	6		CO2	1	1	1	2	2	2	1	2	2	1	2
Teacher Name	Mr S.A.Ghule		CO3	2	2	2	1	1	1	2	1	1	2	1
Course Outcomes			CO4											
	CO1	Students will able to represent complex numbers algebraically and geometrically	CO5											
	CO2	Students will able to apply the concept and consequences of analyticity and the Cauchy-Riemann equations and of results on harmonic and entire functions including the fundamental theorem of algebra	Average	1.33	1.67	1.33	1.33	1.33	1.67	1.33	1.33	1.33	1.67	1.33
	CO3	To analyze sequences and series of analytic functions and types of convergence												
	CO4													
	CO5													

Class		T. Y. B. Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-362	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Real Analysis-II	CO1	2	2	1	1	1	2	2	2	2	1	1	
Semester No	6	CO2	1	1	1	2	2	2	1	1	2	2	2	
Teacher Name	Mr.S.B.Gandhale	CO3	2	1	2	2	1	1	2	1	2	1	1	
Course Outcomes		CO4	1	2	1	1	2	2	1	1	1	2	1	
	CO1	Students will able to learn Riemann integrable and Riemann sums	CO5											
	CO2	To Prove a theorem about Riemann sums and Riemann integrals	Average	1.50	1.50	1.25	1.50	1.50	1.75	1.50	1.25	1.75	1.50	1.25
	CO3	Knowledge of some simple techniques for testing the convergence of sequences and series of functions, and confidence in applying them.												
	CO4													
	CO5													

Class		T. Y. B. Sc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-363	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Ring Theory	CO1	1	2	1	2	1	2	2	1	2	1	1	
Semester No	6	CO2	1	1	1	2	2	2	1	1	1	2	2	
Teacher Name	Mr.A.E.Lagad	CO3	2	1	2	2	1	1	2	2	2	2	2	
Course Outcomes		CO4												
	CO1	Students will able To write precise and accurate mathematical objects in ring theory	CO5											
	CO2	students will ableto understand the concepts like ideals and quotient rings	Average	1.33	1.33	1.33	2.00	1.33	1.67	1.67	1.33	1.67	1.67	1.67
	CO3	Students will able to understand the concept of ring homomorphism.												
	CO4													
	CO5													

Class		T. Y. B. Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-364	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Partial Differentail equation Equations	CO1	1	2	1	2	1	1	2	1	1	1	1	

Semester No	6	CO2	2	1	1	2	2	2	1	1	2	2	2
Teacher Name	Mr.S.A.Ghule	CO3	2	1	2	2	1	1	2	2	1	2	1
Course Outcomes		CO4	1	2	1	2	2	2	1	1	1	1	2
	CO1	To explain the concepts and language of partial differential equations	CO5										
	CO2	To understand the difference between ordinary & partial differential equation	Average	1.50	1.50	1.25	2.00	1.50	1.50	1.50	1.25	1.25	1.50
	CO3	To classify the partial differential equations											
	CO4	Solve the partial differential equation using charpits method, Jacobis method											
	CO5												

Class	T.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-365(A)		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Optimization Technique	CO1	1	2	1	1	1	2	2	1	1	1	1
Semester No	6	CO2	1	2	2	2	2	2	1	2	2	2	2
Teacher Name	Mr.R.R.Devadhe	CO3	2	1	2	1	2	1	2	1	1	2	1
Course Outcomes		CO4	1	2	1	1	2	2	1	1	1	1	1
	CO1	Students will able to formulate optimization problems	CO5										
	CO2	To Understand and apply the concept of optimality criteria for various type of optimization problems	Average	1.25	1.75	1.50	1.25	1.75	1.75	1.50	1.25	1.25	1.50
	CO3	To solve various constrained and unconstrained problems in single variable as well as multivariable											
	CO4	To apply the methods of optimization in real life situation											
	CO5												

Class	T.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	MT-366(A)		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Machine Learning-II	CO1	1	2	1	2	1	2	2	2	2	1	1
Semester No	6	CO2	1	1	1	2	1	2	1	2	2	2	2
Teacher Name	Mr.U.M.Patare	CO3	2	1	2	2	1	1	2	2	2	2	1
Course Outcomes		CO4											
	CO1	To help students learn, understand,practice machine learning approaches	CO5										

	CO2	To specify what the student will able perform python program	Average	1.33	1.33	1.33	2.00	1.00	1.67	1.67	2.00	2.00	1.67	1.33
	CO3	To implement machine learning technique that are suitable for application under consideration.												
	CO4													
	CO5													

CO-PO Mapping

		Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
FY	FY	1 MT-112	1.00	1.67	1.33	1.00	2.00	1.00	1.33	1.67
		2 MT-111	0.75	1.50	1.50	1.25	2.00	1.00	1.50	1.25
		3 MT-122	1.50	1.25	1.00	1.25	1.75	1.25	1.50	1.50
		4 MT-121	1.25	1.25	1.25	1.25	1.75	1.25	1.00	1.50
SY	SY	1 MT-231	1.25	1.50	1.75	1.25	1.75	1.50	2.00	1.00
		2 MT-232(A)	1.25	1.50	1.50	1.25	1.75	1.25	2.00	1.00
		3 MT-241	1.50	1.25	1.50	1.25	1.50	1.75	2.00	1.25
		4 MT-242(A)	1.67	1.33	1.67	1.67	1.67	1.33	1.67	1.33
TY	TY	1 MT-351	1.25	1.50	1.25	2.00	1.00	1.75	1.50	2.00
		2 MT-352	1.00	1.67	1.33	1.67	1.67	1.33	1.67	1.67
		3 MT-353	1.25	1.25	1.25	1.50	1.50	1.25	1.25	1.50
		4 MT-354	1.50	1.25	1.25	1.50	1.00	1.75	1.50	1.50
		5 MT-355(A)	1.67	1.67	1.33	1.67	1.67	1.33	1.67	1.67
		6 MT-356(A)	1.25	1.50	1.25	2.00	1.00	1.75	1.50	2.00
		7 MT-361	1.33	1.67	1.33	1.33	1.33	1.67	1.33	1.33
		8 MT-362	1.50	1.50	1.25	1.50	1.50	1.75	1.50	1.25
		9 MT-363	1.33	1.33	1.33	2.00	1.33	1.67	1.67	1.33
		10 MT-364	1.50	1.50	1.25	2.00	1.50	1.50	1.50	1.25
		11 MT-365(A)	1.25	1.75	1.50	1.25	1.75	1.75	1.50	1.25
		12 MT-366(A)	1.33	1.33	1.33	2.00	1.00	1.67	1.67	2.00

CO-PO ATTAINMENT

Percentage CO-PO ATTAINMENT

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0.413333	0.688889	0.551111	0.413333333	0.826667	0.413333	0.551111	0.688889
0.39	0.78	0.78	0.65	1.04	0.52	0.78	0.65
1.1	0.916667	0.733333	0.916666667	1.283333	0.916667	1.1	1.1
1.25	1.25	1.25	1.25	1.75	1.25	1	1.5
0.65	0.78	0.91	0.65	0.91	0.78	1.04	0.52
1.05	1.26	1.26	1.05	1.47	1.05	1.68	0.84
0.3	0.25	0.3	0.25	0.3	0.35	0.4	0.25
0.866667	0.693333	0.866667	0.866666667	0.866667	0.693333	0.866667	0.693333
0.65	0.78	0.65	1.04	0.52	0.91	0.78	1.04
1	1.666667	1.333333	1.666666667	1.666667	1.333333	1.666667	1.666667
1.25	1.25	1.25	1.5	1.5	1.25	1.25	1.5
1.02	0.85	0.85	1.02	0.68	1.19	1.02	1.02
1.666667	1.666667	1.333333	1.666666667	1.666667	1.333333	1.666667	1.666667
1.25	1.5	1.25	2	1	1.75	1.5	2
0.693333	0.866667	0.693333	0.693333333	0.693333	0.866667	0.693333	0.693333
0.78	0.78	0.65	0.78	0.78	0.91	0.78	0.65
0.693333	0.693333	0.693333	1.04	0.693333	0.866667	0.866667	0.693333
0.78	0.78	0.65	1.04	0.78	0.78	0.78	0.65
1.25	1.75	1.5	1.25	1.75	1.75	1.5	1.25
1.333333	1.333333	1.333333	2	1	1.666667	1.666667	2

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
41.33333	41.33333	41.33333	41.33333	41.33333	41.33333	41.33333	41.33333
52	52	52	52	52	52	52	52
73.33333	73.33333	73.33333	73.33333	73.33333	73.33333	73.33333	73.33333
100	100	100	100	100	100	100	100
52	52	52	52	52	52	52	52
84	84	84	84	84	84	84	84
20	20	20	20	20	20	20	20
52	52	52	52	52	52	52	52
52	52	52	52	52	52	52	52
100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100
68	68	68	68	68	68	68	68
100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100
52	52	52	52	52	52	52	52
52	52	52	52	52	52	52	52
52	52	52	52	52	52	52	52
52	52	52	52	52	52	52	52
100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100

FY
SY
TY

CO-PSO MAPPING

	Course	PSO1	PSO2	PSO3
1	MT-112	1.67	1.33	1.33
2	MT-111	1.25	1.50	1.50
3	MT-122	1.50	1.50	0.75
4	MT-121	1.75	1.50	1.75
1	MT-231	1.50	1.50	1.25
2	MT-232(A)	1.75	1.25	1.50
3	MT-241	6.25	1.25	1.25
4	MT-242(A)	1.67	1.33	1.33
1	MT-351	2.00	1.75	1.25
2	MT-352	1.33	1.33	1.67
3	MT-353	1.50	1.50	1.50
4	MT-354	1.25	1.50	1.75
5	MT-355(A)	2.00	1.67	1.33
6	MT-356(A)	2.00	1.75	1.25
7	MT-361	1.33	1.67	1.33
8	MT-362	1.75	1.50	1.25
9	MT-363	1.67	1.67	1.67
10	MT-364	1.25	1.50	1.50
11	MT-365(A)	1.25	1.50	1.25
12	MT-366(A)	2.00	1.67	1.33

CO-PSO ATTAINMENT

	Course	PSO1	PSO2	PSO3
	MT-112	0.688889	0.551111	0.551111
	MT-111	0.65	0.78	0.78
	MT-122	1.1	1.1	0.55
	MT-121	1.75	1.5	1.75
	MT-231	0.78	0.78	0.65
	MT-232(A)	1.47	1.05	1.26
	MT-241	1.25	0.25	0.25
	MT-242(A)	0.866667	0.693333	0.693333
	MT-351	1.04	0.91	0.65
	MT-352	1.333333	1.333333	1.666667
	MT-353	1.5	1.5	1.5
	MT-354	0.85	1.02	1.19
	MT-355(A)	2	1.666667	1.333333
	MT-356(A)	2	1.75	1.25
	MT-361	0.693333	0.866667	0.693333
	MT-362	0.91	0.78	0.65
	MT-363	0.866667	0.866667	0.866667
	MT-364	0.65	0.78	0.78
	MT-365(A)	1.25	1.5	1.25
	MT-366(A)	2	1.666667	1.333333

Percentage CO-PSO ATTAINMENT

	Course	PSO1	PSO2	PSO3
	MT-112	41.33333	41.33333	41.33333
	MT-111	52	52	52
	MT-122	73.33333	73.33333	73.33333
	MT-121	100	100	100
	MT-231	52	52	52
	MT-232(A)	84	84	84
	MT-241	20	20	20
	MT-242(A)	52	52	52
	MT-351	52	52	52
	MT-352	100	100	100
	MT-353	100	100	100
	MT-354	68	68	68
	MT-355(A)	100	100	100
	MT-356(A)	100	100	100
	MT-361	52	52	52
	MT-362	52	52	52
	MT-363	52	52	52
	MT-364	52	52	52
	MT-365(A)	100	100	100
	MT-366(A)	100	100	100