BLUE PRINT OF QUESTION PAPER

(INSTRUCTIONS TO PAPER SETTER)

B.A./B.Sc. MATHEMATICS SEMESTER-I,PAPER-I

DIFFERENTIAL EQUATIONS

NOTE: - Paper Setter Must select TWO Short Questions and TWO Easy Questions from Each Unit as Follows

UNIT	TOPICS	5 MARKS QUESTIONS	10 MARKS QUESTIONS
UNIT - I	Linear Equations	1(Problem)	-
	Bernoulli's Equations	-	1(Problem)
	Integrating Factor	1(Problem)	-
	Exact Equations	-	1(Problem)
UNIT - II	Orthogonal Trajectories	1(Problem)	1(Problem)
	Solvable for p Clairaut's equation	1(Problem)	1(Problem)
UNIT - III	General Solution of f(D)y=0	1(Problem)	-
	f(D)y = Q when Q= be^{ax}	1(Problem)	1(Problem)
	f(D)y = Q when Q is b sin ax or b cos ax	-	1(Problem)
UNIT - IV	f(D)y = Q when Q= bx^k	1(Problem)	-
	f(D)y = Q when Q= e^{ax} V	1(Problem)	1(Problem)
	f(D)y = Q when Q= xV	-	1(Problem)
UNIT - V	Variation of Parameters (without non constant coefficient equations)	-	1(Problem)
	Cauchy-Euler Equations	2(Problems)	-
	Leg ender's Equations	-	1(Problem)