

SYLLABUS FOR THE YEAR 2016-2017

BUSINESS MATHEMATICS XI STANDARD

MONTH	TOPIC	CONTENT	PAGE NUMBER	TEST PORTION
June	Matrices and determinants	Order-types of matrices-addition and subtraction of matrices and multiplication of a matrix by a scalar	1-14	Matrices and determinants
	„	Product of matrices-Evaluation of determinants of order two and three	15-18	
	„	- singular matrices-product Properties of determinants-singular and non of two determinants	18-24	
	Algebra	Partial fraction -linear and non repeated factors	25-26	
July	„	Repeated factors and quadratic factors-Permutations	26-29	Algebra
	„	Combinations-Applications - Mathematical induction	37-43	
	„	Summation of series using $\sum n$, $\sum n^2$ and $\sum n^3$ - Binomial theorem for a positive integral index and binomial coefficients	45-53	
	Sequences and series	Harmonic progression-A.M-G.M-H.M and sequences in general	54-69	
August	„	Compound interest-nominal rate and effective rate-annuities	69-88	Sequences and series & Analytical geometry
	Analytical geometry	Locus and straight lines-Different forms of straight lines	89-100	
		Circle-General form-Length of tangent - Equation of tangent-Chord of contact of tangent.	100-110	

	Trigonometry	Identities-Signs of trigonometric ratios - compound angles-addition formulae.	111-129	
September		QUARTERLY EXAMS		
October	Trigonometry	Multiple and sub multiple angles-Product formulae	129-141	Trigonometry & Functions and graphs
		Trigonometric equations and Inverse trigonometric functions	141-153	
	Functions and Graphs	Constants and variables-Functions-Different types of functions	154-174	
	”	Arithmetic of functions - Even and odd functions-Composition of functions	174-186	
November	Differential calculus	Limit of a function-continuity of a function-Differentiation using first principles	187-204	Differential Calculus
	”	Rules of differentiation -Chain rule-	204-214	
		Logarithmic differentiation-parametric functions	214-220	
	”	Second order derivatives	220-228	
December	Half -yearly exams			
January	Integral calculus	Integration-Methods of integration	229-242	Integral Calculus& Shares
	”	Integration by parts-Definite integral	242-256	
	Shares and stocks Debentures	Basic concepts - Mathematical aspects of purchase and sale of shares Debentures with nominal rate	257-279	

	Statistics	Measures of central tendency-Mean, Median and Mode	280-287	
	„	A.M ,G.M and H.M	287-294	
February	„	Measures dispersion-Range,S.D and C.V Probability-Basic - Addition theorem Conditional probability- Multiplication theorem- Bayes theorem	294-323	Statistics
	REVISION & MODEL EXAMS			