

BOARD OF INTERMEDIATE EDUCATION::A.P::NAMPALLY::HYDERABAD
SYLLABUS IN MATHEMATICS PAPER -II(A)
TO BE EFFECTIVE FROM THE ACADEMIC YEAR 2008-2009

Sl. No.	Name of Topic and Sub Topics	No. of periods	Remarks
01.	<u>ALGEBRA</u> *		
	01. Quadratic Expressions:		
	Quadratic expressions, equations in one variable	04	
	Sign of quadratic expressions – Change in signs – Maximum and minimum values	04	
	Quadratic inequations	02	
		10	
	02. Theory of Equations:		
	The Relation between in roots and coefficient in an equation	02	
	Solving the equation when two or more roots of it are connected by certain relations	04	
	Equations with real coefficients – occurrence of complex roots in conjugate pairs and consequences	02	
	Transformation of equations – Reciprocal equations	04	
		12	
	03. Matrices		
	Types of matrices	01	
	Scalar multiple of a matrix and multiplication of matrices	07	
	Transpose of a matrix	04	
	Determinants	04	
	Adjoint and Inverse of a matrix	03	
	Solution of simultaneous linear equations	04	
	Consistency and inconsistency of Equations – Rank of a matrix	01	
		24	
	04. Permutations and Combinations		
	Definition of Linear and Circular Permutations	02	
	Permutations of n dissimilar things taken r at a time	03	
	Theorems	03	
	Permutations with repetitions allowed	03	
	Circular permutations	02	
	Permutations – some things are alike and rest different	03	
	Combinations – definitions and illustrations	02	
	Certain theorems on combinations	02	
		18	

02.	05. Binomial Theorem: Binomial theorem for positive integral index Binomial theorem for rational index Approximations using binomial theorem	10 04 02 <hr/> 16
	06. Partial Fractions: Partial fractions of $f(x)/g(x)$ when $g(x)$ contains non-repeated linear factors Partial fractions of $f(x)/g(x)$ when $g(x)$ contains repeated and non repeated linear factors Partial fractions of $f(x)/g(x)$ when $g(x)$ contains irreducible factors	02 02 02 <hr/> 06
	07. Exponential and Logarithmic series: Expansion of e^x for real x Expansion of $\log_e(1+x)$ condition on x	03 03 <hr/> 06
	<u>PROBABILITY</u> *	
	01. Probability: Random experiments and events Classical definition of Probability, Axiomatic approach and addition theorem of probability Independent and dependent events conditional probability – Multiplication theorem and Baye's Theorem	02 08 08 <hr/> 18
	02. Random Variables and Probability Distributions Random variables Theoretical discrete distributions, Binomial and Poisson distributions	06 06 <hr/> 12
	TOTAL	<hr/> 122

Upradhy
28.2.07

J. Shinde
28/2/07

Cescaom
28/2/07

ABSTRACT OF ALLOTMENT OF UNIT WISE TEACHING PERIODS
MATHEMATICS-IIA

Sl.No.	Name of Topic	No. of Periods	Remarks
01.	Quadratic Expressions	10	
02.	Theory of Equations	12	
03.	Matrices	24	
04.	Permutations and Combinations	18	
05.	Binominal Theorem	16	
06.	Partial Fractions	06	
07.	Exponential and Logarithmic series	06	
08.	Probability	18	
09.	Random Variable and Theoretical Distributions	12	
Total		122	