## **TELANGANA STATE BOARD OF INTERMEDIATE EDUCATION, HYDERABAD**

## **ACADEMIC YEAR 2020-2021**

## 70% CONTENT IN VIEW OF COVID-19 PANDEMIC

## **INTERMEDIATE 2<sup>nd</sup> YEAR MATHEMATICS (IIA) SYLLABUS**

S.NO	CHAPTER	TOPICS	no of periods	REMARKS
1	Complex Numbers	Introduction 1.1: Complex number as an Ordered pair of real numbers Fundamental operations 1.2: Representation of Complex number in the form a+ib	6	
2	De Moivre's Theorem	Upto exercise 2(b) section-I and related examples	10	
3	Quadratic Expressions	<ul> <li>3.1 Quadratic expressions, equations in one variable</li> <li>3.2 Sign of quadratic expressions, change of signs and maximum, minimum values</li> </ul>	8	
4	Theory of Equations	Complete Chapter	21	
5	Permutations and Combinations	<ul> <li>5.1 Fundamental Principles of Counting - Linear and Circular permutations</li> <li>5.2: Permutation of n dissimilar things <i>r</i> at a time</li> <li>5.6: Combinations</li> <li>Exercise 5(e) Section I and II</li> <li>Related Problems</li> <li>Exercise 5(e) Section III</li> <li>Deleted</li> </ul>	10	
6	Binomial Theorem	Introduction Exercise 6(a) Section I and Section II up to 4th problem and related examples Exercise 6(b) Section I and related examples Exercise 6(c) Deleted	6	

7	Partial Fractions	Upto 7(c) exercise.	7	
8	Measures of Dispersion	Introduction 8.1: Range 8.2.1: Mean Deviation for ungrouped data Exercise 8(a) Section I (problems 1 and 2)	4	
9	Probability	<ul> <li>9.1 Random experiments and events</li> <li>9.2 Classical definition of probability, axiomatic approach and addition theorem on probability</li> <li>9.3.1 Independent and dependent events, conditional probability, multiplication theorem and problems and related examples</li> </ul>	18	
10	Random Variables and Probability Distribution	Complete Chapter	11	