## **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**

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     2   De Moivre's Theorem   Upto exercise 2(b) section-I and related examples     3   Quadratic Expressions   Introduction     3.1   Quadratic expressions, equations in one variable     3.2: Sign of quadratic expressions, change of signs and maximum, minimum values     4   Theory of Equations     5   Permutations and Combinations     Combinations   Introduction     5.1: Fundamental Principles of Counting - Linear and Circula permutations     5.2: Permutation of n dissimilar things r at a time     5.6: Combinations     Exercise 5(e) Section I and II Related Problems     Exercise 5(e) Section I and Betted Problems     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     7   Partial Fractions     8   Measures of Dispersion     Introduction   8.1: Range     8.2.1: Mean Deviation for ungrouped data	
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8.1: Range	
Exercise 8(a) Section I (problems 1 and 2)	
9 Probability Introduction	
9.1 Random experiments and events	
9.2 Classical definition of probability, axiomatic approach an	t
addition theorem on probability	
9.3.1 Independent and dependent events, conditional probabi	ity,
multiplication theorem and problems and related examples	-
10 Random Variables and Introduction	
Probability Distribution 10.1 Random Variables	
10.2 Theoretical Discrete Distributions- Binomial and Poisso	
Distributions	1