## TELANGANA STATE BOARD OF INTERMEDIATE EDUCATION, HYDERABAD

ACADEMIC YEAR 2020-2021

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

INTERMEDIATE $2^{\text {nd }}$ YEAR MATHEMATICS (IIA) SYLLABUS

| S.NO | CHAPTERS | TOPICS |
| :---: | :---: | :---: |
| 1 | Complex Numbers | Introduction <br> 1.1: Complex number as an Ordered pair of real numbers Fundamental operations <br> 1.2: Representation of Complex number in the form $\mathrm{a}+\mathrm{ib}$ |
| 2 | De Moivre's Theorem | Upto exercise 2(b) section-I and related examples |
| 3 | Quadratic Expressions | Introduction <br> 3.1 Quadratic expressions, equations in one variable <br> 3.2 Sign of quadratic expressions, change of signs and maximum, minimum values |
| 4 | Theory of Equations | Complete Chapter |
| 5 | Permutations and Combinations | Introduction <br> 5.1 Fundamental Principles of Counting - Linear and Circular permutations <br> 5.2: Permutation of $n$ dissimilar things $r$ at a time <br> 5.6: Combinations <br> Exercise 5(e) Section I and II Related Problems <br> Exercise 5(e) Section III Deleted |
| 6 | Binomial Theorem | Introduction <br> Exercise 6(a) Section I and Section II up to 4th problem and related examples <br> Exercise 6(b) Section I and related examples <br> Exercise 6(c) Deleted |
| 7 | Partial Fractions | Upto 7(c) exercise |
| 8 | Measures of Dispersion | Introduction <br> 8.1: Range <br> 8.2.1: Mean Deviation for ungrouped data <br> Exercise 8(a) Section I (problems 1 and 2) |
| 9 | Probability | Introduction <br> 9.1 Random experiments and events <br> 9.2 Classical definition of probability, axiomatic approach and addition theorem on probability <br> 9.3.1 Independent and dependent events, conditional probability, multiplication theorem and problems and related examples |
| 10 | Random Variables and Probability Distribution | Introduction <br> 10.1 Random Variables <br> 10.2 Theoretical Discrete Distributions- Binomial and Poisson Distributions |

