## 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 (IIB)SYLLABUS

| S.NO | CHAPTERS | TOPICS |
| :---: | :---: | :---: |
| 1 | Circles | Introduction <br> 1.1: Equation of a circle, standard form, centre and radius 1.2 Position of a point the plane of a circle - Definition of a tangent <br> 1.3 Position of a straight line in the plane of a circle condition for a line to be tangent <br> 1.4. Chord of contact and polar <br> 1.5 Relative Positions of two circles |
| 2 | System of Circles | Introduction <br> 2.1: Angle between two interesting circles <br> 22: Radical axis of two circles |
| 3 | Parabola | Introduction <br> 3.1: Conic Sections, Standard forms and related problems |
| 4 | Ellipse | Introduction <br> 4.1: Equation of Ellipse in standard form, Parametric equation |
| 5 | Hyperbola | Introduction <br> 5.1: Equation of hyperbola in standard from - Parametric equations <br> Exercise 5(a) Up to Section I and related examples |
| 6 | Integration | Introduction <br> 6.1: Integration as the inverse process of differentiation, standard forms and properties of integrals <br> 6.2: Method of substitution <br> (6.2.1 to 6.2.19) and related problems |
| 7 | Definite Integrals | Introduction <br> Exercise 7(a) <br> Exercise 7(b) section I and III <br> (section II Deleted ) |
| 8 | Differential equations | Introduction <br> 8.1: Formation of differential equation - Degree and order of an ordinary differential equation <br> 8.2: Solving of differential equations <br> 8.2(a): Variable separable method |

