

## SYLLABUS 2020 - 2021

STANDARD- 12

**SUBJECT: BUSINESS MATHEMATICS &  
STATISTICS**

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<b>1. Applications of Matrices and Determinants</b>	1.1 Rank of a Matrix 1.1.1 Concept 1.1.2 Elementary Transformations and Equivalent matrices 1.1.3 Echelon form and finding the rank of the matrix (up to the order of $3 \times 4$ ) 1.1.4 Testing the consistency of non-homogeneous linear equations (two and three variables) by rank method. 1.3 Transition Probability Matrices 1.3.1 Forecasting the succeeding state when the initial market share is given
<b>2. Integral Calculus - I</b>	2.1 Indefinite Integrals 2.1.1 Concept of Indefinite Integral 2.1.2 Two important properties of Integral Calculus 2.1.3 Integration by decomposition 2.1.4 Integration by parts 2.2 Definite integrals 2.2.1 The fundamental theorems of Integral Calculus 2.2.2 Properties of definite integrals
<b>3. Integral Calculus - II</b>	3.1 The area of the region bounded by the curves 3.1.1 Geometrical Interpretation of Definite Integral as Area under a curve 3.2 Application of Integration in Economics and Commerce. 3.2.1 Cost functions from marginal cost functions 3.2.2 Revenue functions from Marginal revenue functions 3.2.3 The demand functions from elasticity of demand 3.2.4 Consumer's surplus 3.2.5 Producer surplus
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