Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)

BoS in Physics (Photonics)

Bridge Course in Mathematics for M.Sc. Physics I
(w.e.f. Academic Year 2021-22)

Department of Physics and Electronics
Rajarshi Shahu Mahavidyalaya, Latur
(Autonomous)

JUNE -2021

Contents

Sr No	Module	Lectures
I	Quadratic Equation and its Solution	02
II	Binomial Theorem (Binomial Theorem and Binomial theorem for positive integral index)	02
III	Logarithms (Indices, Natural and Common Logarithm Laws of logarithms, logarithm of 1, Change of base, Using log table, Using log for calculation, Antilog of negative number)	02
IV	Trigonometry (Angle, System of Measurement of an angle, Definition of a radian, Trigonometric ratios for angles in a right- angled triangle, Sign of an angle in any quadrant, Trigonometrical Ratios of Allied Angles, Trigonometric identities)	02
V	Differentiation Constant Rate of Change, Rate of Change that is Not Constant, Differential coefficient or derivative of a function, Theorems of Differentiations, Differential coefficients of: Trigonometric Functions; Logarithmic and Exponential Functions	02
VI	Integration (Fundamental Formulae of Integration, Theorems of Integration, Definite integral, Application of integration in Physics, Some important Integration formulas, Integration by parts)	02