MM5GET02 : APPLICABLE MATHEMATICS
4 hours/week 4 credits

The objective is to prepare students of all streams, particularly those with arts and commerce back ground for their higher studies and to approach competitive examinations.

Detailed explanation and short cut method for solving problems are to be introduced to students,

so that they can acquire better understanding of concepts and problem solving skill.. All

questions asked to be of arts students' standard.

Module – I (18 hours)

Types of numbers, HCF & LCM of integers, Fractions, Simplifications (VBODMAS rule), squares and square roots, ratio and proportion, percentage, profit & loss.

Module – II (18 hours)

Quadratic equations (Solution of quadratic equations with real roots only), Permutations

and combinations – simple applications, Trigonometry- introduction, values of trigonometric

ratios of 00, 300, 450, 600 & 900, Heights and distances.

Module – III (18 hours)

Simple interest, Compound interest, Time and work, Work and wages, Time and distance,

exponential series and logarithmic series.

Module – IV (18 hours)

Elementary mensuration – Area and perimeter of polygons, Elementary Algebra, monomial ,

binomial, polynomial (linear, quadratic & cubic), simple factorization of quadratic and cubic

polynomials.

Differential Calculus - Differentiation – Standard results (derivatives), Product rule, Quotient

rule and function of function rule (with out proof) and simple probles),

References –

1 M. Tyra, & K. Kundan- CONCEPTS OF ARITHMETIC, BSC PUBLISHING COMPANY PVT.LTD, C – 37, GANESH NAGAR, PANDAV NAGAR COMPLEX
2 GRE Math review (pdf)
3 Joseph Edward : Differential Calculus for beginners. Nabu Press (2011)
4 Calculus Volume I, S. Narayanan & T.K. Manikavachagam Pillai – S. Viswanathan (Printers & Publications) Pvt.Ltd
5 S Narayaynan, TK Manikavachagam Pillai : Calculus Volume I, S Viswanathan Printers
and publications Pvt. Ltd.