1st P.U.C REVISED SYLLABUS ACCORDING TO NCF NORM

BASIC MATHEMATICS (CODE:75)

1) The Karnataka Government has reviser the PUC Syllabus from the current academic year 2013-14. Consequently thus text book of 1 P.U is writers as per the new Syllabus incorporating new chapters like percentages, profit and loss, line an equalities with graphs.

2) Efforts have been made to write this books is a very lucid and in ambiguous manner so that the students comprehend it.

3) This book is supplemented by a variety of problems from different chapters graded on 1 mark questions, 2 marks questions and 3 marks questions and 5 marks questions, It will be very useful to the students from the examination point of new, Every chapter is suplimented with plenty of worked Example.

4) In addition to one model question paper (with answers), we have provide 3 additional model papers(with answers) for students to practice. And also a Blue print of the question paper pattern is provided.

5) Constructive Comments and suggestions are welcome and will be appreciated for the improvement of this book.

Sl.No 1	Objective 2	Unit 3	Chapters 4	No. of Teach hers 5	Expected Learning Outcomes 6	Evaluation and activity 7
1	To create an aptitude for mathematics	1 (Algebra)	**Number theory**	08	1.Understand the terms like divisibility 2.Develops the skill to find G CD on using Euclid Algorithm 3.Appreciates the application of L.cm &H.Cf	1.To find the number of divisions and sum of divisions of some numbers
2	To develop the ability for reasoning and discrimination		**2 sets, relations and functions**	15	1.Recalls the language of set theory 2.Learns the concepts of relations and functions and recognizes the difference between them 3.Develops the skill of drawing graphs 4.appricate the terms like domain, Codman of function	1.To construct relation on a set is show that reflexive, Symmetric, transitive relations are independent 2.Define one-one function. 3.Define into function 4.can you construct bijective function
3	To develop the indices and its Appln.		3. Theory of indices	**. 04**	1. Learn concept of base and index 2. Know the limitation of base 3.Appreciate the importance of indices and its appln.	Some specific problem involving implication of expression
4.	To suggest different method for solving a given problem		4. Logarithms	**05**	1.Learn the conversion of index form to logarithm and visavarsa.	1.Some specific problem like finding the no. digits for a no. having (4.2)50. Also finding the no. zeros after the decimal

					2. Known the limitation of the bases 3. Develop the concept of using logarithmic table 4. Appreciate the important of laws of Logarithms and its table.	points.
5	To create confidences in student for equipping them mathematics of needed for sequence and series.		5.Progresions	**12.**	1. Learns mathematics' ,Geometrics and harmonic series and their summation. 2.Apprecit the techniques of reducing the given series and standard series.	1. problems on inserting arithmetic , Geometric and harmonics means between numbers
6.	Enabling the students to acquire knowledge of solving simultaneous equations. Quadratic Equtn		6.Theory of equations	**12.**	1. Appreciate various method of solving Equtn. 2. Learn how to solve linear, quadratic equtn.. 3. understand the relation between roots and coefficient	1.Formation of quadratic, cubic and biquadrate equtn. when the roots are given.
7.	Skills of drawing no. lines, graphs and tables.		7. Linier inequalities	**06**	1.Recognizes inequation 2. Learn different techniques of solving inequation 3. Appreciate its appln.to L.P.P	Plot the graphs of the inequalities and high light the Feasible regions
8.	Analysis of data judging the relative relevance, adequacy and consistency of two	II Commercial Arithmetic	8. Simple and compo-und interest	**08**	1. Learn to calculate simple and compound interest 2. Appreciate its	1.Study the problem in a particular bank 2.To evaluate your bank pass book

	type of interest				application to calculate population growth, depreciation Etc.,	
9	Understand the different types of annuities		9.Annuities.	**06**	1. Learn to calculate perpetuity, present worth, future value etc.. 2. Appreciate its appln.	1. To evaluate the amount to be invested for specific returns.
10	Develop the skill to find the simple average, weighted average and combined average.		10. Averages	**04**	1. Learn the different type of average like simple, weighted, combined average.	1.To calculate your average in the test and exam 2.conducted in the college
11	To understand the terms like percentage, profit and loss.		**11. Percentageprofit and loss**	**06**	1. Learn how to evaluate percentage. 2. Learn formula for finding out profit or loss. 3. Appreciate its Applications to calculate sales tax, vat, income tax.	1.To calculate the %rise in population income 2009 to 2013 2.To find scrape value of the machine.
12	Understanding the meaning Of linear function		12.Linear function	**04**	1. Linear a new branch of mathematics 2. Develops the skill of drawing graphs 3. Identified linear graphs	1 To show the linear function on a graph for example y=2x+3..
13	To understand the concept of different measurement of angle and their relation.	III Trigonometry	13. Angles and Trigonometric ratios	**06**	1. linear different limits of measurement of angles and establishes relations 2. Recognizes the importance of radian	1.Familiarity with the contribution of following mathematician 1. Euclid.

					measure 3 Understand relation between Trigonometric ratios	2. S.L. Loney 3. Aryabhatta 4. Pythagores 5. Bhaskara
14	To understand standard and allied angles and their relations		14. Standard and allied angles	**04**	1. Learn about standard angles and various types of allied angles 2. Appreciate its appln. To heights and distances problems	1.Problems based on standard identities 2. Problems on height and distances involving angles
15	To familiarize with Cartesian plane	IV (co-ordinate Geometry)	**15. Co-ordinate system in a plane**	**05**	1. Learn to locate appoint in a Cartesian plane 2. appreciate the conversion of geometrical condition algebraic equtn.	1. Identify that three given points are collinear 2. find the slope of line 3. Find the area made by the line with the co-ordinate axes.
16	To understand the concept of locus and its equt..		**16** **Locus and its equt**	**03**	1.Learn and understand the definition of circle and conics in term of locus and their equt.. 2. Appreciates the symmetry and acquires the skill of drawing the conics	To find the equt.to locus of a point given some geometrical conditions.
17	To understand the slope of a line. Condition for two lines to be in parallel and perpendicular		**17** **Straight lines**	**10**	1.Learns the equt.a line in various forms 2. Learn about angles between the lines 3.learns about concurrency of three lines	1. To find the companied equt. of a pair of lines 2. To find the perpendicular distances between parallel lines 3 show the lines on graph sheet and measure