Progressive Education Society's

Modern college of Arts, Science and Commerce,

Ganeshkhind,Pune-16

Autonomous

NEP 2020 (1)

Department of Mathematics

(Under Faculty of Science and Technology)

S.Y.B.Sc.(Regular)

Skill Enhancement Course (SEC)

Choice Based Credit System Syllabus

To be implemented from Academic Year 2024-2025

S.Y.B.Sc.(Regular) : Mathematics

Skill Enhancement Course (SEC)

Semester	Paper Code	Title of the Paper	Theory / Practical	No. of Credits
3	---			
4	MAT24404	Vedic Mathematics	T	2

Semester - 4

Paper Code : MAT24404

Name of the Paper : Vedic Mathematics (Theory)

Total No. of Credits : 2 **Total No. of Lectures : 30**

Course Learning Outcomes :

CO	Outcomes
CO1	Student will learn different techniques to solve the basic operations in Mathematics.
CO2	Fast computation skills will be enhanced.
CO3	Student will be able to solve the problems in Competitive examinations in Mathematics

Details of Syllabus

Unit No.	Sub Unit No.	Content	No. of Lectures
1	**Table Formation**		**2**
	1.1	Tables near to perfect base numbers.	

Unit No.	Sub Unit No.	Content	No. of Lectures
1		**Table Formation**	
	1.2	Tables of Even Numbers.	
	1.3	Tables of Odd Numbers.	
	1.4	Tables of numbers having units place as 5, 8, 9....	
	1.5	Tables of more than two digit numbers .	
2		**Multiplication**	**8**
	2.1	Multiplication of any number by 9, 99, 999, 9999...	
	2.2	Multiplication of numbers more than perfect base numbers.	
	2.3	Multiplication of numbers less than perfect base numbers.	
	2.4	Multiplication of numbers more than sub base numbers.	
	2.5	Multiplication of numbers less than sub base numbers.	
	2.6	Multiplication of any number by 11, 12 to 19.	
	2.7	By any two digit number.	
	2.8	Multiplication of numbers having sum of units place as 10.. -Having sum of last two digits as 100.. -Multiplication of numbers having sum of units place near to 10.	
	2.9	General Multiplication - 2-2, 3-3, 4-4, 5-5 etc..	
	2.10	Multiplication of any number by 5, 25, 125 etc...	

Unit No.	Sub Unit No.	Content	No. of Lectures
3		**Squares**	**4**
	3.1	Squares of numbers having units place as 5.	
	3.2	Squares of numbers more than perfect base numbers.	
	3.3	Squares of numbers less than perfect base numbers.	
	3.4	Squares of numbers more than sub base numbers	
	3.5	Squares of numbers less than sub base numbers	
	3.6	Squares by duplexing method.	
	3.7	Squares of numbers having last digits as 25, 75...	
	3.8	Squares of 1,11,111,1111,…	
4		**Cubes**	**4**
	4.1	Cubing the numbers more than perfect base numbers.	
	4.2	Cubing the numbers less than perfect base numbers.	
	4.3	Cubing any two digit number...	
	4.4	Cubing the numbers near to sub base numbers.	
5		**Square Roots and Cube Roots**	**2**
6		**Division**	**2**
	6.1	Division of any number by two numbers.	
	6.2	Division of any number by three digit number.	
	6.3	Division of any number by 9...	
	6.4	Divisions of algebraic expressions.	
	6.5	Division of decimal places	

Unit No.	Sub Unit No.	Content	No. of Lectures
7		**Test of Divisibility**	**3**
	7.1	Test of Divisibility of numbers having units place as 9.	
	7.2	Seven by seven.	
	7.3	Test of Divisibility of numbers having units place as 9.	
	7.4	Test of Divisibility having units place as 1.	
	7.5	Test of Divisibility of 37.	
	7.6	Some other...	
8	**Magic Square**		**3**
	8.1	Three by three.	
	8.2	Five by five.	
	8.3	Seven by seven.	
	8.4	Nine by nine.	
	8.5	Four by four.	
9	**Compound Interest**		**1**
	9.1	For 2 years.	
	9.2	For 3 years.	
10	**Fractions**		**1**