S.S. JAIN SUBODH P.G. COLLEGE, JAIPUR

GENERIC ELECTIVE COURSE

COURSE TITLE: VEDIC MATHEMATICS

NODAL DEPARTMENT: MATHEMATICS

COURSE CODE: 23GEC_6301T

MARKING SCHEME

Tutorial (Hours)	Time Allowed ESE (Hrs)	Course Credits	Total Marks	End Semester Exam (Max. Marks)	Assignment	Minimum Marks
30	2	2	50	35	15	20

COURSE OBJECTIVES:

1. Foster the love for mathematics by creating a positive attitude through Vedic and Ancient Indian Mathematics.

2. Help student appreciate Ancient Indian mathematics and its contribution to the word.

3. Students mind is at work with this mathematics so mental sharpness is associated with it.

COURSE CONTENTS:

CONTRIBUTION OF INDIAN MATHEMATICIANS: Varahmihir, Brahmagupta, Srinivasa, Ramanujan, Neelkanth Somayya Bharti Krishna Tirtha.

ADDITION AND SUBTRACTION: Addition of algebraic expressions, Subtraction using "EkadhikenaPoorvena", Subtraction using "EkanyunenaPoorvena", Subtraction of Polynomials.

(15 Hours)

MULTIPLICATION AND DIVISION: using Vedic methods: - Multiplication using "UrdhvaTriyagbhyam", Multiplication of polynomials using "UrdhvaTriyagbhyam, Division using "Nikhilum Sutra" • Division using "ParavartyaYojayet" • Division using "UrdhvaTriyagbhyam.

SQUARING AND SQUARE ROOT: cube and cube root using Vedic methods: - Square Root / Vargamfala / Vargamul of a Number, Computing cubes of 2-digit Numbers Computing cubes of 3-digit Numbers, Cube Roots (Ghanmul) of a Number.

(15 Hours)

SUGGESTED READINGS:

1. The Essential of Vedic Mathematics, Rajesh Kumar Thakur, *Rupa Publications*, NewDelhi 2019.
2. Vedic Mathematics Made Easy, Dahaval Bathia, *Jaico Publishing*, New Delhi 2011
3. Vedic Mathematics: Sixteen Simple Mathematical formulae from the Vedas, JagadguruSwami Sri Bharati Krishna Trithaji, *Motilal Banarasidas*, New Delhi 2015.
4. Learn Vedic Speed Mathematics Systematically, Chaitnaya A. Patil 2018.

COURSE OUTCOMES:

On successful completion of the course the students will be able to:

1. Think critically and increase spred as well as accuracy.
2. It helps the student to solve mathematical problems 10-15 times faster. It is a magical tool to reduce scratch work and finger counting and improve Mental Calculation.
3. Appreciate the Mathematical advancement of Ancient India.

(Prof. K. B. Sharma)

Head of the Department

Principal