

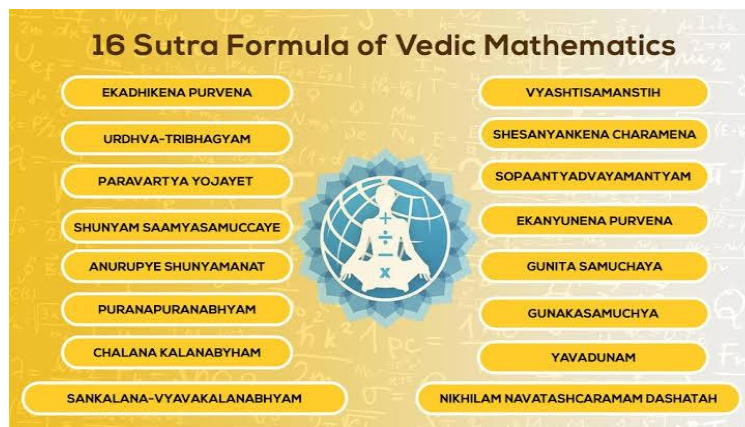
**Sri A.S.N.M GOVERNMENT COLLEGE (A),
PALAKOL,W.G.DT.**

DEPARTMENT OF MATHEMATICS

CERTIFICATE COURSE IN MATHEMATICS

(2020-2021)

“16 SUTRAS OF VEDIC MATHEMATICS”



COURSE COORDINATOR

Dr.G.S.V.S.SAIBABA, HOD OF MATHEMATICS

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Minutes of the meeting

The Department of Mathematics staff held meeting on 22-11-2021 and passed resolution to organize certificate course that is 16 sutras of vedic mathematics under the guidelines of Dr. G.S.V.S. Saibaba, HOD in Mathematics for 30 working days.

The certificate course in **16 sutras of vedic mathematics** was organized from 24-11-2021 to 28-12-2021 for the academic year 2020-2021 to the III B.Sc.MPCs students under curriculum enrichment programme.

Signature of the staff members :

Dr. G.S.V.S. SAI BABA, HOD in Mathematics

B.K.V. RAMA LAKSHMI, contract lecturer in Mathematics

K.SIVA KRISHNA, Contract Lecturer in Mathematics

Signature of the Principal

Report on Certificate Course in Vedic Mathematics

Introduction

Department of Mathematics conducted a certificate course in 16 sutras of vedic mathematics during the academic year 2020-2021 under curriculum enrichment programme.

Jagadguru , Adi Shankaracharya Shri Bharti Krishna Tirathji Maharaj between the periods 1911 to 1918 rediscovered the sixteen sutras of mathematics from Atharva Vedas, the ancient Indian system of calculations. The sutras collectively were later named as vedic Maths. These sutras were derived from “ The Gaint Sutras “ also known as Sulabh Sutras or the simply system of mathematics. The language of these sutras was in Sanskrit which was difficult to understand for common man. It took the genius of Tirathji to decode the various layers of similar sets with different meaning and make it understandable for all.

According to his researches, mathematics is based on 16 Sutras or word- formulae. The 16 sutras are further divided into 13 sub-sutras, derived from Vedic text covering every branch and part of mathematics- arithmetic, algebra, geometry, trigonometry, physics, plain and spherical geometry, conics, calculus-differential and integral, applied mathematics of various kinds, dynamics etc. In this course mainly we discussed sixteen sutras of vedic mathematics.

Course objectives:

- High speed of Vedic Mathematics is 10 to 15 times faster than normal Mathematics
- Increases speed, accuracy and become a mental Calculator.
- This course will be beneficial for students with mathematics in their school or college.

Expected outcomes of specific programme:

The findings of the study were:

1) Achievement of the students taught through Vedic mathematics was found to be higher than those taught through conventional mathematics.

2) Achievement of the students taught through Vedic mathematics with high intelligence is higher than those with average and low intelligence.

- Helps in Simplifying Calculations. Maths is not always the favourite subject of a child as it can get tricky to calculate numbers
- Enhances Ability for Numbers
- Improves Focus, Memory & Concentration
- Speed & Accuracy.
- Better Performances in Competitive Exams.
- Quick learning.

Certificate Course: 2020-2021

List of students enrolled in Vedic Mathematics:III B.Sc.(MPCs) (24-11-2021 to 28-12-2021)30 days from 9am to 10 am

S. NO	Regd .no.	Name of the student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
			24/11	25/11	26/11	27/11	29/11	30/11	30/11	1/12	2/12	3/12	6/12	7/12	8/12	10/12	13/12
1	1922030	B PADMA	p	p	p	p	p	A	A	P	A	P	P	P	A	P	P
2	1922032	B KIRAN KUMAR	P	A	P	A	A	P	P	A	P	P	A	A	P	P	P
3	1922033	CH ASHOK KUMAR	p	p	p	p	p	p	p	p	A	p	p	p	p	p	p
4	1922034	D SAI BABU	p	p	p	A	p	p	p	A	p	p	p	p	A	p	p
5	1922035	D MUDDU SIVA	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
6	1922036	G SURESH KUMAR	p	p	A	p	p	p	A	p	p	p	p	A	p	A	p
7	1922037	G KALYAN KUMAR	p	A	p	A	p	p	A	p	p	p	A	p	p	p	p
8	1922038	G DINESH BABU	p	A	p	p	A	p	p	A	p	p	p	p	A	p	p
9	1922040	K CHANDU	p	p	p	A	A	p	p	p	p	A	p	p	A	p	p
10	1922041	K SHALEM RAJU	p	A	p	p	A	A	p	p	p	A	p	p	p	A	p
11	1922042	K ISSAC	p	p	p	p	p	p	A	p	p	p	p	A	p	p	p
12	1922043	K BHARGAVI	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
13	1922045	M BALAJI PRAVEEN	p	A	p	p	p	p	p	A	p	p	p	A	p	p	p
14	1922047	P SYAM NARASIMHA	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
15	1922048	P L NARAYANA	p	A	p	A	p	p	p	p	p	p	A	p	p	p	p
16	1922049	P JAHNAVI	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
17	1922050	S RAJESH	p	p	A	p	p	p	A	p	p	p	A	p	p	p	p
18	1922053	V AMALA KUMARI	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
19	1922054	V VAMSI KRISHNA	p	A	p	p	A	p	p	p	A	p	p	p	p	A	p
20	1922055	V K GANESH	p	p	p	p	p	p	p	A	p	p	p	p	p	p	p
21	1922056	V SHANMUKASA I	p	p	A	p	p	p	p	p	p	p	p	A	p	p	p
22	1922057	Y MUKESH	p	A	p	p	p	p	p	A	p	p	p	p	A	p	p

Certificate Course: 2020-2021

s. no.	Regd.n o.	Name of the student	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
			13 /1 2	14 /1 2	14 /1 2	15 /1 2	16 /1 2	17 /1 2	18 /1 2	18 /1 2	20 /1 2	21 /1 2	21 /1 2	22 /1 2	23 /1 2	27 /1 2	28 /1 2
1	1922030	B PADMA	p	p	p	p	A	P	A	P	P	P	A	P	P	A	P
2	1922032	B KIRAN KUMAR	p	A	p	p	p	A	p	A	p	p	p	A	p	p	p
3	1922033	CH ASHOK KUMAR	p	p	A	p	p	p	p	p	p	p	p	p	p	p	p
4	1922034	D SAI BABU	p	A	p	p	p	p	A	A	p	A	p	p	p	p	p
5	1922035	D MUDDU SIVA	p	p	p	p	A	p	p	p	p	p	p	p	p	p	p
6	1922036	G SURESH KUMAR	p	p	A	p	p	p	p	A	p	p	A	p	A	p	p
7	1922037	G KALYAN KUMAR	p	A	A	p	p	p	p	A	p	p	A	p	A	p	p
8	1922038	G DINESH BABU	p	p	A	A	p	A	p	p	p	A	p	p	A	p	p
9	1922040	K CHANDU	p	A	p	A	p	p	A	p	p	A	p	A	p	p	p
10	1922041	K SHALEM RAJU	p	A	p	A	p	p	A	p	p	p	A	p	A	p	p
11	1922042	K ISSAC	p	p	p	p	p	p	p	p	p	A	p	p	p	p	p
12	1922043	K BHARGAV I	p	p	p	p	p	p	p	A	p	p	p	p	p	p	p
13	1922045	M BALAJI PRAVEEN	p	p	p	A	p	p	p	p	A	p	p	p	A	p	p
14	1922047	P SYAM NARASIM HA	p	p	p	p	A	p	p	p	p	p	A	p	p	p	p
15	1922048	P L NARAYAN A	p	p	p	A	p	p	A	p	p	p	p	A	p	p	p
16	1922049	P JAHNAVI	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
17	1922050	S RAJESH	p	p	A	p	A	p	p	p	p	p	A	p	p	p	p
18	1922053	V AMALA KUMARI	p	p	p	p	p	p	p	A	p	p	p	p	p	p	p
19	1922054	V VAMSI KRISHNA	p	p	A	p	p	p	p	A	p	p	p	A	p	p	p
20	1922055	V K GANESH	p	p	A	p	p	p	p	p	p	p	A	p	p	p	p
21	1922056	V SHANMUK ASAI	p	p	p	A	p	p	p	p	p	A	p	p	p	p	p
22	1922057	Y MUKESH	p	p	A	p	p	p	p	p	p	p	A	p	p	p	p

Course syllabus :

1. EKADHIKENA PURVENA
2. URDHVA-TRIBHAGYAM
3. PARVARTYA YOJAYET
4. SHUNYAM SAAMYASAMUCCAYE
5. ANURUPYE SHUNYAMANAT
6. PURANAPURANA BHYAM
7. CHALANA KALANABHYAM
8. SANKALANA - VYAVAKALANABHYAM
9. VYASHTISAMANSTH
10. SHESANYANKENA CHARAMENA
11. SOPAANTYADVAYAMANTYAM
12. EKANYUNENA PURVENA
13. GUNITA SAMUCHAYA
14. GUNAKASAMUCHYA
15. YAVADUNAM
16. NIKHILAM NAVATASHCARAMAM DASHATAH

Students Attended to the Examination

Date: 29-12-2021

Multiple Choice Question Paper For 16 sutras of vedic mathematics
Maximum marks: 50 x 1 = 50.

1) solve $59 \times 59 =$ (a)

- a) 3481 b) 3581 c) 3981 d) 3681

2) Solve $23 \times 23 =$ (b)

- a) 629 b) 529 c) 329 d) 429

3) Solve $299 \times 299 =$ (a)

- a) 89401 b) 88401 c) 85401 d) 86401

4) Solve $111 \times 111 =$ (c)

- a) 12369 b) 11111 c) 12321 d) 13657

5) Solve $73 \times 37 =$ (d)

- a) 3701 b) 5201 c) 2503 d) 2701

6) Solve $99 \times 99 =$ (c)

- a) 8801 b) 7801 c) 9801 d) 8901

7) Solve $989 \times 989 =$ (b)

- a) 792121 b) 978121 c) 888965 d) 285765

8) Solve $213 \times 213 =$ (b)

- a) 44369 b) 46369 c) 45369 d) 44449

9) Solve $235 \times 247 =$ (a)

- a) 58045 b) 59045 c) 68045 d) 60145

10) Solve $19 \times 499 =$ (c)

- a) 9861 b) 9618 c) 9481 d) 8165

11) $7x^2 + 5x + 3 / x - 1$ then find Q (b)

- a) $6x + 12$ b) $7x + 12$ c) $9x + 12$ d) $5x + 12$

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- 12) $x^3+7x^2+9x+11/x-2$ then find R (b)
a) 75 b) 65 c) 85 d) 95
- 13) $7x^2+5x+3/x-1$ Find R= (d)
a) 5 b) 10 c) 12 d) 15
- 14) Divide 13456 by 1123 then R= (a)
a) 1103 b) 1104 c) 1105 d) 1106
- 15) Divide 13999 by 112 then R= (c)
a) 112 b) 113 c) 111 d) 123
- 16) Divide 1111 by 839 then R= (b)
a) 282 b) 272 c) 292 d) 300
- 17) Factorize $(6x^2+11x-10) =$ (c)
a) $(2x+5)(3x+2)$ b) $(2x+3)(3x-2)$ c) $(2x+3)(3x-5)$ d) $(2x+3)(3x+5)$
- 18) Factorize $(6x^2+13x+6) =$ (a)
a) $(2x+3)(3x+2)$ b) $(2x+3)(3x-2)$ c) $(2x+3)(3x-5)$ d) $(2x+3)(3x+5)$
- 19) Factorize (x^3-7x+6) (a)
a) $(x+6)(6x+1)$ b) $(x+6)(x+1)$ c) $(x+6)(x+1)$ d) $(x-6)(x-6)$
- 20) Factorize (x^3-7x+6) (d)
a) $(x-1)(x-2)(x-3)$ b) $(x-1)(x+2)(x-3)$ c) $(x+1)(x+2)(x+3)$ d) $(x-1)(x-2)(x+3)$
- 21) The H.C.F. of (x^2+7x+6) and (x^2-5x-6) (b)
a) $x-1$ b) $x+1$ c) $x-2$ d) $x-3$
- 22) The H.C.F. of $(4x^3+13x^2+19x+4)$ & $(2x^3+5x^2+5x-4)$ (a)
a) x^2+3x+4 b) x^2+3x+4 c) x^2-3x+5 d) x^2+3x+6
- 23) $x+1/x = 26/5$ then $X = ?$ (c)
a) 5 b) $1/5$ c) a or b d) None of these
- 24) $x+1/x = 13/6$ then $X = ?$ (a)

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- a) $3/2$ or $2/3$ b) $4/3$ or $1/3$ c) only a d) a&b
- 25) $x - 1/x = 45/14$ then $X =$ (a)
a) $7/2$ or $-2/7$ b) $2/7$ or $4/7$ c) $8/3$ d) $4/3$
- 26) $(11)^3 =$ (c)
a) 1221 b) 1321 c) 1331 d) 1001
- 27) $(25)^3 =$ (b)
a) 16625 b) 15625 c) 17625 d) 18625
- 28) $(207)^2 =$ (c)
a) 41849 b) 41859 c) 42849 d) None of these
- 29) $\sqrt{0.0064} =$ (a)
a) 0.08 b) 0.008 c) 0.0008 d) 0.8
- 30) $\sqrt{0.00049} =$ (c)
a) 0.7 b) 0.07 c) 0.007 d) 0.0007
- 31) $\sqrt{0.09} =$ (b)
a) 0.03 b) 0.3 c) 0.003 d) 3
- 32) samuccaya means (a)
a) combination (or) total b) subtraction c) application d) calculation
- 33) "Ekadhika purva" means (a)
a) by one more than the previous one
b) by two more than the previous two
c) a & b d) none of these
- 34) "Anurupyena" means (c)
a) Inverse b) multiply c) proportionality d) none of these
- 35) URDHVA-TIRYAK means (b)
a) horizontally b) vertically & crosswise
c) addition d) none of these
- 36) nikhilam method is _____ for algebraic divisions (b)
a) suitable b) unsuitable c) improvement d) none of these
- 37) Paravartya method is always preferred to (a)

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- a) nikhilam b) anurupyena c) urdhva d) ekadhika purva
- 38) 'saptaka' means (a)
a) 7 b) 8 c) 9 d) 5
- 39) 'Kalau' means (c)
a) 8 b) 9 c) 13 d) 14
- 40) 'Kamse' means (d)
a) 14 b) 16 c) 18 d) 17
- 41) $54 \times 46 =$ (a)
a) 2485 b) 2484 c) 2478 d) 2376
- 42) $59 \times 59 =$ (b)
a) 3482 b) 3481 c) 3483 d) 3486
- 43) ka, ta, pa, ya denote (a)
a) 1 b) 2 c) 3 d) 4
- 44) jha and dha stand for (a)
a) 9 b) 8 c) 7 d) 5
- 45) Ksa means (a)
a) 0 b) 1 c) 2 d) 3
- 46) $889 \times 898 =$ (b)
a) 789456 b) 798322 c) 789561 d) 745623
- 47) $111 \times 111 =$ (a)
a) 123451 b) 13580 c) 254786 d) 456789
- 48) $207 \times 207 =$ (b)
a) 42819 b) 42849 c) 41236 d) 12345
- 49) $23 \times 23 =$ (C)
a) 569 b) 549 c) 529 d) 555
- 50) $46 \times 46 =$ (a)
a) 2116 b) 2126 c) 2146 d) 2222

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Marks obtained in 16 sutras of Vedic Mathematics

date: 29-12-2021

S.NO.	REGD NO.	NAME OF THE STUDENT	MARKS Obtained
1	1922030	B PADMA	44
2	1922032	B KIRAN KUMAR	31
3	1922033	CH ASHOK KUMAR	46
4	1922034	D SAI BABU	30
5	1922035	D MUDDU SIVA	46
6	1922036	G SURESH KUMAR	32
7	1922037	G KALYAN KUMAR	30
8	1922038	G DINESH BABU	35
9	1922040	K CHANDU	32
10	1922041	K SHALEM RAJU	31
11	1922042	K ISSAC	39
12	1922043	K BHARGAVI	47
13	1922045	M BALAJI PRAVEEN	30
14	1922047	P SYAM NARASIMHA	32
15	1922048	P L NARAYANA	38
16	1922049	P JAHNAVI	47
17	1922050	S RAJESH	32
18	1922053	V AMALA KUMARI	45
19	1922054	V VAMSI KRISHNA	40
20	1922055	V K GANESH	42
21	1922056	V SHANMUKASAI	44
22	1922057	Y MUKESH	45

Certificate Course: 2020-2021

Other Details:

Duration of Course : 30 hrs

Classes starting Date : 24-11-2021

Classes ended Date : 28-12-2021

Class Timings : 9am to 10pm

Resource Person : 1. Dr. G.S.V.S. SAI BABA

2. Sri K.Siva Krishna

Conclusion:

This certificate course mainly carried out to develop fast calculation among the students at college level.

Reference :

Vedic mathematics by BHARATI KRISNA TIRTHAJI MAHARAJA

Certificate Course: 2020-2021



Valedictory program on 29-12-2021

Model certificate



Sri A.S.N.M. Government College(A)

NAAC REACCREDITED AT 'B' GRADE (CGPA 2.61) Palakol,

W.G.Dt, A.P-534260

Certificate Course on **VEDIC MATHEMATICS**

This is to certify that Sri -----

Had successfully completed certificate course on "VEDIC MATHEMATICS"

Through the Department of Mathematics 24-11-2021 to 28-12-2021

Cours Co-Ordinator

IQAC Co-Ordinator

Principal