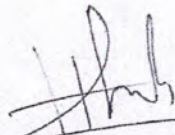


Hindustan College of Science & Technology, Farah, Mathura  
Department of Mathematics

Date: 05 Jan. 2019

Notice

All the students of B. Tech. Biotechnology first year are hereby informed that the registration for value added course "Fundamentals of Vedic Mathematics (VAS1801)" will be started from 07 January 2019 and the last date for registration is 10 January 2019. **The regular classes for value added course will be started from 12 January 2019** All of you are advised to register yourself timely.



HOD, Mathematics

Head  
Department of Mathematics  
Hindustan College of Science & Technology  
Farah, Mathura



Director  
Hindustan College of  
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HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY,  
FARAH -MATHURA

DEPARTMENT OF MATHEMATICS



*Value Added Course*

*VAS1801 – Fundamentals of Vedic Mathematics*

*12<sup>th</sup> Jan '2019 – 4<sup>th</sup> May 2019 - Every Saturday: 3:00 PM – 5:00 PM*



By

Mr. Girraj Kumar Verma

Assistant Professor, Mathematics

Research Interest: Cryptography and Network security



Registration Dates

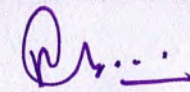
7<sup>th</sup> Jan 2019 – 10<sup>th</sup> Jan 2019

For Registration: Please contact

Mr. Rishi Pal Singh, Office Staff, Department of Ist yr

Prerequisites: Assumes familiarity with Basic Arithmetic, Algebra, Geometry

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Farah, Mathura

  
Director

Hindustan College of  
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HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY,  
FARAH -MATHURA

DEPARTMENT OF MATHEMATICS



Value Added Course

VAS1801 – Fundamentals of Vedic Mathematics

12<sup>th</sup> Jan '2019 – 4<sup>th</sup> May 2019 - Every Saturday: 3:00 PM – 5:00 PM

Course Objectives

The main objective of this value added course are as follows:

1. Foster love for maths and remove its fear through Vedic Mathematics
2. Enhance computation skills in students through Vedic Mathematics
3. Develop logical and analytical thinking
4. Promote joyful learning of mathematics
5. Discuss the rich heritage of mathematical temper of Ancient India

Course Syllabus

Units	Details	Course Out comes
1	History of Vedic Maths and its Features, <i>Vedic Maths formulae: Sutras and Upsutras</i> , Addition in Vedic Maths: Without carrying, Dot Method, Subtraction in Vedic Maths: <i>Nikhilam Navatashcaramam Dashatah</i> , Fraction –Addition and Subtraction	CO1
2	Multiplication in Vedic Maths: Base Method (any two numbers upto three digits) Multiplication by <i>Urdhva Tiryak Sutra</i> Miracle multiplication: Any three-digit number by series of 1's and 9's Division by <i>Urdhva Tiryak Sutra (Vinculum method)</i>	CO2
3	Squares of any two-digit numbers: Base method Square of numbers ending in 5: <i>Ekadhikena Purvena Sutra</i> Easy square roots: <i>Dwandwa Yoga (duplex) Sutra</i> Square root of 2: <i>Baudhayana Shulbasutra</i> Cubing: <i>Yavadunam Sutra</i>	CO3
4	Factoring Quadratic equation: <i>Anurupyena</i> , <i>Adyamadyenantyamantya Sutra</i> Concept of <i>Baudhayana (Pythagoras)</i>	CO4
5	<i>Theorem</i> Circling a square: <i>Baudhayana Shulbasutra</i> Concept of $\pi$ : <i>Baudhayana Shulbasutra</i> Concept angle ( $\theta$ ) $0^\circ$ , $30^\circ$ , $45^\circ$ , $60^\circ$ and $90^\circ$ : <i>Baudhayana number</i> .	CO5

Prerequisites: Assumes familiarity with linear algebra, probability theory, and programming in Python.

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HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY,  
FARAH -MATHURA

DEPARTMENT OF MATHEMATICS



*Value Added Course*

*VAS1801 – Fundamentals of Vedic Mathematics*

*12<sup>th</sup> Jan '2019 – 4<sup>th</sup> May 2019 - Every Saturday: 3:00 PM – 5:00 PM*

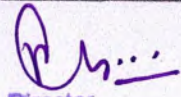
**Course Outcomes**

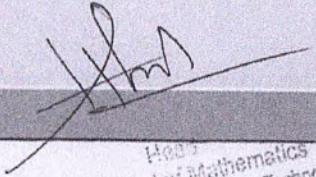
- CO1 Overcome the fear of maths
- CO2 Improved critical thinking
- CO3 Familiarity with the mathematical underpinnings and techniques
- CO4 Ability to do basic maths faster and with ease.
- CO5 Appreciate the Mathematical advancements of Ancient India

**CO-PO Mappings**

COS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	1	1												
CO2	2	2										1	1	
CO3	2	2										1	1	
CO4	2	2										1	1	
CO5	2	1										1		
Average	1.8	1.8										1	1	

**Evaluation Criteria: 1. Evaluation of assignments, Viva/Quiz**

  
Director  
Hindustan College of  
Science & Technology  
FARAH (MATHURA)

  
Head  
Department of Mathematics  
Hindustan College of Science & Technology  
Farah, Mathura



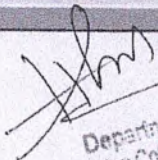
HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY, FARAH -MATHURA  
DEPARTMENT OF MATHEMATICS

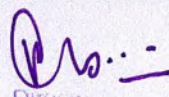


*Value Added Course*  
**VAS1801 – Fundamentals of Vedic Mathematics**  
12<sup>th</sup> Jan '2019 – 4<sup>th</sup> May 2019 - Every Saturday: 3:00 PM – 5:00 PM

Program Schedule

Session	Date	Time	No of Hours	Session Topic	Resource Person
1	12-Jan-2019	3:00 PM - 5:00 PM	2	History of Vedic Maths and its Features	Mr. Girraj Kumar Verma
2	19-Jan-2019	3:00 PM - 5:00 PM	2	Sutras and Upsutras, Addition in Vedic Maths:	Mr. Girraj Kumar Verma
3	26-Jan-2019	3:00 PM - 5:00 PM	2	Dot Method, Subtraction in Vedic Maths	Mr. Girraj Kumar Verma
4	2-Feb-2019	3:00 PM - 5:00 PM	2	Multiplication in Vedic Maths	Mr. Girraj Kumar Verma
5	9-Feb-2019	3:00 PM - 5:00 PM	2	Multiplication by Urdhva Tiryak Sutra Miracle multiplication	Mr. Girraj Kumar Verma
6	16-Feb-2019	3:00 PM - 5:00 PM	2	Division by Urdhva Tiryak Sutra (Vinculum method)	Mr. Girraj Kumar Verma
7	23-Feb-2019	3:00 PM - 5:00 PM	2	Squares of any two-digit numbers	Mr. Girraj Kumar Verma
8	2-Mar-2019	3:00 PM - 5:00 PM	2	Purvana Sutra Easy square roots	Mr. Girraj Kumar Verma
9	9-Mar-2019	3:00 PM - 5:00 PM	2	Sutra Square root of 2: Baudhayana Shulbasutra Cubing: Yavadunam Sutra	Mr. Girraj Kumar Verma
10	16-Mar-2019	3:00 PM - 5:00 PM	2	Factoring Quadratic equation	Mr. Girraj Kumar Verma
11	23-Mar-2019	3:00 PM - 5:00 PM	2	Sutra Concept of Baudhayana (Pythagoras)	Mr. Girraj Kumar Verma
12	30-Mar-2019	3:00 PM - 5:00 PM	2	Theorem Circling a square	Mr. Girraj Kumar Verma
13	6-Apr-2019	3:00 PM - 5:00 PM	2	Concept of pi	Mr. Girraj Kumar Verma
14	13-Apr-2019	3:00 PM - 5:00 PM	2	Numerical Problems discussions	Mr. Girraj Kumar Verma
15	20-Apr-2019	3:00 PM - 5:00 PM	2	Numerical Problems discussions	Mr. Girraj Kumar Verma
16	27-Apr-2019	3:00 PM - 5:00 PM	2	Assignment	Mr. Girraj Kumar Verma
17	4-May-2019	3:00 PM - 5:00 PM	2	Assignment evaluation & Feedback	Mr. Girraj Kumar Verma
Total Number of Hours covered			34		

  
Head  
Department of Mathematics  
Hindustan College of Science & Technology  
Farah, Mathura

  
Director  
Hindustan College of  
Science & Technology  
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## Department of Mathematics

### Value Added Course - Registration Form

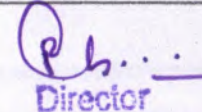
Course Name: Fundamentals of Vedic Mathematics

Course Code: VAS1801

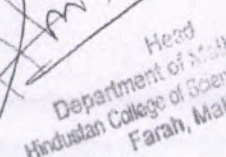
Session 2018-19

From 12th January, 2019 to 4th May, 2019

Sr. No.	Roll No.	Name	Department	Semester	Signature of Student
1	1806454001	AMANJIT YADAV	Biotechnology	II	Amanjit
2	1806454002	AMIT KUMAR	Biotechnology	II	Amit
3	1806454003	AMIT MISHRA	Biotechnology	II	Amit
4	1806454005	ARPIT BAGHEL	Biotechnology	II	Arpit
5	1806454006	BHAVYA SINGH	Biotechnology	II	Bhavya
6	1806454007	Divya Sharma	Biotechnology	II	Divya
7	1806454009	JYOTI YADAV	Biotechnology	II	Jyoti
8	1806454010	LIVESH RAJPUT	Biotechnology	II	Livesh
9	1806454011	MANVI GUPTA	Biotechnology	II	Manvi
10	1806454012	MOHAMMAD SERAJ	Biotechnology	II	M.Seraj
11	1806454013	MONIKA SINGH	Biotechnology	II	Monika
12	1806454014	MONU TOMAR	Biotechnology	II	Monu Tomar
13	1806454015	POOJA	Biotechnology	II	POOJA
14	1806454016	POOJA MISHRA	Biotechnology	II	Pooja
15	1806454017	PRATIMA YADAV	Biotechnology	II	Pratima
16	1806454018	PRIYANSHI CHAUHAN	Biotechnology	II	Priyanshi
17	1806454019	SANJANA SHARMA	Biotechnology	II	Sanjana
18	1806454020	SHAMBHAVI DUBEY	Biotechnology	II	Shambhavi
19	1806454021	SHIVAM SINGH	Biotechnology	II	Shivam
20	1806454022	SHIVANGI CHAUHAN	Biotechnology	II	Shivangi
21	1806454023	SOUMYA SRIVASTAVA	Biotechnology	II	Soumya
22	1806454024	STUTI TIWARI	Biotechnology	II	Stuti
23	1806454025	VAISHNAVI GUPTA	Biotechnology	II	Vaishnavi
24	1806454026	YOGESH CHAUDHARY	Biotechnology	II	Yogesh

  
Director

Hindustan College of  
Science & Technology  
FARAH (MATHURA)

  
Head  
Department of Mathematics  
Hindustan College of Science & Technology  
Farah, Mathura

# Hindustan College of Science & Technology

Department of Mathematics

Value Added Course - Attendance Sheet

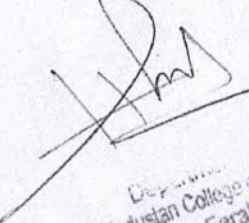
**Course Name: Fundamentals of Vedic Mathematics COURSE CODE:(VAS1801)**

Session (2018-19)

Session wise Attendance Sheet

S. No.	Roll No.	Name	SEM	Attendance																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				12-Jan	19-Jan	26-Jan	2-Feb	9-Feb	16-Feb	23-Feb	2-Mar	9-Mar	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr	20-Apr	27-Apr	4-May
1	1806454001	Amanjit Yadav	II	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	Amanjit	
2	1806454002	Amit Kumar	II	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	
3	1806454003	Amit Mishra	II	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	Amit	
4	1806454005	Arpit Baghel	II	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	Arpit	
5	1806454006	Bhavya Singh	II	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	
6	1806454007	Divya Sharma	II	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	Divya	
7	1806454009	Jyoti Yadav	II	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	Jyoti	
8	1806454010	Livesh Rajput	II	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	Livesh	
9	1806454011	Manvi Gupta	II	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	Manvi	
10	1806454012	Mohammad Seraj	II	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	M.Seraj	
11	1806454013	Monika Singh	II	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	Monika	
12	1806454014	Monu Tomar	II	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	Monu	
13	1806454015	Pooja	II	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	
14	1806454016	Pooja Mishra	II	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	
15	1806454017	Pratima Yadav	II	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	Pratima	
16	1806454018	Priyanshi Chauthar	II	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	Priyanshi	
17	1806454019	Sanjana Sharma	II	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	
18	1806454020	Shambhavi Dubey	II	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	Shambhavi	
19	1806454021	Shivam Singh	II	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	
20	1806454022	Shivangi Chauhan	II	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	Shivangi	
21	1806454023	Soumya Srivastava	II	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	Soumya	
22	1806454024	Stuti Tiwari	II	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	Stuti	
23	1806454025	Vaishnavi Gupta	II	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	
24	1806454026	Yogesh Chaudhar	II	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	Yogesh	

  
 Director  
 Hindustan College of  
 Science & Technology  
 FARAH (MATHURA)

  
 Head of Department  
 Hindustan College of Science & Technology  
 Farah, Mathura

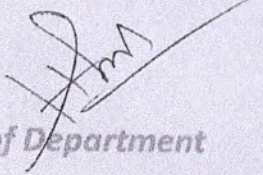


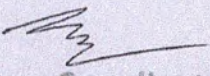
HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY,  
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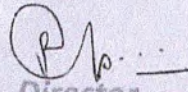
## *Certificate of Completion*

*Department of Mathematics*  
*Academic Session 2018-19*

*This is to certify that Mr/Ms. Stuti Tiwari (Roll No: 1806454024), Department of  
Biotechnology has successfully completed 34 hours of Value Added Course  
"VAS1801 – Fundamentals of Vedic Mathematics."*

  
Head of Department

  
Course Coordinator

  
Director

  
Director  
Hindustan College of  
Science & Technology  
FARAH (MATHURA)



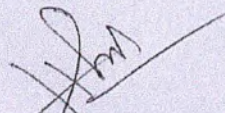


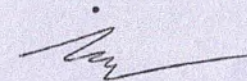
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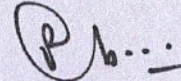
## *Certificate of Completion*

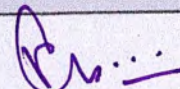
*Department of Mathematics*  
*Academic Session 2018-19*

***This is to certify that Mr/Ms. Shivam Singh (Roll No: 1806454021 ), Department of Biotechnology has successfully completed 34 hours of Value Added Course "VAS1801 – Fundamentals of Vedic Mathematics."***

  
Head of Department

  
Course Coordinator

  
Director

  
Director  
Hindustan College of  
Science & Technology  
FARAH (MATHURA)

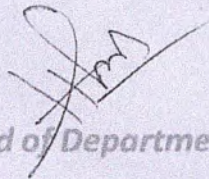


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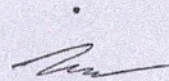
*Certificate of Completion*

*Department of Mathematics*  
*Academic Session 2018-19*

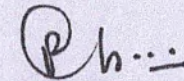
*This is to certify that Mr/Ms. Monika Singh (Roll No: 1806454013 ), Department of  
Biotechnology has successfully completed 34 hours of Value Added Course  
"VAS1801 – Fundamentals of Vedic Mathematics."*



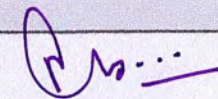
Head of Department



Course Coordinator



Director



Director  
Hindustan College of  
Science & Technology  
FARAH (MATHURA)

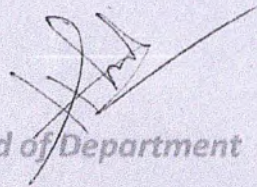


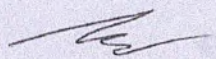
HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY,  
FARAH -MATHURA

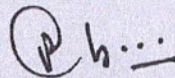
## *Certificate of Completion*

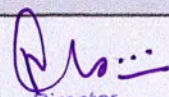
*Department of Mathematics*  
*Academic Session 2018-19*

*This is to certify that Mr/Ms. Bhavya Singh (Roll No: 1806454006 ), Department of  
Biotechnology has successfully completed 34 hours of Value Added Course  
"VAS1801 – Fundamentals of Vedic Mathematics."*

  
Head of Department

  
Course Coordinator

  
Director

  
Director  
Hindustan College of  
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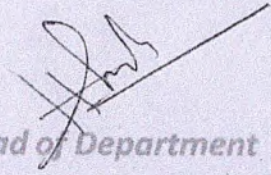


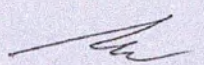
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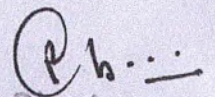
## *Certificate of Completion*

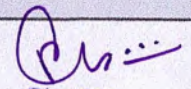
*Department of Mathematics*  
*Academic Session 2018-19*

*This is to certify that Mr/Ms. Amit Kumar (Roll No: 1806454002 ), Department of  
Biotechnology has successfully completed 34 hours of Value Added Course  
"VAS1801 – Fundamentals of Vedic Mathematics."*

  
Head of Department

  
Course Coordinator

  
Director

  
Director  
Hindustan College of  
Science & Technology  
FARAH (MATHURA)