

# Aggarwal College Ballabgarh

A Post Graduate Co-educational College  
(Affiliated to M. D. University, Rohtak)  
NAAC Accredited 'A' Grade (CGPA: 3.40)

Certificate Course in Vedic Maths Trainer Training Program (VTT)

Annexure - I



Registered under R. P. Skill & Education Development Trust



## IIVA Vedic Contents Part - 1

1)	Introduction of Vedic Maths
2)	History of Vedic Maths
3)	Benefits of Vedic Maths
4)	Sutras
5)	Sub-Sutras
6)	Sutras and their explanation
7)	Multiplication by 11 and multiples of 11 (Sub Sutra Ānurūpyeṇa)
8)	Multiplication by 12 to 19 (Sutra Sopāntyadvayamantyaṃ )
9)	Multiplication by 111
10)	Multiplication by 222 to 999
11)	Base Method Multiplication (Sutra Nikhilaṃ Navataścaramaṃ Daśataḥ and Sub Sutra Ānurūpyeṇa)
	(a) Below Base 10
	(b) Below Base 20-90
	(c) Below Base 100
	(d) Below Base 200-900
	(e) Above Base 10
	(f) Above Base 20-90
	(g) Above Base 100
	(h) Above Base 200-900
	(i) Base method when one number is above & other is below the same base
	(j) When Bases are different but both numbers are below base
	(k) When Bases are different but both numbers are above base
12)	If the sum of units digits is 10 and rest place digits are same (Sub Sutra Antyayordaśake'pi)
13)	If the sum of tens place digits is 10 and ones place digits are same
14)	Multiplication by 9
15)	Multiplication by Number Ending with 9 i.e. 19- 99

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## IIVA Vedic Contents Part - 2

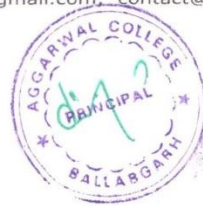
1)	Tables Using Vinculum
2)	Multiplication by number of nines (Sutra Ekādhikena Pūrveṇa)
	a) Multiplier has equal of nines as multiplicand digits
	b) Multiplier has less number of nines as compared to digits of multiplicand
	c) Multiplier has more number of nines as compared to digits of multiplicand. (Sutra Ūrdhva Tiryagbhyām)
	a) 2 D x 2 D
	b) 3 D x 3 D
	c) 3 D x 2 D
	d) 4 D x 4 D
	e) 4 D x 3 D
	f) 4 D x 2 D
5)	Division General Method [Flag Method] (Sutra Parāvartya Yojayet)
6)	Squares by Duplex Method (Sub Sutra Dwandwayogah)
7)	Addition of Squares
8)	Square Roots of Exact Squares (Sub-Sutra Vilokanam)
9)	CUBES (Sub-Yāvadūnaṃ)
10)	Cube Roots of Exact Cubes (Sub-Sutra Vilokanam)
11)	Fourth Power 2 Digit Number

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16)	General Method (2 digits x 2 digits) (Sutra Ūrdhva Tiryagbhyām)
17)	Subtraction ( all from 9 & last from 10) (Sutra Nikhilam Navataścaramaṃ Daśataḥ)
18)	Vinculum
19)	Change units digit into a vinculum
20)	Change all digits to vinculum except first
21)	Devinculate
22)	Subtraction using vinculum
23)	Addition Base Method
24)	Subtraction Base Method
25)	Addition/ Subtraction using vinculum
26)	Addition using Complements
27)	Division by 9 (Sutra Nikhilam Navataścaramaṃ Daśataḥ)
28)	Division by 8 (Sutra Nikhilam Navataścaramaṃ Daśataḥ)
29)	Division by 11 (Sutra Nikhilam Navataścaramaṃ Daśataḥ)
30)	Division by 12 (Sutra Nikhilam Navataścaramaṃ Daśataḥ)
31)	Division by 99 (Sutra Nikhilam Navataścaramaṃ Daśataḥ)
32)	Division by number above base 100 (Sutra Nikhilam Navataścaramaṃ Daśataḥ)
33)	Division Base Method (Above Base)
34)	Division Base Method (Below Base) (Sutra Nikhilam Navataścaramaṃ Daśataḥ)
35)	Squares (Base Method) (Sub Sutra Yāvadūnaṃ Tāvadūnikṛtya Vargañca Yojayet)
36)	Square of number ending with 5 (Sutra Ekādhikena Pūrveṇa)
37)	Square of number starting with 5

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## IIVA Vedic Contents Part - 3

1)	Addition and Subtraction (Fractions)
2)	Auxiliary fractions (Sutra Ekādhikena Pūrveṇa)
	a. Denominator Ending with 9
	b. Denominator Ending with 8
	c. Denominator Ending with 7
	d. Denominator Ending with 6
	e. Denominator Ending with 1
3)	Multiplication (3 Rows General Method)
4)	Multiplication (3 Rows Base Method)
5)	Magic Squares
6)	Multiplication (Algebraic Expressions) (Sutra Ūrdhva Tiryagbhyāṃ)
7)	Division (Algebraic Expressions) (Sutra Parāvartya Yojayet )
8)	Divisibility Rules (Sutra Ekādhikena Pūrveṇa & Sub Sutra Veṣṭanam )
9)	Approximations (Sutra Ūrdhva Tiryagbhyāṃ & Sutra Guṇakasamuccayaḥ )
10)	Calendar Technique (Days & Dates)

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## IIVA Vedic Contents Part - 4

1)	Pythagoras Theorem (Bandhayana Theorem)
	a) Proofs
2)	Triples (Tribhu Jank)
	a. Addition of Triples
	b. Double of Angle
	c. Finding Triple of Angle
	d. Subtraction of Triples
	e. Half Angle
3)	Coordinate Geometry
	a. Distance between the two given points
	b. Equation of straight line passing through two points
	c. Length of perpendicular of a point from the given line
4)	Simple Equation
5)	Factorisation

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**PROPOSED CONTENT VEDIC MATHS FOR QUALIFICATION PACK OF TRAINER**

MEP/N0101: Work effectively within Indian sector			
	Elements	Pcs	Total Marks
1.	Work within the Indian skills system	<p><b>Pc1.</b></p> <p><b>TRAINING SCENARIO IN INDIAN INDUSTRY (2 hrs.)</b></p> <ul style="list-style-type: none"> <li>- Skill development initiatives</li> <li>- National council for vocational training: (NCVT)</li> <li>- Social partners in skill development:                             <ul style="list-style-type: none"> <li>✓ Partnerships will be consciously promoted between government, industry, local governments, civil society institutions and all skill providers</li> <li>✓ It includes training providers, professional societies, cooperatives and civil society institutions</li> <li>✓ Creation of an institutional mechanism and regular consultation with stake holders will form the corner stone of skill development initiative</li> </ul> </li> <li>- National skill development corporation (NSDC)</li> <li>- Training of trainers (TOT) – NSDC</li> <li>- NOS modules</li> <li>- Relevance of training of Vedic Maths in India</li> </ul> <p><b>ENTREPRENEURSHIP SCENARIO INDIAN INDUSTRY (2hrs)</b></p> <ul style="list-style-type: none"> <li>- Evolution of Entrepreneurship in India</li> <li>- Recent trends in Entrepreneurship</li> <li>- Role of Entrepreneurship Ministry in developing entrepreneurs in India</li> <li>- Meaning &amp; Scope of Entrepreneurship</li> <li>- Entrepreneurship as career option</li> <li>- Essentials of being an entrepreneurship trainer</li> </ul> <p><b>Training of Technical Terms of Vedic Maths (7 hrs)</b></p> <ul style="list-style-type: none"> <li>✓ INTRODUCTION TO VEDIC MATHS</li> <li>✓ HISTORY OF VEDIC MATHS</li> <li>✓ BENEFITS OF VEDIC MATHS</li> <li>✓ SUTRAS AND THEIR EXPLANATION</li> <li>✓ MULTIPLICATION BY 11 AND MULTIPLES OF 11</li> <li>✓ MULTIPLICATION BY 12 TO 19</li> <li>✓ MULTIPLICATION BY 111</li> <li>✓ MULTIPLICATION BY 222 TO 999</li> <li>✓ THUMB RULE</li> </ul> <p><b>Activities/Assignment (5hrs)</b></p> <ul style="list-style-type: none"> <li>✓ Activity 1</li> <li>✓ Activity 2</li> <li>✓ Activity 3</li> <li>✓ Activity 4</li> <li>✓ Activity 5</li> </ul>	16
2.	Work within the Organisation's quality framework	<p><b>PC2.</b></p> <p><b>Accreditations &amp; their policies of IIVA (3 hrs)</b></p> <ul style="list-style-type: none"> <li>- NEBET Policy</li> <li>- ISO Policies</li> <li>- SOP of IIVA</li> </ul> <p><b>Legal Duties include:</b></p> <ul style="list-style-type: none"> <li>- Ensuring the organisation meets its objectives as set out in the constitution</li> <li>- Ensuring the organisation complies with the rules set out in its constitution and acts legally in all its activities (getting advice when necessary)</li> <li>- Acting in the interests of the organisation and its beneficiaries, not for personal benefit</li> <li>- Informing meetings of any interest in a contract which could lead to conflict of interest</li> <li>- keeping abreast of legislation that may affect the organisation's work and direction</li> </ul>	18

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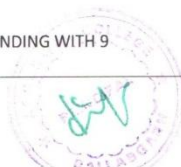
		<p><b>Four Levels of Vedic Maths &amp; Quality Standards of each level (2 hrs)</b>  <b>Conceptual Framework of Training Sessions (2 hrs)</b>  ✓ DODGING TABLE  ✓ GENERAL METHOD 2D X 2D, VERTICAL &amp; HORIZONTAL, 3D X 3D, 4D X 4D</p> <p><b>Activities/Assignment (2 hrs)</b>  ✓ Activity 6  ✓ Activity 7</p> <p><b>PC3.</b></p> <ul style="list-style-type: none"> <li>- Roles and Responsibilities of an IIVA Trainer (1 hr) Enter into the role of Content Curator</li> <li>- Understand the basics of Vedic Maths</li> <li>- See the whole picture of training methods and tools</li> <li>- Know the principles of information architecture</li> <li>- Enter into the role of a Stimulator</li> <li>- Constant development</li> <li>- Critical Thinking</li> </ul> <p><b>Expected qualities in a trainer by the client company</b>  The qualities of a good trainer are as follows:  - Methodical and well-planned  - Highly knowledgeable and competent enough  - Possess relevant industry experience  - Good in communication/presentation and  - Be practical enough to make the overall training session fruitful to the trainees.</p> <p><b>Technical qualities of Vedic Maths (4hrs)</b>  ✓ NUMBER THEORY  ✓ SUM OF PRODUCTS  ✓ DIFFERENCE OF PRODUCTS  ✓ SUBTRACTION (ALL FROM 9 LAST FROM 10)</p> <p><b>Activities/Assignment (4hrs)</b>  ✓ Activity 8  ✓ Activity 9  ✓ Activity 10  ✓ Activity 11</p>	
3.	<b>Manage work relationships and work effectively in the workplace</b>	<p><b>PC 4 – PC8.</b>  <b>Management Sessions (2 hrs)</b>  1. MANAGERIAL ROLE OF IIVA TRAINER INCLUDE:  <ul style="list-style-type: none"> <li>- Setting overall policy and short, medium and long-term objectives</li> <li>- Identifying and discussing new areas of work</li> <li>- Ensuring there are systems for regularly monitoring and evaluating the organisation's work</li> </ul> 2. TRAINING SESSION ON TEAM BUILDING AND FUNCTIONING IN A TEAM  3. COMMUNICATION SYSTEMS IN AN IIVA CENTRE  4. WORKPLACE STANDARDS OF IIVA TRAINING CENTRE  5. IIVA PROFESSIONAL CODE OF ETHICS  <ul style="list-style-type: none"> <li>- Code of Ethics and Professional Practices</li> </ul> <b>IIVA Certified Training Professionals of VEDIC MATHS and Entrepreneurship (2 hrs)</b>  Professional should have ethical responsibilities to their organization, employers, clients, society, as well as to other professionals. The following ethical foundations for professional activities in exercise related roles serve as a code of conduct for practicing professionals. The code implements many of these foundations in the form of rules of ethical conduct. Noncompliance with the code may affect an individual's initial or continuing status as a recognized certified professional by MPESC.</p>	18

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4.	Apply a client focused approach	<p><b>Ethical Foundations</b></p> <ul style="list-style-type: none"> <li>- The Trainer-Client relationship</li> <li>- Trainer conduct and practice</li> <li>- Avoiding conflicts of interest</li> <li>- Professional relations</li> <li>- Societal responsibilities</li> </ul> <p><b>Technical Knowledge on IIVA Product – Vedic Maths (11 hrs)</b></p> <ul style="list-style-type: none"> <li>✓ MULTIPLICATION OF NUMBERS ENDING WITH 1</li> <li>✓ MULTIPLICATION OF NUMBERS STARTING WITH 1</li> <li>✓ VINCULUM</li> <li>✓ CHANGE UNITS DIGIT INTO VINCULUM</li> <li>✓ CHANGE ALL DIGITS TO VINCULUM EXCEPT FIRST</li> <li>✓ DEVINICULATE</li> <li>✓ TABLES USING VINCULUM</li> <li>✓ SUBTRACTION USING VINCULUM</li> <li>✓ ADDITION / SUBTRACTION USING VINCULUM</li> <li>✓ ADDITION BASE METHOD</li> <li>✓ SUBTRACTION BASE METHOD</li> </ul> <p><b>Activities/Assignment (3hrs)</b></p> <ul style="list-style-type: none"> <li>- Activity 12</li> <li>- Activity 13</li> <li>- Activity 14</li> </ul>	16
5.	Work ethically	<p><b>PC9.</b></p> <p><b>TRAINING ON DIFFERENT STAKEHOLDERS OF IIVA (2 hrs)</b></p> <p><b>SESSION ON COMMUNICATION SKILL FOR BETTER ORGANIZATIONAL PERFORMANCE (1 hrs)</b></p> <p><b>WORK PRACTICE SESSIONS ON VEDIC MATHS FOR CLIENT TRAINING (11 HRS)</b></p> <ul style="list-style-type: none"> <li>✓ ADDITION USING COMPLIMENTS</li> <li>✓ DIVISION BY FLAG METHOD</li> <li>✓ MULTIPLICATION BY NUMBER OF 9S (EQUAL TO 9 , LESS NUMBER OF 9S &amp; MORE NUMBER OF 9S)</li> <li>✓ PYTHAGORAS THEOREM, PROOFS, Triples-addition</li> <li>✓ TRIPLES-DOUBLE ANGLE, FINDING TRIPLES OF ANGLE</li> <li>✓ TRIPLES HALF &amp; SUBTRACTION OF TRIPLE</li> <li>✓ BASE METHOD MULTIPLICATION - BELOW BASE</li> <li>✓ BASE METHOD MULTIPLICATION - ABOVE BASE</li> <li>✓ BASE METHOD WHEN ONE NUMBER IS ABOVE AND OTHER IS BELOW THE SAME BASE</li> <li>✓ WHEN BASES ARE DIFFERENT BUT BOTH NUMBERS ARE BELOW BASE</li> <li>✓ WHEN BASES ARE DIFFERENT BUT BOTH NUMBERS ARE ABOVE BASE</li> </ul> <p><b>Activities/Assignment (1hrs)</b></p> <ul style="list-style-type: none"> <li>- Activity 15</li> </ul>	16
6.	Apply HSE practices in a training/assessment environment	<p><b>Pc10 – PC16</b></p> <p><b>SESSIONS ON WORK ETHICS (3hrs)</b></p> <p><b>Perfection towards conducting Vedic Maths Session (11 hrs)</b></p> <ul style="list-style-type: none"> <li>✓ MULTIPLICATION WHERE ANY OF THE NUMBERS IS BELOW OR ABOVE BASE</li> <li>✓ IF THE SUM UNITS DIGIT IS 10 AND REST PLACE NUMBER IS SAME</li> <li>✓ IF THE SUM TENS DIGIT IS 10 AND ONE'S PLACE NUMBER IS SAME</li> <li>✓ MULTIPLICATION BY 9</li> <li>✓ MULTIPLICATION OF NUMBERS ENDING WITH 9</li> </ul>	16

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MEP/N0102: Maintain and enhance professional practice and technical competency			
	Elements	Pcs	Total Marks
1.	Model high standards of performance	<p><b>PC1.- PC4.</b></p> <p><b>PROFESSIONAL TRAINING AND CLIENT ENGAGEMENT (2hrs)</b></p> <ul style="list-style-type: none"> <li>- Vision and Mission of IIVA</li> <li>- IIVA's goal and objectives</li> <li>- Codes of Conduct of IIVA</li> <li>- Creation of learning environment of IIVA centre</li> <li>- Client-based projects</li> </ul> <p><b>IIVA STANDARDS OF PROFESSIONAL PRACTICE: (3hrs)</b></p> <ol style="list-style-type: none"> <li>1. Practice Standards</li> <li>2. Code of Professional Responsibility</li> </ol> <p><b>STANDARDS OF TECHNICAL PRACTICE – VEDIC MATHS (16 hrs)</b></p> <ul style="list-style-type: none"> <li>✓ EXTERIOR &amp; INTERIOR ANGLES</li> <li>✓ RATIO &amp; PROPORTION</li> <li>✓ MULTIPLICATION BY 6</li> <li>✓ VALUE OF EXPRESIONS</li> <li>✓ ALGEBRAIC ADDITION</li> <li>✓ ALGEBRAIC SUBTRACTION</li> <li>✓ Multiplication (Algebraic expression 2D x 2D)</li> <li>✓ Multiplication (Algebraic expression 3D x 3D)</li> <li>✓ Division (Algebraic expression) Quadratic Polynomial/Cubic Polynomial BY LINEAR POLYNOMIAL WHERE COEFFICIENT OF X IS +1, -1</li> <li>✓ Division (Algebraic expression) Quadratic Polynomial/Cubic Polynomial BY LINEAR POLYNOMIAL WHERE COEFFICIENT IS MORE THAN 1</li> <li>✓ Division (Algebraic expression) Quadratic Polynomial/Cubic Polynomial QUADRATIC POLYNOMIAL WHERE COEFFICIENT OF X<sup>2</sup> IS +&amp; -1</li> <li>✓ Division (Algebraic expression) Quadratic Polynomial/Cube Polynomial BY QUADRATIC POLYNOMIAL WHERE COEFFICIENT OF X<sup>2</sup> IS MOER THAN OR LESS THAN 1</li> <li>✓ SQUARES OF ALGEBRAIC EXPRESSION</li> <li>✓ SQUARES BASE METHOD</li> <li>✓ PROBABILITY OF 2 &amp; 3 DICE</li> <li>✓ FIND SUM OF SQUARES OF NATURAL NUMBERS</li> </ul> <p><b>Activities/Assignment (4hrs)</b></p> <ul style="list-style-type: none"> <li>- Activity 23</li> <li>- Activity 24</li> <li>- Activity 25</li> <li>- Activity 26</li> </ul>	25

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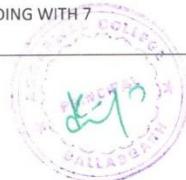
		<ul style="list-style-type: none"> <li>✓ PRODUCT OF NUMBERS ENDING WITH 5</li> <li>✓ SQUARES OF NUMBERS STARTING &amp; ENDING WITH 5</li> <li>✓ SQUARES BY DUPLEX METHOD</li> <li>✓ ADDITION OF SQUARES</li> <li>✓ SQUARE ROOTS OF PERFECT SQUARES</li> <li>✓ SQUARE ROOTS OF IMPERFECT SQUARES</li> </ul> <p><b>Activities/Assignment 2 hrs</b></p> <ul style="list-style-type: none"> <li>- Activity 16</li> <li>- Activity 17</li> </ul>	
6.	Apply HSE practices in a training/Assessment Environment	<p><b>PC17 – PC21</b></p> <p><b>HSE PRACTICE IN IIVA TRAINING (3hrs)</b></p> <ul style="list-style-type: none"> <li>- Detailed study of effective health and safety policies and procedures of IIVA training centre</li> <li>Monitoring &amp; ensuring necessary insurance</li> <li>Ensuring the organisation meets its contractual and other obligations, including employment contracts, premises agreements, funding contracts and equipment licences Regularly attending management committee meetings and working with other members</li> </ul> <p><b>Vedic Maths sessions: (8 hrs)</b></p> <ul style="list-style-type: none"> <li>✓ SQUARE ROOT OF DECIMAL</li> <li>✓ ADDITION &amp; SUBTRACTION OF SQUARE ROOT</li> <li>✓ SQUARE ROOT OF ALGEBRAIC EXPRESSION</li> <li>✓ FOURTH POWER OF 2 DIGIT NUMBER</li> <li>✓ FOURTH POWER</li> <li>✓ FIFTH POWER</li> <li>✓ VALUE OF ALGEBRAIC EXPRESSIONS</li> <li>✓ AVERAGE</li> </ul> <p><b>Activities/Assignment (5 hrs)</b></p> <ul style="list-style-type: none"> <li>- Activity 18</li> <li>- Activity 19</li> <li>- Activity 20</li> <li>- Activity 21</li> <li>- Activity 22</li> </ul>	16
		<b>Total</b>	<b>100</b>

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2.	Determine professional development needs and prepare development plan	<p><b>PC5-PC8</b></p> <p><b>DEVELOPMENT OF IIVA TRAINER (2 hrs)</b></p> <ul style="list-style-type: none"> <li>- Eligibility of IIVA Trainer</li> <li>- Adult Learning</li> <li>- Professional Development of IIVA Trainer</li> </ul> <p>a) Shared vision for planning, implementing, and evaluating training</p> <p>b) Purpose of the Study</p> <p>c) Methods – Survey</p> <p>Creation and Implementation of Evaluation and Quality Assurance System</p> <p><b>WHAT MAKES A TRAINER IN IIVA? (3hrs)</b></p> <ul style="list-style-type: none"> <li>- SWOT Analysis</li> <li>- 720° Evaluation</li> <li>- Career Graph Development</li> </ul> <p><b>DEVELOPMENT OF IIVA TRAINER ON VEDIC MATHS MODULE (15 hrs)</b></p> <ul style="list-style-type: none"> <li>✓ FIND SUM OF CUBES OF NATURAL NUMBERS</li> <li>✓ FIND SUM OF SQUARES OF EVEN NUMBERS</li> <li>✓ FIND SUM OF SQUARES OF ODD NUMBERS</li> <li>✓ FIND THE NUMBER OF DIVISORS</li> <li>✓ ADDITION OF TIME</li> <li>✓ Divisibility by 2, 3,4,5,6,7,8,9</li> <li>✓ Divisibility by 11,12,13,14,15 and other divisors</li> <li>✓ Approximations</li> <li>✓ Calender Technique</li> <li>✓ PERCENTAGE</li> <li>✓ FIND 0.5 %</li> <li>✓ Addition (Fraction)</li> <li>✓ Subtraction (Fraction)</li> <li>✓ SIMPLE EQUATION</li> <li>✓ MULTIPLICATION &amp; DIVISION 5, 50 &amp; 500</li> </ul> <p><b>Activities/Assignment (5hrs)</b></p> <ul style="list-style-type: none"> <li>- Activity 27</li> <li>- Activity 28</li> <li>- Activity 29</li> <li>- Activity 30</li> <li>- Activity 31</li> </ul>	25
3.	Participate in professional development & up skilling activities	<p><b>PC 9-PC11</b></p> <p><b>IIVA COMPETENCY TRAINING FOR TRAINERS (1 hr)</b></p> <p><b>PROFESSIONAL DEVELOPMENT AND UP-SKILLING OF IIVA TRAINER IN VEDIC MATHS (20 hrs)</b></p> <ul style="list-style-type: none"> <li>✓ CHECK FOR DETERMINING PRIME NUMBERS</li> <li>✓ FINDING UNITS DIGITS IN EXPONENTS</li> <li>✓ COORDINATE GEOMETRY</li> <li>✓ TIME &amp; WORK</li> <li>✓ FACTORIZATION OF CUBIC POLYNOMIALS</li> <li>✓ MIXTURES &amp; ALLEGATIONS</li> <li>✓ MAGIC SQUARES OF ODD &amp; EVEN NUMBERS</li> <li>✓ PROFIT &amp; LOSS</li> <li>✓ AUXILIARY FRACTION- NO.ENDING WITH 9</li> <li>✓ AUXILIARY FRACTION- NO.ENDING WITH 8</li> <li>✓ AUXILIARY FRACTION- NO.ENDING WITH 7</li> </ul>	25

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		<ul style="list-style-type: none"> <li>✓ AUXILIARY FRACTION- NO.ENDING WITH 6</li> <li>✓ AUXILIARY FRACTION- NO.ENDING WITH 1</li> <li>✓ MULTIPLICATION ( 3 ROWS GENERAL METHOD)</li> <li>✓ MULTIPLICATION ( 3 ROWS BASE METHOD)</li> <li>✓ CUBES</li> <li>✓ CUBE ROOTS</li> <li>✓ CUBE ROOT OF IMPERFECT CUBES</li> <li>✓ CONVERSION OF KILOMETERS INTO MILES &amp; KM/HR INTO M/SEC</li> <li>✓ DIVISION BY 9 &amp; 8</li> </ul> <p><b>Activities/Assignment (4hrs)</b></p> <ul style="list-style-type: none"> <li>- Activity 32</li> <li>- Activity 33</li> <li>- Activity 34</li> <li>- Activity 35</li> </ul>	
4.	Reflect on and evaluate professional practice	<p><b>PC12-PC13</b></p> <p><b>IIVA PROFESSIONAL PRACTICE OF VEDIC MATHS (10hrs)</b></p> <ul style="list-style-type: none"> <li>✓ DIVISION BY 11 &amp; 12</li> <li>✓ DIVISION BY 99</li> <li>✓ DIVISION BY NUMBER ABOVE BASE 100</li> <li>✓ DIVISION BASE METHOD BELOW BASE</li> <li>✓ ANURUPYE SHUNYAMANYAT</li> <li>✓ LCM &amp; HCF OF FRACTIONS, PUTTING FRACTIONS IN ORDERS</li> <li>✓ FINDING NUMBER OF ZEROS</li> <li>✓ DIVISIBILITY BY 99, 999, 9999</li> <li>✓ DIVISIBILITY BY 199, 299.....999</li> <li>✓ DIVISIBILITY BY 101, 201, 301..... 901</li> </ul> <p><b>Activities/Assignment (4hrs)</b></p> <ul style="list-style-type: none"> <li>- Activity 36</li> <li>- Activity 37</li> <li>- Activity 38</li> <li>- Activity 39</li> </ul> <p><b>PC14.</b></p> <p><b>CONTINUOUS IMPROVEMENT PROCESS (CIP) OF IIVA (4 hrs.)</b></p> <ul style="list-style-type: none"> <li>-process of identifying the key areas of improvement</li> <li>- flow charts</li> <li>- Causes and effect diagram</li> <li>- Control charts</li> </ul> <p><b>TRAINING ON QUALITY STANDARDS (5 hrs)</b></p> <p><b>FINAL LEVEL OF VEDIC MATHS TRAINING (2 hrs)</b></p> <ul style="list-style-type: none"> <li>✓ TIME AND DISTANCE</li> <li>✓ COMPOUND INTEREST</li> </ul>	25
		<b>Total</b>	<b>100</b>

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MEP/N0103: Deliver competency based training			
	Elements	Pcs	Total Marks
1.	Organise and check Training facilities and aids	<p><b>PC1</b>  <b>LOGISTICS ARRANGEMENTS FOR TRAINING:</b></p> <ol style="list-style-type: none"> <li>Pre training checklist</li> <li>Joining instructions</li> <li>Training materials prepared</li> <li>Trainer materials (OHTs, CD-Roms, etc.) handouts, etc., training room &amp; break rooms arrangements</li> </ol> <p>Comfort: temperature, air conditioning, light,</p> <ol style="list-style-type: none"> <li>acoustics</li> <li>Food &amp; refreshments</li> <li>Equipment: <ul style="list-style-type: none"> <li>Seating arrangements</li> <li>Training equipment <ul style="list-style-type: none"> <li>✓ Video, screen</li> <li>✓ Flipchart and pens</li> <li>✓ Overhead projector</li> <li>✓ Computer equipment</li> </ul> </li> </ul> </li> <li>Participant's materials organized: Handouts, etc.</li> <li>Computer ready (if using slides), OHP and OHTs ready</li> <li>Maintenance of Hygiene factors: <ul style="list-style-type: none"> <li>White board with non toxic markers</li> <li>Poster paper (either with a stand or with a sticky back) and non toxic markers SET UP Before Training</li> <li>Ensure binders have appropriate participant materials for this session</li> <li>Room Prep: <ul style="list-style-type: none"> <li>✓ Arrange tables and chairs in a U-shape so that everyone can see one another as well as the white board</li> </ul> </li> </ul> </li> </ol> <p><b>PC2</b>  <b>HEALTH AND SAFETY CHECKLIST FOR TRAINING ROOMS TO CARRY OUT A RISK ASSESSMENT OF THE LEARNING ENVIRONMENT:</b></p> <ol style="list-style-type: none"> <li>Movement around the classroom (slips and trips)</li> <li>Work at height (falls)</li> <li>Furniture and fixtures</li> <li>Manual handling</li> <li>Computers and similar equipment</li> <li>Electrical equipment and services</li> <li>Fire</li> <li>Workplace (ventilation and heating)</li> </ol>	20
2.	Conduct Training Session	<p><b>PC3 – PC10</b>  <b>TRAINING &amp; ASSESSMENT SYSTEM</b></p> <p><b>Needs of teacher trainer</b></p> <ol style="list-style-type: none"> <li>Understanding comparative educational systems</li> <li>The education system</li> <li>The teacher training system</li> <li>Needs assessment</li> <li>Adult learning</li> <li>Andragogy vs. pedagogy</li> <li>Personal learning styles</li> <li>Motivation</li> <li>Considerations in designing a training program</li> <li>Defining program goals and objectives</li> <li>Selecting topic areas</li> <li>Designing learning activities</li> </ol>	25

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		<p>13. Training rhythm and flow  14. Incorporating program evaluation  15. Analyzing training constraints  16. Training techniques :</p> <ul style="list-style-type: none"> <li>- Ice breaker</li> <li>- Brainstorming</li> <li>- Lectures</li> <li>- Demonstrations</li> <li>- Games/Simulations/Structured experiences:</li> <li>- Small groups</li> <li>- Role play</li> <li>- Fishbowl</li> <li>- Field trips</li> <li>- Interviews</li> <li>- Panels:</li> <li>- Case studies:</li> <li>- Critical incidents:</li> <li>- Peer training:</li> <li>- Attendance and record management system</li> </ul> <p><b>COMPUTER TRAINING OF IIVA TRAINER</b></p> <ul style="list-style-type: none"> <li>- Computers - An overview of computer and systems</li> <li>- MS Word</li> <li>- MS Excel</li> <li>- MS Power point</li> <li>- Internet</li> </ul>	
3.	<b>Undertake formative assessment</b>	<p><b>PC11-PC13</b>  <b>ASSESSMENT OF LEARNER'S LEARNING:</b>The need for evaluation; Guidelines for course evaluation; Course evaluation questionnaires; Trainer self-assessment questionnaire for use before the session; Trainer self-assessment questionnaire for use after the session</p> <ol style="list-style-type: none"> <li>1. Assessment techniques</li> <li>2. Choosing an assessment technique</li> <li>3. Testing</li> <li>4. Constructing a test</li> <li>5. Administering a test</li> <li>6. Scoring a test</li> <li>7. Analysing test results</li> <li>8. Implications for instruction</li> <li>9. Self-assessment</li> <li>10. Reviewing the educational process</li> <li>11. Classroom observation/critiquing</li> <li>12. Team teaching</li> <li>13. Collaboration skills</li> <li>14. Organization</li> <li>15. Communication Skills</li> <li>16. Feedback/critiquing</li> <li>17. Working in groups</li> </ol>	20
4	<b>Collect and review learner feedback</b>	<p><b>PC14 – PC18:</b>  <b>DEVELOPMENT OF COURSE EVALUATION QUESTIONNAIRES</b></p> <ol style="list-style-type: none"> <li>1. Preparation of trainer self-assessment questionnaire for use before &amp; after the session</li> <li>2. Preparation of course evaluation/reaction questionnaire</li> <li>3. Meaning of questionnaire, outcome evaluation, questionnaire analysis, etc.</li> <li>4. Development of feedback form</li> </ol> <p>Training session on filling of document (soft and hard copy) as per the IIVA norms of learner confidentiality policy</p>	20

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5.	Undertake post-training activities	<b>PC19-PC21</b> <b>POST TRAINING ACTION PLAN</b> 1. Preparation of checklist of verification of training room equipments 2. Good Bye gestures 3. Explanation of Performance expectations to learners 4. Winding up of Training Material 5. Development of testimonial form 6. Deciding technology for support facilities	15
<b>Total</b>			<b>100</b>

**MEP/N0104: Support and Coach learners**

	Elements	Pcs	Total Marks
1.	Identify needs of learners	<b>PC1-PC6</b> <b>IIVA TRAINING EVALUATION SESSIONS FOR LEARNERS: (7 hrs)</b> - Kirkpatrick Model of evaluation of training effectiveness - Activity on Kirkpatrick's Four-Level Training Evaluation Model - <b>Visual Confirmation</b> - <b>Social Ownership</b> - <b>Skill Assessments</b> - Formation of IIVA Training Evaluation Form 1. Self 2. Learners - Formation of IIVA Trainer's/Facilitator's Manual <b>TECHNICAL SESSION ON ENTREPRENEURSHIP (7 hrs):</b> 1. Who is an Entrepreneur? - Aspects - Meaning - Definition - Concept - Wage Employment & Entrepreneurship - Types - Characteristics - Functions 2. Who can become an Entrepreneur? - Why become an Entrepreneur? 3. What are the Qualities required to become an Entrepreneur? - How to become an Entrepreneur? 4. Entrepreneurship - Meaning - Definition - Concept - Characteristics - Five Core Elements of Entrepreneurship 5. Entrepreneurship in India : Journey since Independence - Vision for 2020 6. Indian Government in fostering Entrepreneurship - Initiatives & Schemes 7. Role of Ministry of Skill Development And Entrepreneurship 8. Abacus & Entrepreneurship 9. How to become an Entrepreneur by learning Abacus? <b>ACTIVITY 1: Level Testing on Training Skills (6hrs)</b> 1. Assessment of Training Skills: - Assessment I - Assessment II <b>ACTIVITY 2: Level Testing on Abacus Skills (5hrs)</b> - Evaluation Test I - Evaluation Test II - Evaluation Test III - Evaluation Test IV - Evaluation Test V	25

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5.	Undertake post-training activities	<b>PC19-PC21</b> <b>POST TRAINING ACTION PLAN</b> 1. Preparation of checklist of verification of training room equipments 2. Good Bye gestures 3. Explanation of Performance expectations to learners 4. Winding up of Training Material 5. Development of testimonial form 6. Deciding technology for support facilities	15
<b>Total</b>			<b>100</b>

**MEP/N0104: Support and Coach learners**

	Elements	Pcs	Total Marks
1.	Identify needs of learners	<b>PC1-PC6</b> <b>IIVA TRAINING EVALUATION SESSIONS FOR LEARNERS: (7 hrs)</b> - Kirkpatrick Model of evaluation of training effectiveness - Activity on Kirkpatrick's Four-Level Training Evaluation Model - <b>Visual Confirmation</b> - <b>Social Ownership</b> - <b>Skill Assessments</b> - Formation of IIVA Training Evaluation Form 1. Self 2. Learners - Formation of IIVA Trainer's/Facilitator's Manual <b>TECHNICAL SESSION ON ENTREPRENEURSHIP (7 hrs):</b> 1. Who is an Entrepreneur? - Aspects - Meaning - Definition - Concept - Wage Employment & Entrepreneurship - Types - Characteristics - Functions 2. Who can become an Entrepreneur? - Why become an Entrepreneur? 3. What are the Qualities required to become an Entrepreneur? - How to become an Entrepreneur? 4. Entrepreneurship - Meaning - Definition - Concept - Characteristics - Five Core Elements of Entrepreneurship 5. Entrepreneurship in India : Journey since Independence - Vision for 2020 6. Indian Government in fostering Entrepreneurship - Initiatives & Schemes 7. Role of Ministry of Skill Development And Entrepreneurship 8. Abacus & Entrepreneurship 9. How to become an Entrepreneur by learning Abacus? <b>ACTIVITY 1: Level Testing on Training Skills (6hrs)</b> 1. Assessment of Training Skills: - Assessment I - Assessment II <b>ACTIVITY 2: Level Testing on Abacus Skills (5hrs)</b> - Evaluation Test I - Evaluation Test II - Evaluation Test III - Evaluation Test IV - Evaluation Test V	25

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**General Terms & Conditions**

- FIRST PARTY hereby offers this course to SECOND PARTY for the benefit of students only, there is no other intention behind this project.
- FIRST PARTY commits to provide best in class education and services
- FIRST PARTY will send MASTER TRAINER to deliver these courses in the college premises only at the stipulated time allotted by the college management.

NOTE: Both the parties are bound to maintain the quality in service and education. On the grounds of working, no compromises shall be dealt on any part. Both the parties have agreed to adhere to the services and mutual understanding till the entire tenure of the contract.

For  
IIVA- Indian Institute of Vedic math and Abacus  
(Registered under R.P. Skill and Education Development Trust)

For  
Aggarwal College Ballabgarh, Tigaon Road,  
Faridabad

SIGNED AND DELIVERED BY:

*for*  
*Nalim* 05/09/2018  
Name: Mr Puneet Ahuja

Designation: Director

Date: 05/09/2018

SIGNED AND DELIVERED BY:

*Krishna Kant* 05/09/2018  
Name: Dr. Krishna Kant  
PRINCIPAL  
AGGARWAL COLLEGE  
BALLABGARH (FBD)

Designation: Principal

Date: 05/09/2018