# Sri – Om
# VEDIC MATHEMATICS AWARENESS YEAR

*'Credit goes to Swami Bharti Krshna Tirtha Ji Maharaj to focus the attention of present generation about the values of Ganita Sutras (mental Mathematics Sutras)'*

*All are invited to join Awareness program*

*All are warmly invited to join the awareness program of Vedic Mathematics. All teachers, parents and students are invited to Learn and Teach Vedic Mathematics for proper intelligence growth at School.*

Dr. S. K. Kapoor
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## ISSUE NO 77

## Vedic mathematics, Science & Technology
## UNIVERSITY CONCEPT

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### XII   21 Branches of Rigved Samhita
**[(Source Theme)    Organization format of Sakala Rigved Samhita**

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### XIII
### Features of organization of 64 chapters of Rigved Samhita
**[(Source Theme)    64 sub sub cubes of 8 sub cubes of cube**

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### XIV  Shastra Shirsha (one thousand heads)
**[(Source Theme)    One thousand branches of Samved**

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### XV   Format of Single wholesome Ved
**[(Source Theme)    Wisdom is Yajna based**

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### XVI        28 Vyas (Diameters)
**[(Source Theme)    Ved Vyas (Diameter of Vedic sphere)**

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### XVII        Chandgoupnishad छान्दोगयोपनिषद्
**[(Source Theme)    Essence of first principles of Vedic Systems are preserved in Upnishadic text**

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1. Chandgoupnishad preserves many principles of Vedic Systems for chase of Vedas wisdom on rays of Sun.

2. Chapter – 3 of Chandgoupnishad in particular preserves the principles of chase of Adityas (अदित्य) (suns) as (Madhu (मधु)..

3. Here it would be relevant to mention that the knowledge of Devnagri script would be of great help to have proper chase of this system as the translation of the technical terms / formulations and processes thereof would be sacrificing some essence and simultaneously it would be becoming a strenuous exercise.

4. Illustratively the formulation Madhu (मधु) on its simple English rendering would mean 'honey'.

5. The formulation (मधु) is a composition of four letters (i) 'म' (ii) 'अ' (iii) 'ध' (iv) 'उ'.

6. As per transcendental (5-space) code values this quadruple letters set up shall be taking us to quadruple artifices values (9, 1, 7, 3).

7. The summation value $9 + 1 + 7 + 3 = 20$ is parallel to TCV (वेद) = TCV (देव).

8. Artifice 9 here in the context of letter 'म्' is parallel to value 9 of the range of 9 geometries of 4-space / 9 versions of hyper cube 4.

9. TCV value 7 as such is parallel to value of the range of 7 geometries of 3-space / 7 versions of hyper cube 3.

10. Also there is a coordination of artifices pair (9, 7) parallel to domain fold.

11. Further the artifices pair (1, 3) is also parallel to format of (dimension fold, domain fold).

12. Here it also would be relevant to note that quadruple artifices (9, 7, 3, 1) is of the format of Divya Ganga flow.

13. Further it also would be relevant to note that 3-space plays the role of dimension of 5-space.

14. Still further it also would be relevant to note that 5-space plays the role of origin of 4-space.

15. Still further it also would be relevant to note that artifice 5 / 5-space as $5^{th}$ fold is the base fold / base of origin fold.

16. 4-space is a spatial dimensional order space.

17. As such the Mathematics of '2 as 1' and '1 as 2' comes into play.

18. Still further transcendental (5-space) domain is of synthetic value of synthesis of a pair of solid dimension / 5 = (3, 3).

19. The formulation 'मधु' as 'म् अ ध् उ' shall be of format and features of solid order being fountained into 4-space from the transcendental (5-space) base of origin at the middle / center of hyper cube 4.

20. One may have a pause here and take note that the artifice 3 is also parallel to the format and features of third basic element (महाभूत) i.e. Agni (अग्नि).

21. Further it also would be relevant to note that 'Agni' अग्नि is the Devta, of the first mantra of Rigved Samhita.

22. Madhu-c-chanda (मधु च छंदः) is the rishi of the first mantra of Rigved samhita.

23. This being so, the comprehension and appreciation of the quadruple formulations (ऋक, यजु, साम, अथर्व) Rik, Yaju, Sama and Atharav with TCV values quadruple (5, 11, 15, 17) and another quadruple formulations (ऋषि, देवता, छंद, स्वर) Rishi, Devta, Chand and Swar with transcendental (5-space) values quadruple (12, 26, 19, 15) deserve to be chased first for chase of Rigved richas (ऋचा).

24. One may have a pause here and take note that artifices quadruple (5, 11, 15, 17) leads to the gaps values triple (6, 4, 2).

25. One may further have a pause here and take note that this triple values set (ऋ, ष, इ) (6, 4, 2) is first the parallel tool TCV values triple of triple letters of formulation 'ऋषि'.

26. Secondly the triple artifices (6, 4, 2) is also parallel to triple half dimension set up of three dimensional frame, two dimensional frame and one dimensional frame respectively being of 3, 2, 1 full dimension respectively leading to 6, 4, 2 (half dimensions respectively).

27. It as such would help us chase quadruple artifices (5, 5 + 6, 5 + 6 + 4, 5 +6 +4 +2) along the format of 5 geometries range of 2-space followed by six half dimensions of 3-space, 4 half dimensions of 2-space and two dimensional of 1 space respectively

28. The other quadruple artifices (12, 26, 19, 15) as well deserve chased along the parallel formats of 12 components of transcendental (5-space) boundary of 6-space, four fold manifestation layers (5, 5, 7, 8) of hyper cube 7 being of the summation value (5, 6, 7, 8) formulation (कृष्ण) with TCV value 19 for incarnation of Lord Vishnu and formulation (राम) with TCV value 15 for incarnation value of Lord Vishnu.

29. This all is being to mention just to impress upon the need for chase of Sanskrit formulation in its Devnagri alphabet itself.

30. To have smooth and complete comprehension of virtues, values, features, format and order of these formulations.

31. This as such also would be bringing to focus as that every Vedic formulation, as is in the case of 'मधु', has a very big range of features and values and as such these shall be chased with equal patience and understanding.

32. In this light, It can be impressed upon that there is a need for VMS & T University. Also there is a need for introducing Ancient Wisdom at school level.

33. And this also brings to focus the need for undertaking the projects of Text Book Settlement for the Ancient Wisdom of Vedic mathematics, Science & Technology                                                                                    *

**05-01-2015**                                                                 Dr. S. K. Kapoor, *(Ved Ratan)*

*VMS & T Project*
*School Text Books*
*(Class IX, X, XI & XII)*
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*VMS & T Text Book Class XII*
*(6-space)*

*VMS & T Text Book Class XII*
*(6-space)*

Chapter – 4
Hexagon

1.  Regular hexagon is of six equal sides and equal external angle, as well as equal internal angles.
2.  One basic feature of this hexagon is that from each corner point of the hexagon is the end point of three internal diagonals.
3.  All the internal diagonals of hexagon construct internal hexagon.
4.  The feature of this internal hexagon is that six of the internal diagonals of the original (external hexagon) meet at the center of the internal hexagon and thereby make it a sealed point of the internal hexagon.
5.  To have comparative appreciation of these features of hexagon with features of regular pentagon, one may be observing as that the internal pentagon is not having a sealed center as that the internal diagonals of original pentagon (external pentagon) are not crossing insight the internal pentagon.
6.  With it, it can be concluded as that regular pentagon leads to internal pentagon and that way the process is ad-infinitum in steps.
7.  Further as that the internal pentagons are not having sealed centers.
8.  However in case of regular hexagon there emerges internal regular hexagon and the process is of ad-infinitum steps but here the centers of internal hexagons are sealed because of the diagonals of external hexagon passing through the center and crossing each other.
9.  Now if the features of triangle (as polygon – 3) and square as polygon – 4 are taken up for their features, it would prominently come to focus as that triangle not having any internal diagonal and as such its center is not sealed.
10. However, in case of square as well there is no internal square but the center of the start with square itself is of sealed format as that the internal diagonals pass through and cross at the center of the square.
11. With it triangle (polygon-3) and pentagon (polygon -5) constitute a class / group with non sealed centers.
12. On the other hand square and hexagon (polygon-6) constitute a distinct class / group having the common feature as that there centers are of sealed features.
13. One may have a pause here and take note that 'pentagon' polygon 5 is of unique features of having ad-infinite internal pentagons of non sealed centers.

14. This as such, makes polygon 5 a class in itself.
15. Further one may have a pause here and take note that triangle (polygon 3) has zero number of internal diagonals, square (polygon 4) is having a single internal diagonal from its corner points, polygon 5 is having a pair of internal diagonals from each corner points, hexagon is having triple internal diagonals from each of its corner points, and so on leading to a sequential range of internal diagonals from corners of polygons 3 onwards being (0, 1, 2, 3, 4, ---).
16. One may further have a pause here and take note that
    (i)     triangle (polygon 3, square (polygon 4, pentagon (polygon 5), hexagon (polygon 6) and so on lead to total angles (sum of internal and external angles) and internal angles parallel to (3, 1);
    (ii)    Square (polygon 3, square (polygon 4, pentagon (polygon 5), hexagon (polygon 6) and so on lead to total angles (sum of internal and external angles) and internal angles parallel to (4, 2);
    (iii)   Pentagon (polygon 3, square (polygon 4, pentagon (polygon 5), hexagon (polygon 6) and so on lead to total angles (sum of internal and external angles) and internal angles parallel to (5, 3);
    (iv)    Hexagon (polygon 3, square (polygon 4, pentagon (polygon 5), hexagon (polygon 6) and so on lead to total angles (sum of internal and external angles) and internal angles parallel to (6, 4) and so on.
    (v)     The above sequence of paired values: (3, 1), (4, 2), (5, 3), (6, 4) ---- is parallel to the sequence of formats of (1) 3-space as domain, 1-space as dimension (2) 4-space as domain, 2-space as dimension (3) 5-space as domain, 3-space as dimension (4) 6-space as domain, 4-space as dimension and so on.
17. One may further have a pause here and take note that the above sequential coordination of domain folds and dimension fold, shall be further leading to the formats of (domain fold, dimensional fold), dimension of dimension fold as under:
    i.      (5, 3, 1)
    ii.     (6, 4, 2)
    iii.    (7, 5, 3)
    iv.     (8, 6, 4) and so on.

18.    It shall further be leading to quadruple stages features as under:
    (i)     5, 3, 1, -1
    (ii)    6, 4, 2, 0
    (iii)   7, 5, 3, 1
    (iv)    8, 6, 4, 2 and so on.
19. One may have a pause here and take note that the quadruple phases stages state (5, 3, 1, -1) is of reversal features at fourth phase  (-1).
20. However in case quadruple phases stage (6, 4, 2,0) the fourth phase is of value (0)
21. It would be a very blissful exercise to have a fresh look at the features of polygon 5 and polygon 6 in reference to the above fourth phases stages namely (5, 3, 1, -1) and (6, 4, 2, 0).

22. In the context it would further be very blissful to chase transcendence Phenomenon from domain to dimension to dimension of dimension in the context of 5-space and 6-space set ups accepting transcendence triple values (5, 3, 1) and (6, 4, 2) respectively.

23. Further, it also would be very blissful to glimpse the fourth phase states in context of above transcendence Phenomenon of transcendental (5-space) domain and self referral (6-space) domain.

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**05-01-2015**                                           Dr. S. K. Kapoor, *(Ved Ratan)*

## Queries and Questions

A pair of following questions have been received from one of the participants.

1)    You claim that (1,2,3,8) is the transition from linear to spatial order. What is the reason for this?

2)    You then split (1,2,3,8) to (1*1,1*2,1*3) and (2*4). What permitted you to do that operation?

About above these questions, it has been shared as under:

## About first question

1. There are a very good range of features of quadruple artifices (1, 2, 3, 8), which help us appreciate the *Swateshwara upnishadic* verse, giving us reference of this quadruple of artifices (1, 2, 3, 8) for transition from 3-space linear order.

2. The **FIRST FEATURE** is which helps us transcends from $1^3$ to $2^3$ .

3. **SECOND FEATURE** is that cube ($1^3$) and parallel to it 3-space permits a split into 8 sub cubes / 8 octants.

4. **THIRD FEATURES** is that Vedic Systems accept external characteristics of Shad Chakras of human body being of the range (2, 4, 6, 8, 10, 12), which is parallel to pair of end points of an interval, 4 boundary lines of square, 6 surface plates of cube, 8 solid boundary components of 4-space 10 creative (4-space) components of boundary of boundary of transcendental (5-space) domain and 12 transcendental (5-space) components of self referral (6-space) domain.

5. **FOURTH FEATURE** is that the quadruple number (1, 2, 3, 4, 5, 6) as sequential ranges of steps of their reach as per the working rule of Ganita Sutra 1 lead us to : (1), (1, 2), (1, 2, 3), (1, 2, 3, 4), ---.
6. The range (1) gives a single set up 1 = 1.
7. The range (1, 2) gives a range of pair of steps of value 2 = 2 and 2 =1 +1.
8. The range (1, 3) gives a range of quadruple steps of value 3 as 3=3, 3=1 + 2, 3=2 +1 and 3=1 + 1 +1
9. A step ahead, the range (1, 4) gives a range of eights steps of value 4 as 4 = 4, 4 = 1 + 3, 4 = 3 + 1, 4 = 1 + 2 + 1, 4= 2+1+1, 4= 1+1+2, 4 and 4 = 1 + 1+ 1+ 1
10.     **FIFTH FEATURE** is that the total internal and external angles of triangle are $3\pi$ and sum of internal angles is $3\pi -1\pi=2\pi$ and it that way coordinates artifices pairs (3, 1).
11.     A step ahead that the total internal and external angles of square are $4\pi$ and sum of internal angles is $4\pi -2\pi=2\pi$ and it that way coordinates artifices pairs (4, 2).
12.     Like that, there are a large number of features, which would help us comprehend and appreciate as that 3-space is a linear dimensional space, while 4-space is a spatial order space.
13.     It leads to three dimensional frame being of three linear dimensions while 4-space being a set up of four spatial dimensions.
14.     Vedic literature preserves Vishwarupa being of three heads and six arms while the idol of Lord Brahma is of four heads and eight arms.
15.     **SIXTH FEATURE** is that the outermost orbit of electronic configuration of atom is having capacity of eight electrons.

## About second question

The second question is inherently having its answer as above of first question. It simply focuses upon the feature as that the first triple artifices (1, 2, 3) are of set up parallel to three linear dimensions of 3-space while a step ahead is the set up of 4-space, which is of a spatial order, further as that 4-space body / hyper cube 4 accepts a solid boundary of eight components.       *

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