Sri – Om
VEDIC MATHEMATICS AWARENESS YEAR

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‘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
Sh. Rakesh Bhatia
Sh. Bhim Sein Khanna
Sh. Deepak Girdhar
- Organizers

ISSUE NO 100

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VEDAS ARE WRITTEN ON RAYS OF SUN
Let us learn to read it

I
Shakala Rigved Samhita
FIRST RICHA

“अन्नमोले रुपोहितं यज्ञय देववृक्षोऽजमु ।
होतारं रत्नार्दत्तमु ।। "अस्त-9-9”

Recapitulation
Organization foundation format

Second learning step
Transition from creative (4-space) to transcendental (5-space) format
Third learning Step

![Hyper Cube 4, 5, 6 Formats]

Fourth learning step

Recapitulation

1. Let us recapitulate the first three learning steps. It would bring to focus the sequential organization of formats of hyper cube 4, 5 and 6.
2. These three formats (of hyper cube 4, 5 and 6) together are designated as the formats of Trimurti (parallel to Idols of Lord Brahma, Lord Shiv and Lord Vishnu) within creator’s space (4-space) along the manifestation format of Idol of Lord Brahma.
3. This way brings us face to face with the manifestation of spatial, solid and hyper solid 4 orders set ups of hyper cube 4, 5 and 6.
4. This sequential manifestation along the format of Idol of Lord Brahma essentially is an organization foundation format of four fold manifestation layer.
5. The domain folds of hyper cube 4, 5 and 6 are manifested contents lumps of 4, 5 and 6-space.
6. This feature of space content manifesting as domain fold enveloped within the boundary manifested by the previous space content, deserve to be comprehended well.
7. Rigved samhita is an organization of 432000 akshras syllables.
8. This organizational range, is of the format and features of sequential range of space contents of spaces 1 to 9 within respective dimensional frames.
9. This feature of space content manifesting domain fold within a dimensional frame and being enveloped within boundary frame and also having origin fold is the organization which deserve to be comprehended well.
10. The text of Rigved Samhita as an organization of 432000 akshras is availing alphabet format.
11. As such the basics of alphabet deserve to be learnt.

**Fourth learning step**

12. Fourth learning step focuses upon the basics of Devnagri alphabet being availed by the text of Rigved Samhita.
13. The alphabet format is inherently of format and features which sequentially unfold its different states.
14. Each letter of the alphabet is of the order of ‘creator’. As such each letter of the alphabet manifests availing the format of Idol of creator itself.
15. It is this feature which deserve to be learnt and to be comprehended fully.
16. With it, the chase of every letter of Devnagri alphabet is to be chased along the format of Idol of Lord Brahma (creator the Supreme).
17. This being so, the chase of the format and features of every alphabet letters is to be along the format and features of hyper cube 4.
18. One shall have a pause here and to revisit hyper cube 4.
19. Hyper cube 4 accepts 9 versions.
20. This 9 versions range of hyper cube 4 be taken as providing 9 steps long range for the format and features of 9 vowels range.
21. One shall further have a pause here and take note that 9 versions range of hyper cube 4 is parallel to 9 geometries of 4-space.
22. Of these 9 geometries, 5 geometries are of non-negative signatures.
23. It also would be relevant to note that numeral 5 is of middle placement of 9 numerals range (1, 2, 3, 4, 5, 6, 7, 8, 9) of ten place value system.
24. One may further have a pause here and take note that the organization of 9 geometries of 4-space also can be approached as a set up of five non positive geometries and 4 positive geometries.
25. This way 9 geometries range of 4-space as a pair of organizations, firstly as the set up of 5 non negative geometries and 4 negative geometries.
26. And secondly as a set of 5 non positive geometries and 4 positive geometries.
27. Further, it also would be relevant to note that the above pair of organizations, shall be providing a utilized state at the middle of the range of 9 geometries. With it the 9 geometries range may be taken as of the feature as that it permits bend at the middle, because of which the linear sequential order of steps 1 to 9 would permit transition into spatial 5 x 5 format.
28. One may have a pause here and take note that 8 solid boundary components of hyper cube 4 can be classified as a pair of sets of four solid boundary components each.

29. This feature of splitting of solid geometry of hyper cube 4 into a pair of halves (boundaries) of 4 components each, would be parallel to the availability of 4 negative signature geometries and 4 positive signature geometries, make the pair of half boundaries as of the format of negative and positive orientation.

30. With it, the 5 x 5 varga consonants of Devnagri alphabet would acquire 4-space formats, which may be expressed as:

(-4, +4), (-4 +3), (-4 +2), (-4 +1), (-4, +0)
(-3, +4), (-3 +3), (-3 +2), (-3 +1), (-3, +0)
(-2, +4), (-2 +3), (-2 +2), (-2 +1), (-2, +0)
(-1, +4), (-1 +3), (-1 +2), (-1 +1), (-1, +0)
(-0, +4), (-0 +3), (-0 +2), (-0 +1), (-0, +0)

31. The above 5 x 5 = 25 varga consonants can be symbolically expressed along the format of hyper cube 4 as under:

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32. One may further have a pause here and take note that 5 x 5 five grid zone shall be leading to 4 x 4 grid zones of the format of coordination of the centers of 5 x 5 grid zones.

33. Further it also would be relevant to note that 5-space plays the role of origin of 4-space.

34. This, as such shall be providing transcendence from 5 x 5 format to 4 x 4 format.

35. One may have a pause here and take note that transcendence for four fold manifestation layers set ups is attainable by transcendence at the origin folds.

36. This 16 streams of transcendence shall be providing formats for remaining 16 consonants of Devnagri alphabets.

37. Of these remaining 16 consonants (8 are yama letters and remaining 4 antstha letters and 4 ushmana letters).

38. Here it also would be relevant to note that artifice 16 permits re-organization as 16 = 5 + 6 + 5 parallel to 6-space playing the role of origin of 5-space.

39. The set of 25 varga consonants + 4 antstha letters and 4 ushmana letter together a set of 33 consonants constitute syllables (akshtras) conjointly with vowels
40. The chase of range of 432000 akhras syllables of Rigved Samhita shall be having at its center a syllables constituted by 33 consonants, in particular.

41. One have a pause here and take note that artifice 33 avails digit 3 at both placement of unit and next placement of ten place value system.

42. It is parallel to the split and placement of pair of 3 dimensional frame of half dimension of three dimensional frame of full dimensions, Here it also would be relevant to note that full expression within a three dimensional frame is along 10 direction flow for 3-space content.

to be continued….

* 02-02-2015, Dr. S. K. Kapoor, (Ved Ratan)

Ganita Sutras objective & short questions Tests and full comprehension tests

Test – 6

Source sutra specific

Ganita Sutra 1 is the source Sutras.

Ganita Sutra 1 text avails 16 letters in all

This manifestation of source Stura text as of 16 letters range is there due to the transcendental (5-space) source reservoir being availed is the sole syllable Om with TCV (знания) = 16.

The further split of 16 letters text of Ganita Sutra 1 as of a pair of words formulations of 9 and 7 letters respectively, as well is parallel to the TCV value of first components of Om formulation being 9 and TCV value of remaining components of om formulation being 7.

Here it also would be relevant to note that sole syllable Om accepts value 1 which is parallel to the 4⁰. Further the unfolding of sole syllable Om as of four components takes us to the value 4 which is equal to 4¹.

Still further the TCV value (знания) = 4² leads us to sequential unfolding as (4⁰, 4¹, 4²) which settles the working rule of Ganita Sutra 1 as ‘one more than before’
One may have a pause here and take note that the working rule of ‘one more than before’ as such is holding in its generality, and the same is not restricted to only base or index.

One may further have a pause here and take note that the organization of sequential four fold values ranges along 4 x 4 format, as below shall be leading us to the total summation value $64 = 4^3$

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<td>4</td>
<td>5=14</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6=18</td>
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<tr>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7=22</td>
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Grand total $10 + 14 + 18 + 22=64$

Here under are being focused upon different unfolding and applications of the working rule of Ganita Sutra 1 and one shall express one’s appreciation and evaluation of these features of values of Ganita Sutra 1.

**Feature 1**

Ganita Sutra 1 leads to sequential values (1, 2, 3, 4, ---)

This is parallel to pushed once, pushed twice, pushed thrice, pushed four times, ---.

**Feature 2**

The values sequence (1, 2, 3, 4, ----).

As $(1, 1+1, 1+1 + 1, 1+1 + 1 + 1, ---)$

Shall be taking every push being of same value (1).

However if sequential push is to be of values ‘1, 2, 3, 4, ----’

Then the first single push would be of value ‘1’.

Twice pushed value would be $1 + 2 = 3$.

Pushed triple would be of value $1+ 2 + 3 = 6$

Pushed four times would lead to value $1 + 2 + 3 + 4 =10$

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**Feature 3**

Summation value of quadruple artifices (1, 2, 3, 4) comes to be 10
Summation value of quadruple artifices (2, 3, 4, 5) comes to be 14
Summation value of quadruple artifices (3, 4, 5, 6) comes to be 18
Summation value of quadruple artifices (4, 5, 6, 7) comes to be 22

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**Feature 4**

Summation value of quadruple artifices (1, 3, 6, 10) comes to be 20
Summation value of quadruple artifices (3, 6, 10, 15) comes to be 34
Summation value of quadruple artifices (6, 10, 15, 21) comes to be 52

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**Feature 5**

The reach of feature 3 is of values range (10, 14, 18, 22, 26, ----)
The reach of feature 4 is of values range (10, 20, 34, 52, 76, ----)
The combined super imposed and synthetic reach comes to be

10, 10, 20, 14, 34, 18, 52, 22, 26, 76, ----

It may be punctuated as (10 + 10 = 20), (20 + 14 = 34), (34 + 18 = 52), (52 + 24 = 76), - ----

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Diagram:

- Hypercube 3: \((1, 2, 3, 4) = 10\)
- Hypercube 4: \((2, 3, 4, 5) = 14\)
- Hypercube 5: \((3, 4, 5, 6) = 18\)
- Hypercube 6: \((4, 5, 6, 7) = 22\)
- \((0, 1, 3, 6) = 10\)
- \((1, 3, 6, 10) = 20\)
- \((3, 6, 10, 15) = 34\)
- \((6, 10, 15, 21) = 52\)
Feature 6

1. The sequential range (1, 2, 3, 4, 5, 6, ---)
2. This sequential range leads to the sequential range (2^0, 2^1, 2^2, 2^3, 2^4, ---).
   As that
   (i) 1 = 1 is the only arrangement for ‘1’
   (ii) 2 = 2 and 2 = 1 + 1 are 2^1 arrangement for ‘2’
   (iii) 3 = 3, 3 = 1 + 2, 3 = 2 + 1, 3 = 1 + 1 + 1 are 2^2 arrangements for ‘3’
   (iv) 4 = 4, ---- 4 = 1 + 1 + 1 +1 are 2^3 arrangements for ‘4’

3. The n x n formats are of the following features
   1, 2 total value 3
   2, 3 total value 5 grand total value 8 = 2^3

4. The n x n formats are of the following features
   2^0, 2^1 total value 3
   2^1, 2^2 total value 6 grand total value 9 = 3^2

5. The n x n formats are of the following features
   1, 2, 3 total value 6
   2, 3, 4 total value 9
   3, 4, 5 total value 12 grand total value 27 = 3^3

6. The n x n formats are of the following features
   2^0, 2^1, 2^2 total value 7
   2^1, 2^2, 2^3 total value 14
   2^2, 2^3, 2^4 total value 28 grand total value 49 = 7^2

7. The above pair of n x n values arrangements lead to sequential ranges of values
   (2^3, 3^3, 4^3, 5^3, 6^3, 7^3, ---)
   (3^2, 7^2, 15^2, 31^2, 63^2, 127^2, ---)

Note

The above features be visited and re-visited to comprehend as a reach of the pure and applied values of working rule of Ganita Sutra 1 (together with values of ganita Upsutra1). One shall evaluate one’s comprehension of values of Ganita Sutra 1 as the source sutra availing transcendental (5-space) source reservoir sole syllable Om.

* 02-02-2015

Dr. S. K. Kapoor, (Ved Ratan)