## Vedic Mathematics, Science & Technology FOUNDATION COURSE

Index

Opening words : VMST Foundation course

Section – 1 Installation of Shiv Lingum within creator's space

Week – 01 Preliminary chase steps (01-04-2014 to 07-04-2014)

- 1. Chase Step 01 Technical terms
- 2. Chase Step 02 Hyper cubes 0 to 6
- 3. Chase Step 03 Geometric ranges of 0 to 6 spaces

Week – 02 Real 4 and 5 spaces (08-04-2014 14-04-2014)

- 4. Chase step 04 Real 4-space
- 5. Chase step 05 Origin of 4-space
- 6. Chase step 06 Real 5-space

\_\_\_\_\_

Week – 02 Real 4 and 5 spaces Introductory

- 1. Course focus is upon foundation of the Discipline of Vedic mathematics, science technology.
- The focus of section 1 of the course is upon installation of Shiv Lingum in creator's space to lay foundation of the Discipline of Vedic Mathematics, Science and Technology (in short VMS & T).
- 3. First week focus is upon preliminary information upon 'foundation' regarding foundation of the format and features of 5-space as origin of 4-space.
- 4. Present week focus, as such is upon three fold aspects namely i. Real 4-space ii. Origin of 4-space and iii. Real 5-space as .

Chase step 04 Real 4-space Chase step 05 Origin of 4-space Chase step 06 Real 5-space

## Chase step 04 Real 4-space

- 1. Space in which we live is 4-space as here solids / 3-space bodies have a degree of freedom of motion.
- 2. As the existence phenomenon of us is a reality for us, as such the 4-space in which we exist is real 4-space.
- 3. Let us have a pause and comprehend, appreciate and to have an insight as that
  - i. Point as 0-space body moves and tracks a line / 1-space.
  - ii. Line as 1-space body moves and tracks surface of 2 space set up.
  - iii. Surface as 2-space body moves and tracks 3-space.
  - iv. Solids as 3-space body is move and track 4-space.
  - v. Let us further have a pause and to comprehend, appreciate and to have an insight as that (i) Line accepts a pair of end points / Pair of 0-space bodies (ii) Surface / square accepts 4 boundary lines / 1-space bodies (iii) Cube accepts six surface plates / 2-space bodies..
- 4. The pair of end points / 0-space bodies, four boundary lines / 1-space bodies and 6 surface plates with 2-space bodies, as first three terms of the sequence lead to 8 cubes / solids / 3-space bodies as the fourth member of the sequence.
- 5. One may have a pause here and comprehend, appreciate and to have an insight as that 1-space accepts 0-space as boundary, 2-space accepts 1-space as boundary and 3-space accepts 2-space as boundary and as such in this sequence, a step ahead 4-space is to accept 3-space as boundary.
- 6. 1-space / interval/ line accepts a pair of end points, 2-space / surface / square accept 4 boundary lines, 3-space / solid / cube accepts 6 surface plates and as such in that sequence, a step ahead 4-space / hyper solid 4 accepts solid boundary of 8 components.
- 7. One may have a pause here and chase the split of 3-space as 8 octants and parallel to it the split of cube as 8 sub cubes.
- 8. Further one shall further chase and comprehend, appreciate and to have an insight as that 8 sub cubes of the cube with their placements as these have, their inner corner points meet at the center.
- 9. One may further have a pause here and take note that center of the cube, as such is wrapped by eight sub cubes, which is parallel to the format and features of 4-space wrapped within solid boundary of eight components.
- 10.One may further have a pause here and take note that above format and features leads us to the following conclusions
  - i. Center of cube / origin of a 3 dimensional frame is a seat of 4-space
  - ii. The synthesis of 8 corner points of 8 sub cubes at center of the cube is a collapse of solid points at the hyper solid seat / center / origin of 3-space.

- iii. As a reverse process, the split of cube as 8 sub cubes is the unfolding of cube structures from the set of 8 solid points, otherwise after collapse having seat at the center as their center as well.
- 11.It would be a blissful exercise to locate real 4-space at center of cube origin of 3-space.
- 12.It further be a blissful exercise to chase 4-space as a porous space within which solid have a degree of freedom of motion.
- 13. The degree of freedom of motion for 12 edged cube within 4-space may be taken as manifestation of an additional, that is 13<sup>th</sup> edge for the cube along the available degree of freedom of motion for the solid within 4-space.
- 14.It would be a blissful exercise to approach 4-space (domain as of the format and features of 13 edged cube.
- 15.It would further be a blissful exercise to take note that as degree of freedom of motion for 3-space bodies within 4-space can be along any of the four dimension of 4-space as such 13 edged cube shall be swapping 4-space domain as a structural set up of  $13 \times 4 = 52$  components.
- 16.Further it also would be relevant to note that as the boundary of 4-space / hyper cube 4 is solid boundary of 8 components as such the fixation of 4-space / hyper cube 4 in terms of 13 edged cube shall be a fixation in terms of 13 x 8 = 104 coordinates.
- 17.Here it also would be relevant to note that 2-space plays the role of boundary of 3-space.
- 18.As such the motion of 3-space bodies in 4-space in a way would be of format and features of the degree of freedom of motion being of a spatial format (2-space format and features).
- 19.One may have a pause here and take note that, it is this feature of degree of freedom of motion which shall be making format of 13<sup>th</sup> edge of cube within 4-space being of a spatial format / of 2-space / surface features
- 20.It is this feature of 13<sup>th</sup> edge of cube within 4-space which deserves to be comprehended well and to be appreciated fully to have a deep insight for complete glimpse of the spatial dimensional order feature of 4-space.
- 21. This as such, in a way amounts to a transition and transformation from the set up of linear order 3-space / cube to spatial order hyper cube 4
- 22. With it shall be emerging as that 2-space plays the role of dimension of 4-space and 3-space plays the role of boundary of 4-space.
- 23.One may further have a pause here and take note that 4-space plays the role of origin of 3-space.
- 24.A step ahead, 5-space shall be playing the role of origin of 4-space.

\*

Chase step 05 Origin of 4-space

- 1. Let us have a fresh look at the set up of a cube
- 2. Cube is a representative regular body of 3-space as 3-space content manifest as domain fold of hyper cube 3 along the format of volume of 3-space

enveloped within its geometric envelope stitched as 26 structural components being a corner point, 12 edges and 6 surfaces

- 3. One may have a pause here and take note that cube and sphere are the pair of representative regular bodies of 3-space of hyper cube 3 / hyper sphere 3 formats
- 4. In respect of sphere, it is apparent that 3-space is wrapped within a 2-space set up.
- 5. However in case of cube regarding the role of 2-space as boundary of 3space, one is to further take note that points and lines being devoid of area, so the prominent role, that way remains to be of 2-space as boundary
- 6. One may further have a pause here and take note that spatial boundary (2-space as boundary) / surface plates while those will strip off, the same shall be structuring the outside 4-space.
- 7. Simultaneously it also would be relevant to note that 2-space / surfaces being devoid of volume so the wrapping of 3-space content lump within 2-space content lump is the feature which will help comprehend, appreciate and to have an insight of how each grain of solid of 3-space as domain shall be a wrapped within surfaces
- 8. One may further have a pause here and take note that it is this feature of center of the cube which deserves to be comprehended well and to be appreciated fully to have deep insight and complete glimpse of the phenomenon as that the center of cube / origin of 3-space is making the role of 2-space at center / origin being prominent in respect of center/ origin being a seat of 4-space
- 9. One may further have a pause here and take note that the split of 4-space as domain shall be unfolding the spatial boundary of solid grain wrapped at the seat of the center / origin of 3-space itself and thereby resulting a spatial order set up of 4-space domain and solid order set up for the origin of 4-space
- 10.One may further have a pause here and take note that linear order 3-space domain leads to spatial order origin and ahead spatial order 4-space leads to solid order origin of 4-space
- 11.It is this feature of origin of 3-space being the 4-space of spatial order and that the origin of 4-space being 5-space of solid order, which deserves to be comprehended well and to be appreciated fully to have deep insight for complete glimpse of the format and features of solid order 5-space playing the role of origin of 4-space.
- 12.One may have a pause here and permit the transcending mind to continuously remain in prolonged sitting of trans to glimpse this Transcendental phenomenon of Transcendental domains (5-space) as domain manifesting within 4-space as four fold manifestation layers with 3-space as dimension fold, 4-space as boundary fold, 5-space as domain fold and 6-space as origin fold.

- 1. Hyper cube 5 being the four fold manifestation layers (3, 4, 5, 6) / (3-space as dimension, 4-space as boundary, 5-space as domain, 6-space as origin) is a printout of the Transcendental domains within creator's space (4-space) of spatial order. For full expression of Transcendental domains, one is to transcend through the four fold manifestation format of hyper cube 5.
- 2. One may have a pause here and take note that scriptures preserves the enlightenment for us as that Lord Brahma, four head lord is the presiding deity of creator's space (4-space), the idol of Lord Brahma as well manifest itself within creator's space itself and the same being of a spatial order as such each of the four heads of lord Brahma is equipped with a pair of eyes.
- 3. Further as that Lord Brahma sits gracefully on a lotus seat of eight petals and meditates within cavity of his own heart, where is the seat of the ted` lord, Lord Shiv and lord Brahma multiplies as ten brahmas
- 4. One may have a pause here and take note that the above enlightenment is of the format and features of hyper cube 4 as much as that
  - i. Parallel to four heads of lord Brahma, 4-space has four dimensions
  - ii. Each head of lord Brahma is equipped with a pair of eyes, parallel to spatial dimensional order / 2-space playing the role of dimension of 4-space
  - iii. Parallel to eight petals of lotus seat of lord Brahma there is a solid boundary of eight components of hyper cube 4
  - iv. Parallel to Transcendental lord (5-space) Lord, having seat within cavity of heart of Lord Brahma, there is origin fold of hyper cube 4 being of the format and features of 5-space playing this role.
  - v. One may have a further pause here and permit the transcending mind to continuously remain in prolonged sitting of trans and be face to face with the phenomenon of Lord Brahma multiply ten fold as ten Brahmas, it would be blissful to note that hyper cube 5 accepts creative boundary (4-space in the role of boundary) of ten components.
  - vi. It is this feature of Transcendental domains that their boundary as well is of creative format and features.
  - vii. Not only that there are as many as ten creative boundary components available in respect of Transcendental domains (5-space domains) and that being so the creative phenomenon of manifestation format and features of 4-space are distinctively different than that of the creative phenomenon of Transcendental domains format and features.
  - viii. One may have a pause here and take note that the within 4-space, creations are of manifestation formats of four folds while the creations of Transcendental domains are of Transcendental features, as much as that here transcendence from the manifestation folds as well takes place

ix. One may have a pause here and take note that it is this feature of transcendence of solid order within spatial order creator's space which becomes the basic feature of the foundation of the Discipline of Vedic mathematics Science and Technology which deserves to be chased with full comprehension, complete appreciation and deep insight with full glimpse of the phenomenon.

## Blissful exercises

- 1. The focus of present course is to reach at foundation of the ancient disciplines systems of Vedic Mathematics, Science and Technology. The medium being availed here is of 'English' language. With it, the participants have to continuously remain conscious of the format and values of 'English language formulations' being availed for appreciation of 'Vedic systems' formulations composed in 'Sanskrit language'.
- 2. English alphabet avails 26 letters range 'A to Z', parallel to which is artifices range '1 to 26', which further is parallel to 26 chandas / meters range.
- 3. Chandas / meters is one of the Upanga / organization limb of Vedas. There are five other organization limb of Vedas (namely, Shiksha, Vyakaran, Nirukat, Jyotish and kalap). As such the English language formulations, that way would be having focused approach of chandas format and values.
- 4. Sanskrit alphabet of Devnagri script avails 9 vowels 25 varga consonants and 33 consonants (including 25 varga consonants) and 8 yama letters making it a range of 50 letters for the coverage of 'middle' and end to end coverage makes it a range of 52 letters which is precisely double of the range of English alphabet of 26 letters.
- 5. English language is a pairing language. NVF (English) = NVF (Point). This and that way shifts a focus from a single letter to a pair of letters.
- 6. This shift is of the features of shift from a 'letter' to a 'syllable'
- 7. NVF (letter) = 80 = NVF (Creator) and NVF (Syllable) = 88 = NVF (Volumme) = NVF (Space) + NVF (Space)
- 8. NVF (Void) = 50 = NVF (Area) + NVF (Area)
- 9. Here it would be relevant to note that in 3-space, surface has a pair of faces devoided of volume.
- 10.Here it also would be relevant to note that NVF (Devoided) = 68 = NVF (Joint) = NVF (One) + NVF (one).

- 11.Further NVF (Surface) = NVF (Two face).
- 12.Still further it also would be relevant to note that quadruple (1, 2, 3, 4) permits its extension without change in summation value as (0, 1, 2, 3, 4)
- 13.It would be relevant to note that quadruple (1, 2, 3, 4) is a four fold artifices range while (0, 1, 2, 3, 4) is a five fold artifices range.
- 14.Firstly, the summation value 10 = 1 + 2 + 3 + 4 as quadruple (1, 2, 3, 4) and parallel to it the four fold manifestation layers of format and values of dimension fold, boundary fold, domain fold, origin fold and secondly as five fold transcendence range (0, 1, 2, 3, 4) / (dimension fold, boundary fold, domain fold, origin fold, base fold) shall be helping us reach at two fold transition and transformation firstly from 0 to 4 and secondly from 4 to 0, and also as a split of transcendence range (0, 1, 2, 3, 4) into a pair of manifestation layers (0, 1, 2, 3, 4) and (1, 2, 3, 4) and that way we can reach at format and values of transition systems from the formulations of English language word compositions formulations to Sanskrit language word compositions.
- 15.For it, let us work with the following pair of codes
  - i. Number values formats code for A to Z letters as 1 to 26 in that sequence and order
  - ii. Transcendental code values for 50 Sanskrit alphabet letters being as under
    - i. 9 vowels as artifices range 1 to 9 in that sequence and order
    - ii. 25 varga consonants as of 5 x 5 matrix format accepting organization of artifices values as 5 consecutive five fold transcendence ranges as under

1	2	3	4	5
2	3	4	5	6
3	4	5	6	7
4	5	6	7	8
5	6	7	8	9

iii. Other 8 consonants as a pair of folds of values

3, 5, 7, 8

- 2, 3, 6, 9
- iv. 8 yama letters

9 10 11 12 13 14 15 16

16. The starting point, beginning value for Sanskrit alphabet is ॐ sole syllable Om which accept value 16 while the end point of the alphabet is प्रणवः Parnava of format and values तस्य वाचक प्रणवः / (Tasey Vachka

Parnava) / Thy name is Parnava / though are the synonym of Om / Sole syllable accepting Transcendental codes values 23 .

- 17. Along NVF (cage) = 16 and NVF (End) = 23
- 18. For better insight, the participants are advised that one may take another course on this website itself <u>www.vedicganita.org</u>., namely understanding mathematical basis of English language of orthodox and classical vocabulary.
- 19. Still further, it would be a blissful exercise that one shall start compiling Transcendental code values dictionary of Vedic mathematics, Science and Technology, for which the initiation may be as under :-

Sr.	Word	TCV	Roman script	
1	वेद	20	Ved	
2	देव	20	Dev	
3	ॠग्वेद	27	Rigved	
4				