# Vedic Mathematics, Science \& Technology Teacher Course 

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## HYPER CUBES SEQUENCE

This day the course focus is upon 'Hyper cubes sequence'. It four folds aspects being taken up are as follows:
45. Hyper cubes sequence
46. Extension of four fold format of creation into 5 and higher folds formats of creation
47. Set up of boundary and boundary of boundary
48. 6-space mathematics

The values being covered are to be taught as lessons numbers 45 to 48 to the students of 6 -space Vedic Mathematics, Science \& Technology.

## LESSON-45

## HYPER CUBES SEQUENCE:

1. Hyper cube sequence $\left(\mathrm{H}_{0}, \mathrm{H}_{1}, \mathrm{H}_{2}, \mathrm{H}_{3}\right.$, ------------- $)$ leads to summation values sequence ( $2,6,10,14,18,32$, ---------------).
2. The sequence $\left(H_{0}, H_{1}, H_{2}, H_{3},-----------\right)$ permits extension as (---- H-3, H-2, H-1, H-0, $\mathrm{H}_{0}, \mathrm{H}_{1}, \mathrm{H}_{2}, \mathrm{H}_{3}$, ,------------).
3. This extended sequence would be of summation values $=(----32,-18,-14,-10,-6,-2,0,2,6,10,14,18,32$, ------------).
4. One may have a pause here and take note that this extended sequence permits a split at $\mathrm{H}_{0}$ as the middle value.
5. The pair of halves of the above sequence namely (----$\mathrm{H}-3, \mathrm{H}-2, \mathrm{H}-1)$ and $\left(\mathrm{H}_{1}, \mathrm{H}_{2}, \mathrm{H}_{3}\right.$, ,------) are of opposite orientation progression values sequences.
6. It would be blissful to take note that above pair of halves lead to reach at measuring rods of dimensional spaces domains of hyper cubes N for $\mathrm{N}=$ whole number value which permit depiction as follows:
-----H-3
-----H-2 H-2 H-2
------H-1 H-1 H-1 H0 H-1 H-1 H-1 --------
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H-2 H-2 --------
$\qquad$ H-3 --------
7. One may have a pause here and take note that the above depiction for its both parts on either side of middle value H0 as 0 space measuring rod, the set of measuring rods of negative and positive dimensional spaces domain are of the format features of Udharv Tiriyag Bhayam
( Vertically and cross-wise) values of Ganita upsutra 3 mathematical domain processing system.

## LESSON-46

## EXTENSION OF FOUR FOLD FORMAT OF CREATION INTO 5 AND HIGHER FOLDS FORMATS OF CREATION

1. It would be blissful to glimpse and imbibe the values of the sequential emergence of synthetic set ups of measuring rods for whole range of dimensional spaces.
2. Four folds format of hyper cube 1 as four folds manifestation layer ( $-1,0,1,2$ ) of summation value 2 with its extension into a five fold transcendence range ( $1,0,1,2,3$ ) comes to be summation value $2+3=5$.
3. A step ahead, its extension into self referral range of six folds (( $-1,0,1,2,3,4$ ) comes to be of summation value $2+3+4=9$.
4. Like that the sequential extension of four fold manifestation layer of hyper cube 1 into $5,6,7,8 \&$ higher number of folds shall be leading to sequence of summation value of the folds as $(2,2+3=5,2+3+4=9$, $2+3+4+5=14,2+3+4+5+6=20$,
5. One may have a pause here and take note that this summation values sequence $(2,5,9,14,20,27,35,----)$ is parallel to the values sequence of $4,5,6,7,8,9,-------$ number of dimensions synthesis value difference between the consecutive dimensional orders .
6. Illustratively, (I) the difference of dimensional synthesis values of 4 dimensions of dimensional order N and of dimensional order $\mathrm{N}+1$ is " 2 ". (II) The difference of dimensional synthesis values of 5 dimensions of dimensional order N and of dimensional order $\mathrm{N}+1$ is "5".
(III) The difference of dimensional synthesis values of 6 dimensions of dimensional order N and of dimensional order $\mathrm{N}+1$ is "9".
(IV) The difference of dimensional synthesis values of 9 dimensions of dimensional order N and of dimensional order $\mathrm{N}+1$ is "14".
(V) The difference of dimensional synthesis values of 14 dimensions of dimensional order N and of dimensional order $\mathrm{N}+1$ is " 20 " -----------
7. It would be blissful to take note that the sequential synthesis values of 4 dimensions of linear will decrease by value 2 at every next dimensional order and it will give rise to deficiencies sequence as " $2,4,6,8,10$ ).
8. Further it would be blissful to take note that the sequential synthesis values of 5 dimensions of linear will decrease by value 5 at every next dimensional order and it will give rise to deficiencies sequence as ( $5,10,15$, 20, 25, 30, -------).
9. Still further it would be blissful to take note that the sequential synthesis values of 6 dimensions of linear will decrease by value 5 at every next dimensional order and it will give rise to deficiencies sequence as $(9,18,27$, 36, 45 --------).
10. And still further it would be blissful to continue reach at deficiencies sequence for $7,8,9 \&$ of any number of
dimensions synthesis value for whole range of dimensional order.
11. One may have a pause here and take note that the reach at the deficiencies sequence has at its base the processing system of mathematical domains of Ganita Sutra 10 and Ganita upsutra 6 in particular.
12. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of Trans and to glimpse and imbibe the above features formats of Sathapatya Measuring Rod.

## LESSON-47

## SET UP OF BOUNDARY AND BOUNDARY OF BOUNDARY

1. The set up of boundary and boundary of boundary of dimensional domain is of features which in terms of number of boundary components comes to be ( 2 n , $2 \mathrm{n}-2$ ) pair of summation value $4 \mathrm{~N}-2$ which for $\mathrm{N}=1,2$, $3,4,5,6,7$ leads to a values range ( $2,6,10,14,18,22$, 26) which is parallel to the summation value of four fold manifestation layer of hyper cubes $1,2,3,4,5,6 \& 7$ respectively .
2. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of Trans and to glimpse and imbibe the above features formats.
3. One shall further sit comfortably and permit the transcending mind to revisit Sathapatya Measuring Rod of 6 space as a synthetic set up of hyper cubes 1 to 6 and the emerging Sathapatya Measuring Rods for the sequential domain folds of hyper cubes 1 to 6 .
4. As the Sathapatya Measuring Rod of 1 space domain is parallel to hyper cube 1 and Sathapatya Measuring Rod of 2 space domain is parallel to the features of hyper cubes $1 \& 2$ together and step ahead for 3 space domain the measuring rod being parallel to the features of hyper cubes $1,2 \& 3$, and so on, as such the Sathapatya Measuring Rod 6 space will be having sequential measuring rods at each phases .
5. Still further as that the reach uptil boundary of boundary of a dimensional domain as well is of the format features of respective hyper cubes, as such the chase in terms of measuring rod of 6 space will amount to a chase parallel to phasewise chase of reach uptil boundary of boundary of domain folds of hyper cubes 1 to 6 being availed for the synthetic set up of the measuring rod of 6 space.
6. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of Trans and to glimpse and imbibe the above features formats.
7. One shall glimpse and fully imbibe the format features of Sathapatya Measuring Rod to acquire deep insight and appropriate enlightenment about the Vedic processing systems along geometric format in terms of artifices of values of whole numbers.

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## LESSON-48

## 6-SPACE MATHEMATICS

## Introductory

1. 6-space mathematics is the mathematics of creations.
2. The existence phenomenon of creation within human frame is the phenomenon of 'impulses'.
3. The transition from phase 2 as of 6 -space content to phase 3 as of 6 -space mathematics is the transition from 'creator' to 'creation'.
4. This transition is of the range of transition from 'measure' to be measuring rod itself.
5. It is of the reach from 4 -space as dimension to 6space as domain.
6. This is a reach from values to virtues.
7. Values of 6 -space content are being chased by $6-$ space mathematics as virtues of the values of 6-space content.

## 6-SPACE MATHEMATICS

1. 6-space mathematics is the mathematics of 6-space contents manifesting as 6 -space domain and playing its different roles of which six of them are as:
i. Dimension fold of 8-space.
ii. Boundary fold of 7 -space.
iii. Re-manifestation within 6-space domain.
iv. Origins fold of 5 -space domain.
v. Base fold of 4-space domain.
vi. Format of 3-space domain.
2. Further reach of 6 -space content manifesting as domain fold is of the nature of it as a self-referral order (6-space in the role of dimension), sequentially leads to 9 -space as origin, 10 -space as base, 11 -space as format of base and 12 -space as unity state of format of base of origin.
3. A step ahead, 6-space also lead to natural source sustained by Brahman reservoir.
4. 6-space has 13 geometries range and parallel to it are 13 versions of hyper cube 6 , of which 7 are of non-negative signature $(0,1,2,3,4,5,6)$ which as a starting value 6 takes us to values range ( $6,7,8,9,10,11,12$ ) and same as dimension, boundary, domain, origin, base and format make the sequential reach step.
5. 6-space as dimension fold shall be manifesting a creative dimensional frame of 6 dimensions.
6. 6-space as boundary fold shall be manifesting a boundary of 14 components.
7. 6-space re-manifesting within self-referral domain (6space domain) shall be manifesting a Sathapatya measuring rod synthesis by hyper cube 1 to 6 for chase of 6-space domain.
8. 6-space as domain fold shall be permitting transcendence flow path for the transcendental carriers for reach up-till orb of the sun from where Brahman carrier will take over.
9. With it, the richness and extent of reach of 6-space mathematics, and its system is self evident.
10. 6 -space mathematics becomes a mathematical domain of the order of 6 -space domain itself.
11. The values and virtues of 6 -space domain and of 6 -space mathematics domain run parallel to each other.
12. Reach of 6 -space domain and as such of 6 -space mathematics is of the range of existence phenomenon of our solar universe within and without frame, including existence within human frame.
13. Parallel processing values of Yoga Nishta and of Sankhya Nishta lead to chase of 6-space domain within creative dimensional frame of 6 dimensions permit parallel chase along the artifices of numbers which settles number value 6 as 'Surya Ank' / 6 as number of sun.
14. With it, values range ( $1,2,3,4,5,6$ ) goes parallel to Sathapatya parallel to set up of Sathapatya measuring rod as a synthetic set up of hyper cubes 1 to 6 .
15. This further takes parallel to shad chakras (eternal circuits) of human frame.
16. Still further, it also take parallel to 6 steps long range of (earth, water, fire, air, space, sun).
17. A step head it takes to the sustain-ness format of TriMurti for Tri-Loki.
18. These parallel 6 folds formats organizations emerge as different aspects of the discipline of 6-space mathematics.
19. 6-space mathematics becomes the basis base of 6 -space Vedic Mathematics, Science \& Technology.
20. The distinct prominent processing features of 6 -space domain, and parallel to it the processing systems of 6space mathematics marks their presence under designations of features and values as under:
i. Manifestation of 6-space contents as domain fold of hyper cube 6 format along the format of Idol of Lord Brahma, over lord of real 4-space.
ii. Transcendence at origin fold for its reach up-till the base fold, and ascendance back from base through origin into domain fold of 6 -space.
iii. Extension of 4 folds manifestation layer into 5 fold transcendence range and along the transcendence range happening transition and transformation for a four folds manifestation layer into next order four folds manifestation layer.
iv. Transcendence range further extending into selfreferral range of 6 folds permitting transition and transformation for a given order transcendence range into the next order transcendence range.
v. Sealed state domain in a dynamic state carries origin to the next order domain in unsealed state and their by there being a Divya Ganga Parvaha covering the range from first perfect number (6) to the second perfect number (28) and as a system having a reach a head from second perfect number (28) to the third perfect number (496).
vi. Two folds transcendence happening within all the four folds (4-space as dimension, 5 -space as boundary, 6 -space as domain and 7 -space as origin).
vii. Divya Ganga Parvaha taking place during transcendence within each of the four folds (4space as dimension, 5 -space as boundary, 6 -space as domain and 7 -space as origin).
21. These features and values, individually and collectively make the features and values of 6 -space mathematics domain parallel to 6 -space domain.
22. These features and values of 6 -space domain and of 6space mathematics domain are the expression range of Vedas which collectively are the expression of single wholesome Vedic domain which during its reorganization is manifesting as four Vedas, Upvedas, Vedengas and Vedic knowledge based literature of purans of Samrits, apex and all that.
23. Each of 4 Vedas (Rig Ved, Yajur Ved, Sam Ved and Athrav Ved) have their full expressions as 21, 101, 1000 and 9 branches respectively.
24. Of these, Sakhala Rig Ved Samhita of Rig Ved is the source scripture and the seat thoughts and process of Vedic knowledge domain are well preserved in this scripture, in term of which the entire Vedic domain can enliven on the format of self-referral domain (6-space domain) and its parallel basis base 6 -space mathematics domain.
25. Sadhakas fulfilled with intensity of urge to know and to explore Vedic mathematics shall initiate themselves and to glimpse and imbibe the values of 6 -space domain and 6 -space mathematics domain.
