# Vedic Mathematics, Science \& Technology Teacher Course 

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## TRANSCENDENCE ORIGIN

This day the course focus is upon 'Transcendence origin'. It four folds aspects being taken up are as follows:
5. Transcendental origin
6. Spatial dimensional order
7. Solid boundary
8. Creative domain.

The values being covered are to be taught as lessons numbers 5 to 8 to the students of 4 -space Vedic Mathematics, Science \& Technology.

## LESSON-5

## TRANSCENDENTAL ORIGIN

1. Creator's space (4-space) has transcendental origin (5space) as origin.
2. Hyper cube 4 is the representative regular body of 4space and it is of a spatial dimensional order ( 2 -space in role of dimension of 4 -space).
3. A step head, hyper cube 5 is the representative regular body of 5 -space and it is of a solid dimensional order (3space plays the role of dimension of 5 -space).
4. With 5 -space, in the role of origin of 4 -space, the dimensional order of the origin as such being of solid order becomes of a higher degree than that of 4 -space domain which is of a spatial dimensional order.
5. As such, when transcendental origin ( 5 -space as origin) comes in manifest form, it acquires domain of a solid dimensional order and 4 -space domain being of a spatial dimensional order acquire a degree of freedom of motion within in 5 -space domain.
6. It is this value and feature of 4 -space domain transiting and transforming from its static state into dynamic state, which deserves to be comprehended well for its full appreciation.
7. The transition and transformation for 4 -space domain from its static state into dynamic state within 5 -space domain is the values and feature because of which spatial order set up has transcendental flow with in solid order 5 -space domain and it acquires its reach at the base fold of a creative dimensional order.
8. One may have a pause here and take note that, in the process their happen to be a transition and transformation for the spatial order into creative dimensional order (4-space) in the role of dimension of 6 -space.
9. One shall sit comfortably and permit the transcending mind to glimpse and to imbibe the values and features of this transcendence phenomenon for the spatial order through transcendental origin as creative order with reach at the base fold.
10. One may further have a pause here and to fully comprehends and to completely imbibe the above feature and value of transcendence through transcendental origin resulting into transition and transformation for the spatial order into creative order with reach at the base fold.
11. 2-space plays the role of dimension as a spatial order and 4 -space plays the role of dimension as a creative order.
12. 2 -space has dimension creates 4 -space domain and 4 space as dimension creates 6 -space.
13. It is this sequential reach from 2 -space to 4 -space to 6 space which is to the format feature of a reach at first step from 2 -space as dimension of dimension as to 4 space as dimension and their after at second step their being a reach from 4 -space as dimension to 6 -space as domain.
14. One may have a pause here and take note that, this value and feature is of reverse orientation than that of a reach from 6 -space as domain to 4 -space as dimension and a head, from 4 -space as dimension to 2 -space as dimension of dimension.
15. One may have a pause here and take note that this permissibility of reversal of orientation with in domain (here 6 -space) is their because of the spatial order of the dimension (here 4 -space).
16. It is this feature, which makes 6 -space domain as a reservoir of values and features unifine 'push-pull' values and features because of the spatial order as it dimension of dimension level.
17. The reach of 2 -space as dimension of dimension of 6 space domain as values triple $(2,4,6)$ in its both orientations $(2,4,6$ and $6,4,2)$ having triple points
fixation for each orientation as, first orientation being (i) $2,4,6)$, (ii) $(2,6,4)$ and (iii) $(4,2,6)$ and for the second orientation $(6,4,2)$ as (i) $(6,4,2)$, (ii) $(6,2,4)$ and (iii) (4, 6,2 ), makes a complete fixation for 6 -space domain in its 6 ways.
18. With it, the summation value $(2+4+6)=12$, becomes parallel to 12 components of transcendental boundary ( 5 -space as boundary) of self-referral domain ( 6 -space).
19. It would be a blissful to take note that this value is parallel to transcendental code value of formulation: Rishi, Yog and Shiv.
20. With this the glimpsing and imbibing of the values and features of transcendental origin is to be parallel to the values and features of whole range of formulation accepting transcendental code value 12 .

## RECAPITULATION

1. Let us recapitulate what we have to learnt in this section.
2. The learning focus of this section, as is its title: 'real 4space', is upon the reality of 4 -space.
3. The format of Idol of Brahama settles format of hyper cube 4 as a four folds manifestation layer $(2,3,4,5)$ of spatial dimensional order, solid boundary, creative domain and transcendental origin.
4. The spatial order settles whole range of hyper cubes, of lower, as well as of higher dimensional orders than that of spatial order itself, as per the values and features of the four fold manifestation format of hyper cube 4 parallel to values and features of Idol of Brahama.
5. One shall glimpse and imbibe the values and features of reality of 4 -space.
6. One shall comprehend and reach at settlement of hyper cube 4 as a representative regular body of 4 -space.
7. One shall distinctively tabulate values and features of format of hyper cube 4.
8. Let their be distinct tabulation for values and features of spatial dimension, solid boundary, creative domain and transcendental origin of hyper cube 4.
9. One shall sit comfortably and permit the transcending mind to glimpse and imbibe the way Lord Brahama with the grace of Lord Shiv, multiplied as ten Brahamas.
10. It would be a blissful exercise to reach at comparative table of the values and features of Idol of Brahama and values and features of hyper cube 4.
11. One shall enlist the conceptual terms of this section and to write short note on upon each conceptual term.
12. One shall answer short question enlisted in the last section of this book and to evaluate one self of one's learning and understanding of different aspects of reality of 4 -space.

## ONE SHALL REACH AT ONE'S ON DICTIONARY

1. It would be a very blissful exercise that one reaches as one's on dictionary of the values and feature of reality of 4-space.
2. Let the aim be that every conceptual term finds entry in one's dictionary.
3. One shall continuously up to date one's dictionary by adding every new value and feature of reality of 4 -space stands glimpsed and imbibed by the Sadhakas.
4. One shall compare one's comprehension of values and features of 3-space with one's comprehension of values and features of 4 -space.
5. Further, one shall sit comfortable and permits the transcending mind to glimpse and imbibe the values and features of reality of 5 -space and to compare the same with the values and features of the reality of 4 -space.
6. One shall revisit the structural set up of cube (hyper cube 3).
7. One shall revisit the structural set up of hyper cube 4.
8. One shall also attempt to comprehend the structural set up of hyper cube 5 .

## LESSON-6 SPATIAL DIMENSIONAL ORDER

## GENERAL

1. We are well acquainted with a linear dimensional order.
2. We are also well acquainted with a three dimensional frame of three linear axes of 3-space set up.
3. 4 -space set up accepts a dimensional frame of 4 spatial dimensions.
4. We have learnt in previous class as that the domain fold of hyper cube 3 also accepts its structural chase in terms of a three dimensional frame of three spatial dimensions.
5. With addition of $4^{\text {th }}$ spatial dimension their happen to be a transition and transformation from the set up of 3space domain to set up of 4-space domain.

## POINT OF A PLANE

6. Let us have a pause here, and first of all let us re-visit the set up of a plane / square.
7. Each point of a square is structured point.
8. The point of a plane is fulfilled with the structure of plane itself.
9. One may further have a pause here and to compare a point of line (interval) with the point of a plane (square).
10. Point of a line is fulfilled with structure of a line / 1space content set up.
11. Point of a plane is fulfilled with structure of a plane of 2space content.

## 2-SPACE CONTENT

12. One may further have a pause here and to glimpse the distinguishing feature of 1 -space content and of 2 -space content.
13. 1-space has (-1 space) in the role of dimension while 2space has ( 0 space) in the role of dimension.
14. Further as that, dimensional frame of 1 -space is a set up of a single dimension of (-1) order / negative linear order, while 2 -space accepts a dimensional frame of a pair of dimensions of (0) order.
15. As such, the structure of a point of a plane / 2-space are framed with in a dimensional frame of pair of dimensions of zero order ( 0 space) playing the role of dimension of 2 -space.

## STRUCTURE WITHIN 2-SPACE POINT

16. One may have a pause here and to fully glimpse and to completely imbibe this set up of the structure fulfilled within every point of a plane / 2 -space.
17. One may have a pause here and to glimpse and imbibe other feature of a square that it accepts domain boundary ratio as $\mathbf{A}^{2}: 4 \mathbf{B}^{1}$.
18. Further as that, square splits into quadruple quarter squares.
19. One shall further have a pause here and take note that if 3 out of 4 quarter squares are synthesized together, these automatically bring in fourth quarter square, though in an un-manifest form.
20. It is this value and feature of the set up of square as 3 manifests quarter squares and fourth un-manifests quarter square, which deserves to be comprehend well for complete imbibing and appreciation of this feature of the set up of a square and hence of its each points.

## DIMENSION-DOMAIN VALUES PAIR

21. One may further have a pause here and take note that $\left(n^{1}+2 n^{0}\right)^{2}=n^{2}+4 n^{1}+4 n^{0}$ is parallel to the structural set up of a square of area $n^{2}$, perimeter of length $4 n^{1}$ and 4 corner point $4 n^{0}$.
22. Further $\left(n^{1}+2 n^{0}\right)^{1}=n^{1}+2 n^{0}$, which is parallel to the structural setup of an interval of length $n$ and of its boundary as a set up of a pair of end points.
23. This bring to focus the set up of an interval (as an axis / dimension) being a set up of a pair of distinct generic counts of 1 -space and 0 space respectively and these
together accepts the formulation as only two counts of zero space for all values of n for 1 -space count.
24. This brings us face to face with the feature of interrelationship of values ( $\mathrm{n}, \mathrm{n}+2$ ), which further brings us face to face with the feature of difference value ' 2 ' for all values of $n$.
25. It is this feature which deserves to be comprehended well, as the feature which holds for every domain with in a frame of dimensions and consequentional enveloping boundary frame.

## GLIMPSE ‘0 AS 1 ’ \& ' 1 AS 0 ’

1. Origin in un-manifest form is ' 0 ', while origin in manifest form is ' 1 '.
2. Line is of ' 0 ' area while line is also of ' 1 ' length.
3. Plane is of ' 0 ' volume, while plane is also of ' 1 ' area.
4. In general, boundary is ' 0 ' domain while domain itself is ' 1 ' domain.

## GLIMPSE '0’ \& ' 1 ’

1. Let us glimpse the equality: $\mathrm{N}^{0}=\mathrm{A}^{\mathrm{n}}$.
2. let us further glimpse:

$$
(0,1)=\left(0^{1}, 1^{0}\right) .
$$

3. Further glimpse:

$$
\begin{aligned}
& (0 \mathrm{x} 0 \mathrm{x} 0 \ldots \mathrm{x} 0)=0 \\
& (1 \mathrm{x} 1 \mathrm{x} 1 \ldots \mathrm{x} 1)=1
\end{aligned}
$$

4. Further

$$
\begin{aligned}
& (0+0+0 \ldots+0)=0 \\
& (0 \mathrm{x} 0 \mathrm{x} 0 \ldots \mathrm{x} 0)=0
\end{aligned}
$$

## GLIMPSE PLANE AS INFINITE POINT

1. Glimpse plane as a set of infinite point permitting organization as a grid of infinite rows and infinite column.
2. Further glimpse plane as infinite points permitting organization as infinite diagonals rows and infinite diagonals columns.
3. One may have a pause here and take note that the same placement of the points of a plane leads to above pair of organizations.
4. The infinite feature of the points of plane leading to above pair of organizations may be viewed as organization manifesting as symbols for addition $(+)$ and as symbol of multiplication (x).
5. One may further have a pause here and take note that the infinite feature of set of point of a plane and the consequential 'nearness' of the points will further make the angle between the diagonals rows and columns being of any value between 0 degree and 90 degree.
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 format feature and values.

## INFINITY ( $\infty$ ) AND ITS SYMBOL

1. Glimpse nearness of a pair of points of a plane.
2. Glimpse structure within a point of a plane as full structure of a plane accepting domain boundary ratio formulation ( $\mathbf{a}^{2}: 4 \mathbf{b}^{1}$ ) being commonly available for both square and circle being the representative regular body of 2 -space.
3. One shall sit comfortably and permit the transcending mind to glimpse and imbibe the script form of symbol of infinitely and its features and values parallel to the paired pair of points of a plane.
4. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format feature and values

## SAPTIAL DIMENSIONAL ORDER

1. Sadhakas fulfilled with intensity of urge to glimpse and imbibe the spatial dimensional order features and values shall first of all glimpse and imbibe the feature and values of a plane as a set of infinite point permitting pairing and taming infinity along both axis of the plane remain conscious that zero space is playing the role of dimension of 2 -space and a pair of zero order dimensions (axes) of constituting a dimensional frame for 2 -space.
2. In the next section, we shall be learning about the dimensional synthesis phenomenon with a focus upon dimensional synthesis of number of dimensions of linear order, as well as the dimensional synthesis of numbers of dimensions of spatial order and sequential difference of dimensional synthesis values in respect of linear dimension and spatial dimensions.
3. Senior Sadhakas shall be chasing further Divya Ganga Parvaha through artifices component of sole syllable being designated and being of features and values of (i) Bindu Sarovar (point reservoir/ structured point) (ii) Ardhmatra (half measure) with Ardhmatra accepting transcendental code value 29 which is parallel to www.vedicganita.org/vmcourses
transcendental code value of formulation Vyajan (consonant) and also that transcendental code value 29 is parallel to transcendental code value of formulation Braham, the four head lord, creator's supreme, the over lord of real 4 -space of spatial dimensional order. (iii) TriPundram, a synthetic set up of a pair of monad synthesizing as tri-monad. (iv) Swastik Pada /quarter of Swastik / a spatial dimensional frame for the dimension of 4-space.

## UPDATE ONE'S DICTIONARY

1. It would be blissful to glimpse and imbibe the features and values of conceptual terms of this lesson and to include them in one's dictionary with one's notes.
2. On second reading of the lesson, one shall further update one's dictionary.
3. Let us this blissful exercise to be under taken at every stage of fresh visit to the lesson.
4. Let this value of continuous evaluation of one's learning be a blissful habit of the Sadhakas to be of same intensity throughout the learning of this course.

## LESSON-7

## SOLID BOUNDARY



## GENERAL

1. Spatial order approach to space in terms of a dimensional frame of four spatial dimensions envelops 4-space domain within a solid boundary of 8 components.

## DIMENSIONAL FRAME OF SPATIAL ORDER

2. Spatial order, with its dimensional frame of a pair of dimensions of zero order, creates, in terms of its each axis a set up of a four folds manifestation layer ( $0,1,2$, 3 ) of hyper cube 2 with solid origin (3-space as origin).

## SOLID BOUNDARY SPLIT

3. A reach in terms of first axis up till 3-space as origin on its re-manifestation along the format of second axis of
spatial order again with 3 -space origin in its zero value state takes to 3-space as origin.
4. This re-manifestation set up, accordingly spilt solid boundary of 8 components into a pair of part of 3 components and 5 components respectively.

## TAKE OFF FROM THE SOLID BOUNDARY

5. With this, the second part which consists of 5 solid components permits take off and their by dimensionalises the outside space being approach in terms of a dimensional frame of 5 solid dimensions.

## INWARD AND OUTWARD TRANSCENDENTAL EXPENSION

6. 4-Space has transcendental origin (5-space as origin of 4space).
7. Take off from solid boundary of hyper cube 4, dimensionalises outside space as 5 -space (of solid order).
8. With it, the outward space, as well as inward space of spatial order 4 -space is a solid order 5 -space.
9. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format feature and values.

## CREATIVE DIMENSIONAL ORDER

10. One may have a pause here and to glimpse the set up of inward as well as outward 4 -space (domain) being a transcendental space (domain) and 4 -space (domain) having a degree of freedom of motion with in a domain and with it role of 4 -space domain transition and transform into the role of a creative dimensional order (4-space in the role of dimension of 6-space).
11. One may have a pause here and take note that 4 -space plays the role of dimensional of 6 -space while 6 -space plays the role of origin of 5-space.
12. Further as that, 4 -space also plays the role of creative boundary of 5-space.
13. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format feature and values.
14. One may have pause here and to re-visit the emerging set up with the take off of the solid boundary and their by the space, outside, as well as inside getting dimensionalise as 5 -space. of solid dimensional order(3space as dimensions), creative boundary(4-space as boundary), transcendental domain(5-space as domain) and self-referral origin(6-space as origin).

## BLISSFUL EXERCISE

1. It would be a blissful exercise to glimpse and chase take off from the solid boundary of hyper cube 4 and
transcendental dimensionalization of the outside, as well as inside space.
2. One shall further sit comfortably and to glimpse and to chase the dynamic state of creator's space (4-space) within transcendental domain (5-space) and consequential transition and transformation for the role of 4-space domain into creative dimensional order of self-referral domain(4-space in the role of dimension of 6-space).
3. It would further be a very blissful exercise to glimpse and to chase solid boundary of 8 components as a format for eight place value systems for organization

## 7X9 GRIDS

1. It would be a blissful exercise to glimpse and to chase of accommodation of all 63 double digit numbers of eight place value system along 7 x 9 grids.

## 3x5 GRIDS

2. It would be a very blissful exercise to chase all 15 double digit number of 4 place value system along $3 \times 5$ grids.

## LESSON-8 <br> CREATIVE DOMAIN

## GENERAL

1. 4-space contents manifests as 4-space domain, designated as creative domain.
2. This domain is enveloped by a solid boundary of 8 components.

## ENVELOPED WITHIN SOLID BOUNDARY

3. With the presence an absence of component, it acquire 9 versions as bodies of respective 9 geometries of 4 -space.

## 9 VERSIONS OF HYPER CUBE 4

4. One way to arrange these 9 versions of hyper cube 4 is as per the number of components presence sequence ( 8 , $7,6,5,4,3,2,1,0)$.
5. The presence of the component is taken as a signature in token of presence of the same.
6. Accordingly 9 geometries of 4 -space are designated as geometries of $(8,7,6,5,4,3,2,1,0)$ signature.

## PARALLEL TO WAY ARRANGE

7. Another, parallel way to arrange and to reach 9 geometries range is as $(-4,-3,-2,-1,0,1,2,3,4)$ signature.
8. This arrangement focus upon the availability of 8 component permits approach at $4+4$ organization, an accordingly the absence of 4 component and presence of 4 components become available by having pair of orientation reach from the middle state.

## 5X5 GRIDS FORMAT

9. This organization leads us to $5 \times 5$ grids format of pair of values from first part of four components and from four components of second part respectively, as follows.

| $(4 \times 4)$ | $(4 \times 3)$ | $(4 \times 2)$ | $(4 \times 1)$ | $(4 \times 0)$ |
| :--- | :--- | :--- | :--- | :--- |
| $(3 \times 4)$ | $(3 \times 3)$ | $(3 \times 2)$ | $(3 \times 1)$ | $(3 \times 0)$ |
| $(2 \times 4)$ | $(2 \times 3)$ | $(2 \times 2)$ | $(2 \times 1)$ | $(2 \times 0)$ |
| $(1 \times 4)$ | $(1 \times 3)$ | $(1 \times 2)$ | $(1 \times 1)$ | $(1 \times 0)$ |
| $(0 \times 4)$ | $(0 \times 3)$ | $(0 \times 2)$ | $(0 \times 1)$ | $(0 x 0)$ |

10. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format feature and values.

## 5X5 VARGA CONSONANT FORMATS

11.The above $5 \times 5$ grids format of organization of 9 geometries range and parallel 9 versions of hyper cube 4 provides us $5 \times 5$ grids organization of geometric formats supplied by creative domain.
12. This may be glimpsed and imbibed as follows:

## Ka (क) first letter of first row



## KHA (ख)

## Second Letter Of First Row



Third Letter Of First Row


## GHA (घ)

## Fourth Letter of First Row


(ड़) Fifth letter of first row

(च) First letter of second row


CHA (छ) Second letter of second row


JA (ज) Third letter of second row


## JHA (झ) Fourth Letter of Second Row



NJA (ज) Fifth letter of second row


## TTA (ट) First letter of third row



THA (ठ) Second Letter of Third Row


## DA (ड) Third Letter of Third Row



DHA ( $\quad$ )


## NNA (ण) Fifth letter of third row



## TA (त) First Letter of Fourth Row



## THA (थ) Second letter of fourth row




Fifth row of varga consonants



## BLISSFUL EXERCISE

1. It would be a blissful exercise to chase 9 vowels range of Devnagri alphabet along 9 versions of hyper cube 4.
2. It would be a very blissful exercise to glimpse and imbibe the feature and values of each versions of hyper cube 4 in terms of presence of boundary components.
3. Further it would be a blissful exercise to chase each versions of hyper cube 4 in terms of components of its boundary being absent.
4. It would be a very blissful exercise to glimpse and imbibe the version of the hyper cube 4 in which all the eight boundary components are absents.
5. It would be a very blissful exercise to glimpse the way 4space domain splits and releases its transcendental origins.
