# Vedic Mathematics, Science \& Technology Teacher Course 

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## TEXT SUTRAS 8 TO 11 \& Ganita Upsutra 10 \& 11

This day the course focus is upon 'Text of Ganita Sutras 8 to $11 \&$ Ganita Upsutra $10 \& 11$ '. It four folds aspects being taken up are as follows:
17. Text of Ganita Sutras 8 to 11 and Ganita Upsutras 10 and 11.
18. Dynamic circuit for transcendence reaches.
19. Dimensional synthesis values reach
20. Gaps bridging of dimensional synthesis reach

The values being covered are to be taught as lessons numbers 17 to 20 to the students of 5 -space Vedic Mathematics, Science \& Technology.

## LESSON-17

## TEXT OF GANITA SUTRAS $8,9,10 \& 11$ AND GANITA UPSUTRA $10 \& 11$

1. One shall visit and revisit the text of Ganita Sutras 8,9 , $10 \& 11$ and Ganita Upsutra 10 and 11.
2. It would be a blissful exercise to have a letter wise chase of these texts.
3. If would further be a blissful exercise to tabulate TCV values and VCV values of these texts.

## LESSON-18

## DYNAMIC CIRCUITS FOR TRANSCENDENTAL REACH

1. Transcendental domain placed the role of Base fold.
2. Base fold is the fifth fold.
3. Base fold, the fifth fold, is compactified with origin fold, the fourth fold.
4. Origin fold itself is of placement at the center of the domain fold.
5. Domain fold transit from its static state to dynamic state by moving along its dimensional order format.
6. As the dimensional frame is constituted by number of dimensions, as such dynamic state as expression along all the dimensions.
7. The value of dimensional frame itself is equal to the value of all the dimensions (order units).
8. This gives rise to the complete and full dynamic state value for the domain as:
$[\mathrm{N}\{\mathrm{N}+\mathrm{N}-2+\mathrm{N}(\mathrm{N}-2)\}]$.
9. This value together with the format of hypercube n will make the above the value as:

$$
[\mathrm{N}\{\mathrm{~N}+\mathrm{N}-2+\mathrm{N}(\mathrm{~N}-2)\}]+\mathrm{N}-2+\mathrm{N}-1+\mathrm{N}+\mathrm{N}+1
$$

10. It would be blissful exercise to reach at above value for $\mathrm{N}=(0,1,2,3,4,5,6,7 \ldots)$
11. It would be further blissfully to glimpse and imbibe the above reach at its every step.
12. Illustratively, let us revisit the above reach for $n=3$.
13. As first step we are having 3 -space domain.
14. It gives rise to value 3 .
15. 3-space is a linear order space.
16. It gives rise to order unit $=1$.
17. All the three dimensions of three space gives rise to order unit $=3$.
18. The dynamic expression along single dimension is of value equal to value of dimensional frame + value of domain + value of dimensional order $=1 \mathrm{x} 3+3+1=7$.
19. Total value along the three dimension will comes to be $7 \times 3=21$.
20. The hypercube 3 format is a set up of four fold manifestation layers ( $1,2,3$, and 4 ) of summation value $1+2+3+4=10$.
21. As such the grand dynamic state value for complete and full motion of 3 space domain on hypercube 3 formats comes to be $21+10=31$.
22. One may have a pause here and to take note that this is dynamic state value with sealed origin.
23. 4-space plays the role of origin of 3-space.
24. It is the origin fold of hypercube 3 .
25. 4-space is a spatial order space.
26. Dimensional frame of 4 -space is a synthetic set up of quadruple spatial dimensions.
27. The synthesis value of quadruple spatial dimension comes to be ' 8 '.
28. The transcendence at the origin will require a synthetic set up of 5 spatial dimensions of synthesis value ' 10 '.
29. With it super summation value for complete and full dynamic state of 3 space domain comes to be $31+8+10$ $=49$.
30. One may have a pause here and to take note that number value 49 is parallel to transcendence code value 49 of formulation 'marutagana'.
31. Here, transcendental carriers (ativabaka) come into play. 32. Transcendental carrier reach is up till orb of the sun.
32. One may have a pause here and to take note that seven space play the role of origin of 6 -space (sun).
33. Further as that, 2 -space playd the role of dimension of dimensions of 6 -space.
34. The pilgrimage ahead is along the dynamic path whose circuits are formatted by 'ashwani kumaro', the physicians of gods.
35. The formulations 'ashwani kumaro' accepts transcendental code value $21+26=47$.
36. The reach up till sun ' 6 space domain' is of the format of hyper cubes 1 to 6 , giving rise to value range $1,2,3,4$, 5,6 of summation value $1+2+3+4+5+6=21$.
37. The reach at orb of the sun brings in transcendental dimensional order (5space as dimensions) of unity state.
38. As such, there is an availability of value ' 5 '.
39. This takes us with the other random with six space domain.
40. This reaches value $21+5=26$.
41. With this reach in terms of five units makes pilgrimage head being of value steps $6,7,8,9,10,11$, parallel to 11 versions of hypercube 5 .
42. According, the pilgrimage on the other side of 6 space domain comes to be of value steps $26+6=32,32+7=39$, $39+8=47,47+9=56,56+10=66,66+11=77$.
43. It would be blissful to take note that the above reach beginning value 0 and reach at value 21 , and a jump to a value 26 and their after sequential reach up till value 77 makes a progression of parabolic format of 7 steps reach.
44. These 7 steps reach gives rise to 7 paired pair values as:
i. $21+26=47$.
ii. $\quad 15+32=47$.
iii. $\quad 10+39=49$.
iv. $\quad 6+47=53$.
v. $3+56=59$.
vi. $1+66=67$.
vii. $\quad 0+77=77$.
45. One may have a pause here and to take note that the value range ( $47,47,49,43,59,67$, and 77) accepts sequential of value gaps $(0,2,4,6,8$, and 10 ) which is parallel to synthesis values of spatial order dimensions.
46. One may have a pause here and to take note that the creative boundary ( 4 space boundary and 5 space is of 10 components and as such hypercube 5 accept 11 versions).
47. Further as that creative boundary of 10 component s accepts reorganization at $10=4+6$ and their by takeoff from creative boundary results into creation of selfreferral domain (6 space domain) as of a re manifested format of creative dimensional (4 space as dimension), which here is in the format of hypercube 4.
48. The value $4 \times 4$ gives rise to a matrix only grid of following expression:

| 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- |
| 2 | 3 | 4 | 5 |


| 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- |
| 4 | 5 | 6 | 7 |

50. One may have a pause here and to take note that above expression makes north east diagonals an affine diagonal as that air, at that each step, there is same value ' 4 '.
51. Further as that synthesis value of fourth creative dimensions is of sequential reach ( $4,6,6$, and 4 ).
52. Further as that above $4 \times 4$ matrix expressions makes each row and each column being of hypercube format.
53. Row 1, 2, 3, and 4, respectively are of format value of hyper cubes $3,4,5$ and 6 respectively.
54. Likewise columns $1,2,3,4$, as well are of format value of hypercube $3,4,5$ and 6 respectively.
55. This brings us face to face a reach along both axes at hypercube 6 set up.
56. It is this feature which deserves to be comprehended well about 6 space domain emerging at its dimension of dimension level as of spatial order.
57. One may have a pause here and to take note that a pair of four fold manifestation layers $(3,4,5,6)$ and $(3,4,5$, 6) synthesis sequential $(5,6,7,8)$ manifestation layer as of reach at origin fold ( 8 space).
58. One shall sit comfortably and permit the transcendence mind to glimpse and imbibe the organization feature of Ganita Sutras and upsturas as that there text avails number values $(1,2,7,9,10)$ and in terms of there and reach at $(3,4,5,6,7,8)$.
59. One shall visit and revisit above format feature values, virtues order of the setup of transcendental domain format for transcendental carriers.
60. Within, it would be blissful to glimpse and imbibe above values and virtues and to acquire proper insight and
appropriate enlightenment about Vedic systems of mathematics, science and technology of Existence phenomenon of our solar universe, within and without frames including human frame and it absence, as the sustains format of human frame as shad chakras (eternal circuit is parallel to Sathapatya measuring rod of hypercube 1 to 6 . Presided by lord Vishnu and it measure beings presided by Lord Brahma.

## LESSON-19

## DIMENSIONAL SYNTHESIS VALUES RANGES

1. One of the basic attainments of Vedic system is of reach at dimensional synthesis values ranges.
2. These ranges are reached order wise. Illustratively, linear, spatial, solid and hyper solid order constitutes distinct dimensional synthesis values ranges.
3. It is not only the positive order dimensional but also 0 order dimension and negative order dimensions as well lead to their specific dimensional synthesis values ranges.
4. The dimensional synthesis value range of a particular dimensional order, say $m$ dimensional order, shall be of zero, single, double, triple, quadruple and higher number of dimensions of order $m$.
5. This range of dimensional synthesis values of dimensions of order m is not restricted to zero number of dimensions or two single dimensions or two pair of dimensions or triple dimensions or two quadruple dimensions or two higher numbers of dimensions only.
6. This range shall be also being covering prior to the stage of zero number of dimensions.
7. One may have a pause here and to take note that zero number of dimensions means 'no dimension being available'.
8. A prior stage of zero number of dimensions would be a stage of presence of single hole because of the absence having been there, because of the whole filling dimension not marking its presence.
9. It may be designated as a single black dimension, vish-avish the single dimensions presence (to be designated as a light dimension).
10. The range of values prior to zero number of dimensions may a taken as a range of synthesis values of black dimensions.
11. And the range of values subsequent to zero number of dimensions be taken as light dimensions synthesis value range.
12. The zero number of dimension situations may be taken as the phase and stage of half black, half bright dimensional setups.
13. First of all let us take dimensional synthesis value range of more than zero number of light dimensions of linear order.
14. The synthesis values of this range come to be $(1,3,6,10$, 15, $21 \ldots$...
15. One may have a pause here and to take note that this value range accepts gaps of values constitute gaps value ranges as ( $2,4,6,8,10,12 \ldots$...).
16. One may have a pause here and to take note that this gap value range, infect is the values range of spatial
dimensions being single , double, triple, quadruple and sequential higher number of dimensions of spatial order.
17. One may have further pause here and to take note that the sequential differences of values range $(1,3,6,10,15$, $21 \ldots$ ) and of value range ( $2,4,6,8,10,12 \ldots$ ) comes to be ( $-1,-1,0,2,5,9,14,20,27,35,44,54 \ldots$.$) .$
18. It would be blissful to taken to this difference value sequence, as it is, is infect the value difference for any pair of constituted dimensional order synthesis value ranges.
19. Illustratively a reach from dimensional synthesis values range of spatial order to that of solid order would means that each step the difference value range $(-1,-1,0,2,5,9$, $14,20,27,35,44 \ldots$ ) is to be diminished form the values of respective stages of the dimensional synthesis of dimension of spatial order to have a reach at the respective dimensional synthesis values for solid order.
20. This shall be leading us to dimensional synthesis values range of solid order as: $(3,5,6,6,5,3,0,-4 \ldots$.$) .$
21. A step head, there would be a reach at dimensional synthesis values range of creative dimensional order (4 space in the role of dimension).
22. One may have a pause here and to take note that this way, we can have a reach up till any higher dimensional order setup.
23. One may have further pause here and to take note that by reversing the orientation of the differences, as increase value, at each step parallel to above difference value range ( $-1,-1,0,2,5,9,14,20,27,35,44 \ldots)$, we will be reaching a value range ( $1,1,0,-2,-5,-9,-14,-20$, $-27,-35,-44,-54 \ldots$...).
24. This way we shall be having a reach at dimensional synthesis value range of dimensions of zero order as: $(0$, $2,6,12,20,30,42,56,72 \ldots)$.
25. One may have a pause here and to take note that , like that we can reach at respective dimensional synthesis value ranges for ( $-1,-2,-3,-4$ ), and so on, dimensional orders.
26. Now one may have further pause here and to take note that parallel to light dimensions, there would be a reach for black dimension as well.
27. In respect to linear order, the extended and integrated dimensional synthesis values range for black as well as light dimensions , coming to be as follow: (... -45, -36, -28, -21, -15, -10, -6, -3, -1, 0, 1, 3, 6, 10, 15, $21,28,36,45 \ldots$..
28. The extended integrated range for spatial order will be : (...-18, -16, -14, -12, -10, -8, -6, -4, -2,- $0,2,4,6,8,10$, $12,14,16,18 \ldots)$.
29. The difference values range of above pair of extended ranges for both black and light dimensions will help us reach at such extended value ranges for entire range of dimensional order may those be negative, zero or positive dimensional orders.
30. It would be blissful exercise to reach at extended value ranges for all dimensional orders.

## LESSON-20

## GAPS BRIDGING OF DIMENSIONAL SYNTHESIS VALUES RANGES

1. Linear order leads to value range $(1,3,6,10,15,21,28$, 36, $45 \ldots$...
2. The gaps of this range are of value $(2,3,4,5,6 \ldots)$.
3. This further leads to gaps values ( $1,1,1$, and 1 ), with it, the gaps get plugged as the difference remains of value 0 .
4. Spatial order value range comes to be $(2,4,6,8,10 \ldots)$.
5. Gaps value of this range are ( $2,2,2,2 \ldots$ ), as such gaps get plugged as their remains zero increase between these steps.
6. Solid order leads to value ranges $(3,5,6,6,5,3,0 \ldots)$.
7. This leads to gaps of values $(2,1,0,-1,-2,-3,-4 \ldots)$.
8. This further be leads to sequential gaps of values $(-1)$.
9. This uniformity plugged the gaps.
10. Creative order leads to value range ( $4,6,6,4,0,-6,-14$ ...).
11. From quadruple dimensions synthesis onwards the value range ( $4,0,-6,-14 \ldots$ ) leads to gaps value sequence ( -4, -$6,-8 \ldots$..
12. This leads to uniformity plugging value (-4).
13. Order 5 leads to dimensional synthesis values range as $(5,7,6,2,-5,-15,-28 \ldots)$.
14. From quadruple dimensions synthesis onwards the value range ( $2,-5,-15,-28 \ldots$.$) leads to gaps values (-7,-10$, $13 \ldots$...) which gets plugged with uniformity value ' -3 '.
15. Like that one can reach at uniformity plugging value for every dimensional order.
16. Here would be relevant to take note that the extended difference value range for constituted dimensional order comes to be as ( $\ldots-27,-20,-14,-9,-5,-2,0,1,1,0,-1,-$ $1,0,2,5,9,14,20,27 \ldots)$.
17. Here would be relevant to take note that the central seven step long difference value range $(0,1,1,0,-1,-1$,
and 0) playd its prominent role for transition and positive number of light dimensions to negative number of black dimensions.
18. One shall sit comfortably and glimpse and imbibe these value and feature of dimensional synthesis phenomenon.
19. It would be relevant to take note that the sequential reach along Sathapatya measuring rod up till core of the sun and their after a reach on the other hand six space domain of sun takes us sequential progression of various step $(4,5,6,7,8,9,10,11)$. The spatial order working unit $(1 / 2)$ will be sequential step $(1,3 / 2,2,5 / 2,3,7 / 2$, $4,9 / 2,5,11 / 2,6,13 / 2,7,15 / 2 \ldots)$.
20. As such this format for the sequential progression reach value ( $5,6,7,8,9,10,11,12,13 \ldots$ ) shall be leading us to values $5 \times 1,6 \times 3 / 2,7 \mathrm{x} 2,8 \times 5 / 2,9 \mathrm{x} 3,10 \mathrm{x} 7 / 2,11 \times 4$, 12x9/2 ...).
21. One may have a pause here and to take note that it is going to be a reach of values range ( $5,9,14,20,27,35$, 44, 54 ...).
22. It would be blissfully to take note this values range parallel to differences value range dimensional synthesis values of linear order and spatial order of ( $5,6,7,8,9$, $10,11,12 \ldots$ ) number of dimensions.
23. It would be blissful exercise to visit and revisit above value and feature of the transcendental carrier path up till core of the sun and even beyond the domain of the sun.
24. Vedic system follow the transcendental carrier path with success and their by become of the order of existence phenomenon of our solar universe.
25. Vedic systems are also potentialized to process the universe even beyond the format of solar universe.
26. It is this success and attainments which shall be blissful comprehend and imbibed by the Sadhakas of Vedic Mathematics, Science \& Technology.
