## ORGANIZATION FORMAT OF GANITA SUTRAS

## Step-37: Dimensional synthesis mathematics

1. One of the applied values of Ganita Sutras particularly of Ganita Sutras 4 and 5 and their formats features parallel to hyper cubes 5, 6 as sequential emergence within hyper cube 4 itself leads us to dimensional synthesis mathematics.
2. The pair of dimensions of order $n$ ( $n$-space) playing the role of dimension get synthesized availing unit dimension of dimension value [( $\mathrm{n}-2$ ) value] as synthetic glue.
3. The synthesis value of synthesis of pair of dimensions of order $n$ comes to be $n+n-(n-2)=n$.
4. One may have a pause here and permit the transcending mind to be face to face with the features of dimensional synthesis mathematics rule as that the pair of dimensions structure the domain.
5. Further as that synthesis of ' m dimensions of order n ' shall be requiring ( $m-1$ ) units of dimension of dimension value ( $n-2$ ).
6. It shall be leading us to following tabulation for synthesis of 1 to m dimensions of 1 to $n$ order.

|  |  | M <br> $=1$ | M <br> $=2$ | M <br> $=3$ | M <br> $=4$ | M <br> $=5$ | M <br> $=6$ | M <br> $=7$ | M <br> $=8$ | M <br> $=9$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{~N}=1$ | 1 | 3 | 6 | 10 | 15 | 21 | 28 | 36 | 45 |  |
| $\mathrm{~N}=2$ | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |  |
| $\mathrm{~N}=3$ |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{~N}=4$ |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{~N}=5$ |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{~N}=6$ |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{~N}=7$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

7. One may have a pause and have a fresh look at the above values entries of first and second row in each column and take note that the entries
values in column 3 are 6 and 6 , for all orders, which would mean the different between the two values is zero.
8. Further as that difference between the values of column 4 is

$$
10-8=2 .
$$

9. The difference between the values of column 5 is

$$
15-10=5
$$

10. The difference between the values of column 6 is

$$
21-12=9
$$

11. One may have a pause here and take note that the values $2,5,9$, permit re-organization as

$$
2,2+3,2+3+4
$$

12. With it one can easily project the sequence of differences of values of columns 4 onwards being:

$$
2,2+3,2+3+4,2+3+4+5,--
$$

13.This sequential chain of values permit re-organization as
i. $2=(1+2)-1$
ii. $\quad 5=(1+2+3)-1$
iii. $\quad 9=(1+2+3+4)-1$
iv. $\quad 14=(1+2+3+4+5)-1$.
14.In the sequence the general value would be for rth term being (sum of numbers [(1 to r)-1].
15.It would be blissful to complete the above table for any number of rows and columns as under:

|  | M <br> $=1$ | M <br> $=2$ | M <br> $=3$ | M <br> $=4$ | M <br> $=5$ | M <br> $=6$ | M <br> $=7$ | M <br> $=8$ | M <br> $=9$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{~N}=1$ | 1 | 3 | 6 | 10 | 15 | 21 | 28 | 36 | 45 |  |
| $\mathrm{~N}=2$ | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |  |
| $\mathrm{~N}=3$ | 3 | 5 | 6 | 6 | 5 | 3 | 0 | -4 | -9 |  |
| $\mathrm{~N}=4$ | 4 | 6 | 6 | 4 | 0 | -6 | -14 | -24 | -36 |  |
| $\mathrm{~N}=5$ | 5 | 7 | 6 | 2 | -5 | -15 | -28 | -44 | -63 |  |
| $\mathrm{~N}=6$ | 6 | 8 | 6 | 0 | -10 | -24 | -42 | -64 | -90 |  |
| $\mathrm{~N}=7$ | 7 | 9 | 6 | -2 | -15 | -33 | -56 | -84 | -107 |  |
|  |  | --- | --- | --- | --- | --- | --- | --- | --- | --- |

16.One may have a pause here and permit the transcending mind to be face to face with a poser as that how the sequentially increasing values line (1,
$2,3,4,5,6),---$, is to be made 'affine line' of equal values by compensating the increase at every step with a parallel decrease.
17.Here it would be relevant to note the first triple $(1,2,3)$ is the only primes triple.
18. The synthesis of pair of dimensions of order $n$ structures ( $n+2$ ) domain.
19.The synthesis of three dimensions leads to the equal value for every dimensional order being equal to ' 6 '.
20.However from the phase and stage of synthesis of four and higher number of dimensions for whole range of dimensional spaces, that is for whole range of dimensional order, follows a definite rule, and it is as is summed up above as that the decrease from fourth column onwards is of the sequential values $(2,2+3,2+3+4,2+3+4+5,---)$ and so on.
21.Here it would be relevant to note that artifice 2 and parallel to it 2-space plays the role of dimensional value of artifice value 4 / 4-space.
22.Further as that artifice 3 / 3-space plays the dimensional value of artifice 5 / 5-space.
23. One may have a pause here and take note that the decrease at fifth column is of the combined value of artifices 2 and 3 which means the combined dimensional values of 4 -space and 5 -space.
24.Likewise the decrease at every subsequent step shall be the sequential sum up of the values of artifices $2+3+4$, --- up till the column $(r+3)$ the values are being calculated.
25.It shall be bringing to focus that the manifestation within creator's space (4-space) permit transcendence at the origin and this transcendence is of sequential steps which makes the origin being the compactified origin of whole range of hyper spaces.
26. With it there emerges a transcendental phenomenon of internal expansion.
27.One may have a pause and be face to face with this blissful phenomenon and to comprehend it completely and to imbibe its values fully as values of mathematics of synthesis of dimensions of all orders.
28.

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