

Sri – Om
VEDIC MATHEMATICS AWARENESS YEAR

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'Credit goes to Swami Bharti Krshna Tirtha Ji Maharaj to focus the attention of present generation about the values of Ganita Sutras (mental Mathematics Sutras)'

All are invited to join Awareness program

All are warmly invited to join the awareness program of Vedic Mathematics. All teachers, parents and students are invited to Learn and Teach Vedic Mathematics for proper intelligence growth at School.

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Sankhya Nishtha and Yoga Nishtha

II

Quadruple phases and stages of manifestation

(व्यक्तः Vykata, अव्यक्तः Avykata, अव्यक्तोऽव्यक्तात् / सनातनः
Avykato Avykatat / Sanatana and पुरुष Pursha)

III

**Om (ॐ), Parnava (प्रणवः), Aum (ओम्)
and Aumkar (ओमकार)**

IV

**Body (शरीर), Mind (मन), Intelligence (बुद्धि),
consciousness (चित), soul (आत्मा) , Brahm (ब्रह्म)**

V

Single letters meanings Dictionary

1. To reach at Vedic Systems formats, it would be essential to first of all reach at single letters meaning Dictionary.
2. Compilation of such dictionaries has been the focus of attention since times in memorial.
3. The values of such dictionaries is well evident from the fact that Lord Krishna in His divine song (Shrimad Bhagwag Geeta enlightened as that amongst akshras syllable) He is the first syllable Akara (अ)

4. Shrimad Bhagwag Geeta further enlighten about the values of 'आ' / elongated first vowel comparing it to be with the cyclic features of 'ब्रह्म्, लोक, भुवन.
5. The parallel values formats for letters 'अ, ओ, म्' as parallel to padas / quarters of Braham and Atman.
6. It is impressed upon Sadkhas and scholars to reach at one's own single letters meanings dictionaries as on this foundation only the values and features of Vedic Systems can be reached at.
7. Once single letters meanings dictionary stands reached at, then at next step the need would the reach at syllable dictionary.
8. It is only, in the background of availability of single letters and syllables dictionaries that one can proceed further with meanings of words formulations of Vedic Systems.
9. It would be relevant to note that the meanings of words formulations are directly related to the formats of features of Existence Phenomenon.
10. That way the manifestations of Existence Phenomenon get associated with words formulations.
11. This successful association of word formulations with manifestations of Existence Phenomenon that Vedic Systems go parallel to the Existence Phenomenon of our solar universe.

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19-01-2015

Dr. S. K. Kapoor, *(Ved Ratan)*

***One thousand pure and applied values
of Ganita Sutras and Ganita Upsutras***

श्री ॐ
Sri-om

- I** *One thousand pure and applied values*
II **Chase of organization format and features**
III **Revisit the Discipline and organization of Ganita Sutras and Upsutras
with an urge to know more about its values and unfolding processes**

**IV
Steps to reach at organization format of the
text of Ganita Sutras and Ganita Upsutras**

1. One may start chase for the reach at the steps of organization format of the text of Ganita Sutras and Ganita Upsutras by initiating chase with the feature as under:-

Sole syllable	Ganita Sutra 1	Ganita Uputra 1	End reach value
ॐ	एकाधिकेन पूर्वेषु	अनुरूप्येण	प्रणवः

- The transcendental (5-space) code values yield artifices triple (16, 26, 36) with TCV (ॐ) = 16 and TCV (प्रणवः) = 36 and TCV (सोपान) = 26.
2. This as such leads us to organization chase step being ॐ (16), सोपान (26) and (प्रणवः) = 36
3. Here It would be relevant to note that total letters of text of Ganita Sutra 1 together with letters of text of Ganita Sutra 1 come to be 26.
4. Still further it also would be relevant to note that transcendental (5-space) code value of the first letter of the text of Ganita Sutra 1 comes to be: TCV (ए) = 6
5. Still further it also would be relevant to note that number 6 / artifice 6 / 6-space/ hyper cube 6 / Sun are of parallel format and features.
6. Still further It also would be relevant to note that 6-space accepts 13 geometries range and parallel to it there are 13 versions of hyper cube 6.
7. Still further It also would be relevant to note that Ganita Sutra 13 (सोपान्त्यद्वयमन्तम्) focus upon the format and features of formulation of 'सोपान'.
8. One may have a pause here and take note that simple meanings of formulation 'सोपान' is parallel to domain fold.
9. As the text of Ganita Sutra 13 implies with focus that 'Sopan' accepts a pair of end values.
10. This feature is parallel to the feature of the boundary fold being of double number of components ($A^n: 2nB^{n-1}$)
11. One may have a pause here and take note that the close interval (hyper cube 1) is having a pair of end points.

12. With it the organization chase of the text of Ganita Sutras (and also of Ganita Upsutras) is to focus the format of hyper cube 1 (and in general the format of hyper cube n).
13. The working rule of Ganita Sutra 1 'one more than before' settles a sequential progression of ascending order initiated from one end point of an interval.
14. So initiated, uptill Sutra – 13, the format of close interval stands settled, which may be taken as having fixation of the second point of the interval as well.
15. Once the second end point of the interval, as well stands settled then the sequential progression from second end point towards first end point as comparison to the initial sequential progression of ascending order, this second progression, that way, being of opposite orientation, would be the sequential progression of decending order.
16. With it the format and features of the text of Ganita Sutra 14 come into play.
17. This settlement of the format of close interval / hyper cube 1 as a format for the pair of orientations (+1, -1) parallel to (+1) space as domain fold (-1) space as dimension fold and the end points being of format and values of 0 space in pair, would synthesize $(0, 0) = 2$ / pair of dimension of 0 order synthesizing value 2 / 2-space completing four fold format for hyper cube 1 (-1) space as dimension, 0-space as boundary, + 1 space as domain, 2-space as origin shall be making it a of a manifestation format for the role of 'axis' of a dimensional frame.
18. Once this settlement is therefore the dimensional axes, then the pair of axes shall be making out a dimensional frame of two space and with it would stand settled the format and features of Ganita Sutra 15 and a step ahead the permissibility of transposition for the two dimensional frame within 2-space (surface) / square will be making transposed rotational permissibility into a two dimensional frame being cross wise in reference to original two dimensional frame.
19. And with it the format and features of Ganita Sutra 16 would stand settled.
20. With it the symbols (+) and (x) for the addition and multiplication operations as well stands settled
21. One may have a pause here and take note that of the artifices range 1 to 13, artifice 7 is of middle placement.
22. Further of the artifices range 1 to 7 is of artifices 4 middle placement.
23. The sequential chase steps as first axis, pair of axes, all the three axes and seven geometries range of 3-space and parallel to it there being 7 versions of cube shall be leading us to quadruple artifices (1, 2, 3, 7).
24. The format and features of artifices quadruple (1, 2, 3, 7) and parallel to it four steps chase along (first axis, pair of axes, triple axes and seven versions range will provide parallel formats and features for Ganita Sutras 1, 2, 3 and 7 respectively
25. One may have a pause here and take note that cube has 8 corner points which permit coordination in a sequential progression of ascending order of seven edges.
26. One shall revisit this organization to comprehended and appreciate features of this organization and to imbibe the same to have insight about this organization.

27. This format and features of this organization of seven edges sequential progression of ascending order shall be bringing us face to face with the distinct features of fourth and seventh edges.
28. The distinct features of this pair of edges namely of fourth and seventh edges from those of remaining edges namely (firstly, second, third, fifth and sixth edges) comes to be that in case of this pair of edges namely (fourth and seventh edges), there is super imposition of pair of orientations.
29. One may further have a pause here and take note that first set of triple edges (1st, 2nd and 3rd edges) and second set of triple edges namely (5th, 6th and 7th) edges are of opposite orientations.
30. Still further it also would be relevant to note that while the sequential progression will reach at its seventh step along 7th edge then it being the end reach, there would be a reversal of progression which would mean that the first reversal step shall be along 7th step itself.
31. With this the format and features of the fourth edge go parallel to the format and features of Ganita Sutra 4.
32. Further the format and features of 7th edge go parallel to Ganita Sutra 7.
33. One may have a pause here and take note that Ganita Sutra 4 is of the working rule 'transpose and apply / unite'
34. Further the working rule of Ganita Sutra 7 is 'addition and minus' simultaneously.
35. Still further while having sequential progression of increasing order, there would be reach of first three edges orientation being opposite to the orientation of last three edges.
36. This pairing of opposite orientations amounts to having neutralization for them and hence of 0 value.
37. It would be the parallel to format and features of Ganita Sutra 5.
38. Likewise during sequential progression of decreasing order as well the pairing of reversal orientations for the last three edges and first three edges here two would be neutralization yielding 0 value.
39. And it would be parallel to the format and features of Ganita Sutra 6.
40. One may have a pause here and take note that the above steps have attained reach for Ganita Sutra 1 to Ganita Sutra 7.
41. One may further have a pause here and take note that Ganita Sutra 1 text is of a pair of word formulation (एकाधिकेन) and (पूर्वेण)
42. This pair of formulation namely (एकाधिकेन) and (पूर्वेण) are compositions of 9 and 7 letters respectively.
43. One may have a pause here and take note that this artifices pair (9, 7) is parallel to 9 geometries of 4-space / 9 versions of hyper cube 4 and 7 geometries of 3-space / 7 versions of cube.
44. With it the coverage of Sutras 1 to 7 along format of cube will lead us for further steps of coverage of Ganita Sutras 8 to 16 along format of hyper cube 4.
45. Here It would be relevant to note that the cube / 3-space is of linear order while hyper cube 4 / 4-space is of spatial order.
46. One may have a pause here and take note that the numbers values sequence attained by the working rule of Ganita Sutra 1 (one more than before) comes to be (1, 2, 3, 4, 5, 6, 7, ---)

47. Now if have a pause and be face to face with the inner organization of values of numbers (1, 2, 3, 4, 5, 7, ----) we shall be comprehending and appreciating and imbibing and having insight about the inner organization of this number sequence leading us to the values sequence ($2^0, 2^1, 2^2, 2^3, 2^4, \dots$)
48. One may have a pause here and take note that the in respect of number 1 there is only organization arrangement for this value namely ($1=1$).
49. However in case of number 2 this organization arrangement would lead to two ways reach at value as (i) $2=2$ (ii) $2=1+1$.
50. Still further in case of number 3, in its internal organization arrangement would lead to four sets of values as (i) $3=3$ (ii) $3=1+2$ (iii) $3=2+1$ (iv) $3=1+1+1$.
51. It would be blissful to chase internal organization arrangement of value 4 for number 4 which would be 8 in count.
52. Like wise chase can be in number 5, 6 and so on.
53. One may further have a pause here and take note that the outer most values sequence (1, 2, 3, 4, 5, 6, ---) with inner folds sequence ($2^0, 2^1, 2^2, 2^3, \dots$) there would be a reach at the organization formats of hyper cubes .
54. Let us have a pause and chase number 3.
55. The inner organization arrangement of number 3 for total counts of reach at value 3 comes to be $2^2=4$.
56. The format of hyper cube 1 (close interval), leads to four versions of interval namely (i) close interval (ii) open interval (iii) half closed on left and half open (on right) (iv) half open (on left and half close on right)
57. One may have a pause here and take note that the number 3, with its internal organization arrangement of value 3 of four counts and its geometric formats being of hyper cube 1 (close interval) with four versions of interval.
58. These features will help us comprehend and appreciate the interrelationship of artifices pair (3, 1) parallel to (3-space, 1-space) coordination and parallel to it the coordination of the formats of hyper cube 3 (cube) and hyper cube 1 (close interval).
59. Further It would be bring to focus the four folds sets ups of hyper cubes.
60. This way the shift from 1^3 to 2^3 shall be helping us to have transition from the format of hyper cube 3 to format of hyper cube 4 and thereby the chase steps for the organization formats of Ganita Sutra 8 to 16.
61. One may have a pause here and take note that the transition from 1^3 to 2^3 is parallel to have a transition from a single unit close interval to double unit close interval.
62. This transition would be further parallel to a two point fixation of a line to three point fixation of a line
63. With this three point fixation format of a line, there can be cut and split for this interval into two parts.
64. One may have a pause here and take note that this split shall be having a placement for the middle point either in the first or in the second part.
65. With it the split for the close interval would be into a close interval and half close interval.
66. It would go parallel to the format and features of Ganita Sutra 8 (पूरणापूरणाभ्याम् ।) / (complete and incomplete)
67. One may have a pause here and take note that the middle point may have any of the placements in between the pair of end points.
68. It as such shall be going parallel to the format and features of Ganita Sutra 9.
69. The deficiency of one part over the other part would be the feature which plays its role. And with it comes in play ganita sutra 10.

70. One may have a pause here and take note that the split of close interval into a close interval and a half closed interval shall be making original bigger close interval and subsequent smaller close interval
71. But in case of both there being a full structural format of a close interval.
72. This will take us to the format and features of Ganita Sutra 11.
73. One may have a pause here and take note that the middle point, as an end point of close interval is the end reach point and it goes parallel to the format and features of Ganita Sutra 12.
74. The availability of both the end points amounts to competition of the attainment of the format and features of a close interval and in general of the format of hyper cube n which goes parallel to the format and features to Ganita Sutras 13.
75. The availability of both the end points, as such shall be the attainability of sequential progressions of both orientations with first orientation initiated along the format and features of Ganita Sutra 1 and second orientation attainability of the format and features of Ganita Sutras 14.
76. The competition of format for the axes (as of hyper cube), there would be an attainability of formation of dimensional frames and permissibility of transposition of dimensional frame within dimensional domains and thereby would be the attainability of format and features of Ganita Sutras 15 and 16 respectively
77. With it, phase and stage of chase comes of the Discipline of Ganita Sutras and Ganita Upsutras along its organization format.
78. For it, one shall visit and revisit the text and tabulate and categorize formulations availed by the text.
79. Illustratively the text avails formulation $(0) = (0)$, $1 = 1$, $द्वो = 2$, $सप्त = 7$ and $नौ = 9$ and $दस = 10$
80. One shall pose to oneself and as to why only these 6 numbers are being made part of the text and try to answer as to how in terms of only these numbers, the structures of other number can be reached at.
81. Further one may pose to one self as to why only the directions (पूर्व) = east, उर्ध्व = upward, त्रिर्यक = diagonal wise / crosswise and अध = downward are being made part of the text and as that how in terms of only this set of directions the whole range of directional frame for the universe can be worked out.
82. Likewise text deserve to be categorized and classify to reach at the working systems and attainability of Mathematics of Ganita Sutras and Upusttras.

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