List of VM Consolidated documents of Dr. S. K. Kapoor List 4
Manuscript - 6 GANITA SUTRA 1 AND INTELLIGENCE FIELD

## GANITA SUTRA 1 AND INTELLIGENCE FIELD

# VM Article - 1 <br> GANITA SUTRA 1 AND INTELLIGENCE FIELD 

## GANITA SUTRA 1 AND INTELLIGENCE FIELD

## I <br> MENTAL MATHEMATICS VIRTUE

1. To appreciate mental Mathematics virtue of Ganita Sutras, one shall have parallel appreciation of the organization format of Ganita Sutras and intelligence field within human mind.
2. Human mind within human body is manifested creation along the creation format of idol of Lord Brahma, 4 Head Lord, Creator of the Supreme.
3. Lord Brahma, Creator of the Supreme manifests His own idol as well within Creator's space ( 4 space) along the four fold creation format of spatial order ( 2 space in the role of dimension of 4 space).
4. Four fold creation format is a four fold manifestation layer ( $2,3,4,5$ ) of hyper cube 4 , the representative regular body of 4 space content manifesting as domain fold of hyper cube 4
5. This four fold manifestation format as a four fold manifestation layer ( $2,3,4,5$ ) is of summation value $2+3+4+5=14$ as transcendental code value 14 as 5 space plays the role of origin fold of hyper cube 4 .
6. One may have a pause here and take note that 5 space is a solid order space and as such the transcendental origin of 4 space gets imbedded with a solid order dimensional frame of 5 solid dimensions with dimensional value $3 \times 5=15$
7. One may have a pause here and take note that the equipping of four fold creation format of hyper cube 4 with solid order dimensional frame at its origin fold leads to a set up of $14+15=29$ value.
8. One may have a pause here and take note that $14+15=29$ is parallel to transcendental code value 29 of word formulation "BRAHMA".
9. One may further have a pause here and take note that the word formulation " MANN" ( Mind) and " SHAKTI" ( Power) are accepting transcendental code values pair (19, 10) with summation value $19+10=29$ parallel to transcendental code value 29 of word formulation " BRAHMA".
10. One may have a pause here and take note that there are 16 sutras and 13 upsutras making it out a set up of 29 formulation.
11. It would be blissful to take note that organization of double digit numbers of 10 place value system organize themselves along $9 \times 11$ grid which splits itself as upper and lower part with upper part being a set up of 29 reflection pairs of double digit numbers of which 16 reflection pairs are of double digit numbers with distinct digits and none of them being a zero. The remaining reflection pairs are 13 in numbers. This goes parallel to the organization of 16 sutras and 13 upsutras .
12. It would be blissful to take note that the above organization is the format of organization of the text of the last $13^{\text {th }}$ chapter of scripture Srimad Durga Satt Sati.
13. It also would be blissful to take note that the word formulation Pran, Vayu ( Life, Breath) comes to be 16+13.
14. These features will help us comprehend and appreciate the mental Mathematics features , values and virtues of the Mathematical domain of Ganita Sutras.
15. 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 .
16. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

# VM Article－ 1 <br> GANITA SUTRA 1 AND INTELLIGENCE FIELD 

ニニニニニニニニニニニニニニニニニニニニニニニニニニニニニニニニニ

II

## SELF REFERRAL ORGANIZATION FEATURE OF GANITA SUTRAS

1．It is the self referral organization feature of Ganita Sutras which deserve to be comprehended well and to be properly appreciated to imbibe the parallel formats of Mathematical domain of Ganita Sutras，and of the intelligence field of human mind．
2．It is the spatial order（ 2 space in the role of dimension ）of creation format of Creator＇s space（ 4 space）which is at the base of whole range of manifested creation and parallel to it of Vedas，the organized discipline of knowledge．
3．The self referral organization feature is 12 reflected in the set up of human mind as a synthetic set up of pair of parts．
4．This self referral feature is also well reflected in the organization format of Ganita Sutras as that parallel to 16 letters values and formats of the text of Ganita Sutra 1 are the structural keys of Ganita Sutra 1 to Ganita Sutra 16 respectively in parallel sequence and order with those of sequence and order of values and formats of the letters of the text of Ganita Sutra 1 itself．
5．It is this feature which makes Ganita Sutra 1 as the source sutra．
6．The self unfolding feature of Ganita Sutra 1 in terms of its very first letter supplies us the basic structural key of chase of the organization format of whole range of Ganita Sutras Mathematical domains and parallel to it to have a reach at
the whole range of values and virtues of the intelligence field of human mind.
7. Accordingly it becomes the solemn responsibility of Vedic Mathematics teachers to approach learning and teaching methodology of Vedic Mathematics parallel to the start with absolute state of innocence values and virtues of young $\operatorname{mind}(\mathrm{s})$.

# VM Article - 1 <br> GANITA SUTRA 1 AND INTELLIGENCE FIELD 

## III

LET US REVISIT THE TEXT OF GANITA SUTRA 1
GANITA SUTRA 1
एकाधिकेन पूर्वेण

## Ekadhiken Purvena

One more than before
LETTERWISE TEXT CHASE

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ए | क् | आ | ध् | इ | के | ए | नू | अ |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |  |  |
| प् | उ | र. | व् | ए | ण | अ |  |  |

UNFOLDING FORMAT


1. Read the text loudly .
2. Pronounce loudly letter-wise.
3. Recite the text .
4. Appreciate the sequential arrangements of the 16 letters being availed.
5. Have a halt at each of these 16 steps of placements of these 16 letters.
6. The first placement is of the $6^{\text {th }}$ vowel.
7. Have a pause here and revisit this choice for the very first placement.
8. It is the $6^{\text {th }}$ vowel.,
9. Being the $6^{\text {th }}$ vowel it accepts value 6 .
10. Parallel to it is 6 space.
11. Hyper cube 6 is the representative regular body of 6 space as 6 space content manifests as domain fold of hyper cube 6
12. Imbibe the value 6 and parallel geometric format of this placement as of 6 space.
13. It would be blissful to take note that number value 6 is the value of Surya (Sun).
14. Number value 6 is the first perfect number .
15. 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 .
16. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
17. It would be blissful to take note that Earth to Sun is a 6 steps long range.
18. 5 senses and $6^{\text {th }}$ mind as well constitute a 6 step long range.
19. There are Shudchakras of human frame .
20. With this $6^{\text {th }}$ chakra, mind, Sun, Soul (Atma) get parallel placements.
21. It is this parallel placement of different sequential strings, as above, which will permit chase along the same format .
22. In other words it may be said that these strings are of parallel formats.
23. These are of parallel progression formats lines.
24. This will bring us face to face with the application simultaneously along parallel lines.
25. It is this feature, in particular, which makes Vedic Mathematical systems of very rich applied values discipline.
26. This has been about the first placement.
27. The second placement takes to the second letter ( ka), the first consonant.
28. First consonant ( Ka ) is the first verga consonant .
29. It is the first letter of the first row .
30. It is also the first letter of the first column.
31. These all features bring to focus of reach at the second placement.
32. "Ka-Brahma, Ka-Shiv" are the meanings/values of letter Ka.
33. It makes of the full range beginning with 4 space presided by Lord Brahma to 5 space presided by Lord Shiv .
34. One may have a pause here and take note that 6 space and 4 space are related to each other as 4 space playing the role of dimension of 6 space.
35. Further as that 4 space is presided by Lord Brahma and Lord Brahma during meditation with grace of transcendental Lord Shiv multiplies as 10 Brahmas.
36. It is this feature which takes from four fold manifestation format to five fold transcendence domain ( 5 space).
37. This way the sequential unfolding process is coming into play.
38. It is this reach from first letter of first placement of text of Ganita Sutra 1 to $16^{\text {th }}$ letter of $16^{\text {th }}$ placement of text of Ganita Sutra 1 which will bring us face to face with the values of the organization format of text of Ganita Sutra 1, and a step ahead, about the organization format of the text of Ganita Sutra 1 to Ganita Sutra 16 , and also to the mathematical domains of Ganita Upsutra 1 to Ganita upsutra 13.
39. It is this unfolding process which is to be delicately chased and to be learnt and to be taught appropriately to the young minds.
40. It is this responsibility which is to be discharged by V.M.Teachers.
41. 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 .
42. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## IV <br> SIXTEEN PLACEMENTS FEATURES

1. $16^{\text {TH }}$ placement features values range is $(6,4,2,7,2,4,6,8,1$; 5,6,7,6,2,7,1) .
2. This range chase along with their respective geometric format as sequential progression step of values (6), (6,4), ( $6,4,2), \quad(6,4,2,7), \quad(6,4,2,7,2), \quad 6,4,2,7,2,4,6)$, ( $6,4,2,7,2,4,6,8)$, ( 6,4,2,7,2,4,6,8,1), ( 6,4,2,7,2,4,6,8,1,5), ( 6,4,2,7,2,4,6,8,1,5,6), (6,4,2,7,2,4,6,8,1,5,6,7), $(6,4,2,7,2,4,6,8,1,5,6,7,6), \quad(6,4,2,7,2,4,6,8,1,5,6,7,6,2)$,
(6,4,2,7,2,4,6,8,1,5,6,7,6,2,7) and finally as

$$
6,4,2,7,2,4,6,8,1 ; 5,6,7,6,2,7,1) .
$$

3. This aspect is being left here with present focus being only upon on the first letter placement and format and the working rule of Ganita Sutra 1 " One more than before", which is being taken up hereunder.

## V <br> RULE " ONE MORE THAN BEFORE"

1. With 6 space as domain fold as manifested 6 space content lump permitting chase by a rule " One more than one", as such brings us face to face with conceiving of "One" as constituent ( 6 space content lump of 6 space domain).
2. It is this conceiving of "One" which that way becomes the initiation point
3. This is the initiation point of " Intelligence" being fulfilled in " Affine State" of young mind.
4. It is the initiation point of chase of domain in terms of its " constituent(s)".
5. Constituent is an entity and association of value " 1 ", as such is setting the rule in progression by having association of similar value as value " 1 " with every entity/constituent of the domain.
6. "One more than before" will take from the given constituent to another constituent.
7. It is this pairing which is a leap forward of the chase .
8. Reach at a pair of constituent as per the rule " One more than before", is an attainment .
9. It is like, initially having one pick of constituent/entity / body.
10. And then there being a repeated pick, 2 times picks, and having attainment of a reach from initial one pick to a pair of picks.
11. Designating this attainment as value " 2 ", amounts to further fulfil intelligence in to innocence state of mind.
12. It is this reach of conceiving " 1 " and then as a step ahead, also as " 2 " is going to make a very big difference in the previous innocence state.
13. It brings in "Counts".
14. It brings in Mathematics of "Counting".
15. A reach from count 1 to count 2 , is a counting reach .
16. It also brings in sequency .
17. It brings in an arrangement,
18. It also bring in the organization.
19. As well as an order.
20. All these features deserve to be phased by proper phasing of learning through phased teaching.
21. A step ahead and the third pick and availability of triple constituent/ bodies/entities is going to be a big leap forward.
22. It would be setting in a step by step counting.
23. A step by step ordering.
24. A sequency
25. And a linear progression.
26. A counting.
27. A setting of points/entities/bodies/constituents, one after the other .
28. It is designated as forward progressing counting.
29. Ganita upsutra 1 gives the rule of symmetry .
30. With it, a shift can be had from direct counting to reverse counting.
31. Transition from direct counting to reverse counting , in itself, is a very delicate introduction of additional intelligence to the innocence state.
32. It deserves to be learnt and to be taught in appropriately delicate manner.
33. Here the concept of direction and orientation will be coming into play.
34. It is reverse of reaching from count 1 to count 2 .
35. It is a back reach from count 2 to count 1.
36. Direct counting uptil some steps is going to be the measure of imbibing the values of Mathematics of direct counting.
37. Likewise reverse counting from any count back uptil any previous count, as well is going to be an index of imbibing of the values of Mathematics of reverse counting.
38. With the help of rule of symmetry, young minds can be taught direct counting with jumps.
39. It may be start with a one count jump at a time.
40. It will with first step as count 1 take at next step at count 3 , as here there is going to be a jump over count 2 .
41. This art of counting with a jump over one count will sequentially take counting attainment as " One, Three, Five, ---------".
42. Parallel to it, the reverse counting with one jump shall with first step as " count 9 " will sequentially take to " first step as count 9 , second step as count 7 , third step as count $5,---$
$\qquad$ ".
43. With perfection of the art of direct and reverse counting and further of direct and reverse counting with one jump at each step, the further lessons should be of direct and reverse counting with 2 count jump at each step, then direct and reverse counting with 3 count jump at a time, and this art may be practiced for bigger jumps
44. With emerging maturity, young minds to be exposed to direct counting with different jumps at different steps.
45. Likewise practice should be of reverse counting with different jumps at different steps.
46. With further maturity simultaneous direct and reverse counting steps Mathematics art may be practiced.
47. Further in stead of single counting string of steps, practice may be had of simultaneously progressive counting steps along a pair of strings.
48. One may have a pause here and take note that each counting string may be taken as a single column or single row progression art permitting expression as ( $1,2,3,------------)$ ).
49. The pair of simultaneous string progression would be availing a format of a pair of columns/rows having independent progression steps .
50. Like first row ( $1,2,3,----------$ ) and second row as well ( 1,2,3, --------------).
51. It would be blissful to take note that it will be bringing us face to face with simultaneous progression along pair of rows as of steps attainments values as $(1,1),(2,2),(3,3)$, ---
52. It would be blissful to take note that it will help us have its applied value providing us the reach of attainment of table 11 as $(1,1=11,2,2=22,3,3=33$, -------------$)$.
53. This art, on its practice will further mature young mind for simultaneous handling of 3,4 or higher number of strings of progression formats as of 3,4 or higher number of rows/columns.
54. Illustratively the table of 111 being of value 111,222 , ----------- will follow.
55. It would be very blissful to take note that this simultaneous availability of format of more than one number of rows/columns for strings of values steps will take us from similar counting progressions along each of the row /column/string.
56. Illustratively the table 12 as $12,24,36$, ------------ is availing pair of rows with one of it having counting rule $2,4,6$, -------- while the another row is having the counting rule ( $1,2,3,------------)$.
57. This art perfection will mature young mind.
58. The innocence state of young mind will get fulfilled with the intelligence of sequential progression parallel to the sequential progression of the counts.
59. With this perfection will follow the satisfaction of ensured initiation of intelligence growth within the young minds.
60. Understanding and practice are the key words here.
61. Rules of Ganita Sutra 1 " One more than before" and rule of Ganita upsutra 1 "Symmetry" are the Mathematical basis for laying foundation of initial stage intelligence growth with in young minds.
62. The whole responsibility lies upon Vedic Mathematics teachers to attain this growth in the young minds.
63. 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
64. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## VI <br> SETS OF COUNTS AND STRINGS OF COUNTS

1. The art of counting, direct and reverse, with and without jumps, of equal and unequal jumps, and of different jumps and different steps and simultaneous direct and reverse counting at different steps as a single stream and then all these features of pairs of strings of counts will mature young minds.
2. The intelligence features of art of counting along single or more strings will further mature young minds .
3. The sets of counts of different steps of given strings will bring us face to face with different features, which make a counting Mathematics .
4. The concept of coordinality as the total number of counts will come into play .
5. The sequencing of counts as well will come into play .
6. Coordinality comparison would be the feature which would require its chase .
7. The placement features of counts will also require chase .
8. The comparison of sets of counts and the comparison of the placement of counts in different strings will make a Mathematics, whose learning will further mature young minds.
9. The art of constructing measuring rods, marking the barometers, erecting mile stones along the roads, and all that will give practical exposure to the imbibed values of Mathematics of counts .
10. Associating roll numbers , allotting numbers to houses, issuance of tickets as per the seats in the bus, making queues, settling time tables and all that as well be the values of art of Mathematics of counts.
11. Queues may not be along a line, roads may not be straight, houses in the city may not be in straight or circular lanes, lions in the forest may not have fixed location points as per their senses chips and recalling of pigeons at the feeding time by the owner may not expect their feeding pots as per their chips being parallel to the placements order of their feeding pots, but still, the Mathematics of counts will be at play in all these situations.
12. This art of values of Mathematics of counts of rule " One more than before" together the symmetry rule of Ganita Sutra 1, Ganita upsutra 1 simultaneously at work deserve to be learnt and to be taught for maturity of the young minds.
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 features formats .
14. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight
about the values and appropriate enlightenment about the virtues of this phenomenon.

## VII <br> CLASSIFICATION OF SETS OF ENTITIES ACCEPTING ASSOCIATION OF COUNTS, OF FINITE STEPS

1. Text of Ganita Sutra 1 is one such set of 16 letters .
2. These letters accept association of values 1 to 16 as per placements of these 16 letters.
3. Of these letters, there are 2 words of 9 and 7 letters each.
4. These 2 letters make a pair of sub sets of 9 and 7 letters respectively .
5. These sub sets as well have arrangement of placements 1 to 9 and parallel to it these will accept values 1 to 9 .
6. The second sub set being of 7 letters is having 7 placements and parallel to it these will have association of values 1 to 7 .
7. One may have a pause here and take note that second sub set as part of the original set is also having association of values ( $10,11,12,13,14,15,16$ ).
8. This way this sub set is having association of a pair of values for each of its letters.
9. These 16 letters permit their classification as 8 vowels and 8 consonants.
10. It would be a blissful exercise to reach at placements of 8 vowels.
11. Further it also would be blissful to reach at placements of 8 consonants.
12. Vowels are having their respective placements in the string of 9 vowels of Devnagri alphabet.
13. As such as per the placements of the respective vowels in the strings of 9 vowels of Devnagri alphabet, there would be an association of values for them as per their placements there.
14. Further the letters of the text of Ganita Sutra 1 shall be having association of values with them as per their placements in the text of Ganita Sutra 1.
15. Further as that each letter of Devnagri alphabet is having along with their respective transcendental code values, parallel geometric format as well.
16. With it the classification of letters of the text of Ganita Sutra 1 shall be making very rich spectrum as per the placements, values and formats.
17. It would be blissful exercise to revisit the following values strings coming into play here in the context of the set of letters of the text of Ganita Sutra 1 .
i) Numbers 1 to 16 .
ii) Placements Ist to $16^{\text {th }}$.
iii) Placements of vowels strings 1 to 9 .
iv) Placements of consonants, verga and others .
v) Transcendental code values of letters.
vi) Geometric format of individual letters.
vii) Transcendental code values string ( 6,4,2,7,2,4,6,8,1,5,6,7,6,2,7,1).
viii) Geometric format ( 6 space, 4 space, 2 space, -------------).
ix) Letters sequentially constituting formulations as the first letter as a formulation, first pair of letters as a formulation, first 3 letters as a formulation and so on.
x) First letter as a structural key of sutra 1.
xi) Second letter as a structural key of sutra 2, and so on.
xii) $\quad 16^{\text {th }}$ letter as the structural key of sutra 16 .
xiii) Ganita upsutra 1 as of gap placement of sutras 1 and 2.
xiv) Upsutra 2 as of gap placement of sutras 2 and 3 and so on, with the arrangement of first 7 upsutras, in the gaps, followed by self bridged gap of sutras 8 and 9
and then upsutras 8 to 13 of placements in between the gaps of sutra 9 to sutra 15 .
18 With it, it would follow that the chase of finite sets, in itself is a very big domain of Mathematics .
19 Accordingly the exposure to the Mathematics of finite sets is going to be a very delicate aspect which deserve to be had with appropriate delicate phasing of the same.
20 Vedic Mathematical systems of handling 4 consecutive counts at a time is of values and features, whose advantages deserve to be demonstrated well to make it comprehensible as to how the set of 9 such quadruples give a reach of very big range.
21 These 9 sets of quadruples are :
i) $(-1,01,2)$ parallel to four fold manifestation layer of hyper cube 1
ii) $(01,2,3)$ parallel to four fold manifestation layer of hyper cube 2
iii) 1, 2,3,4 parallel to four fold manifestation layer of hyper cube 3 .
iv) $2,3,4,5$ parallel to four fold manifestation layer of hyper cube 4.
v) $3,4,5,6$ parallel to four fold manifestation layer of hyper cube 5
vi) $4,5,6,7$ parallel to four fold manifestation layer of hyper cube 6
vii) $5,6,7,8$ parallel to four fold manifestation layer of hyper cube 7
viii) $6,7,8,9$ parallel to four fold manifestation layer of hyper cube 8
ix) $7,8,9,10$ parallel to four fold manifestation layer of hyper cube 9
18. The chase of above hyper cubes 1 to 9 is had in 3 steps as :
i) hyper cubes $1,2,3,4$
ii) hyper cubes $3,4,5,6$
iii) hyper cubes 6,7,8,9
19. Of these 3 steps, the first step of ( hyper cubes $1,2,3,4$ ) is a remanifestation of 3 space, firstly as 3 space domain of hyper cube 3 , and secondly as hyper cube 3 itself being in the role of domain fold .
20. The second step of ( hyper cubes $3,4,5,6$ ) is a remanifestation of 5 space, firstly as 5 space domain of hyper cube 5 , and secondly as hyper cube 5 itself being in the role of domain fold
21. The third step of (hyper cubes $6,7,8,9$ ) is a remanifestation of 8 space, firstly as 8 space domain of hyper cube 8 , and secondly as hyper cube 8 itself being in the role of domain fold
22. With it the remanifestation of 3 space, 5 space and 8 space comes in to play.
23. It is this remanifestation feature which deserve to be comprehended well and to be properly appreciated for imbibing the chase phenomenon of finite sets structures along the geometric format.
24. At the first step reach would be in the remanifested format for 3 space content as on its remanifestation being hyper cube 5 in its domain role.
25. Hyper cube 5 is a four fold manifestation layer ( $3,4,5,6$ ) of summation value 18 which goes parallel to 18 infinite series of finite groups .
26. The second step of 5 space in its remanifested format shall be leading us to hyper cube 8 as a domain fold.
27. It shall be accepting hyper cube 7 domain as in boundary fold role for hyper cube 8 in its domain fold role.
28. Hyper cube 7 is a four fold manifestation layer ( $5,6,7,8$ ) with summation value ( $5+6+7+8=26$ ) which leads to the format for 26 sporadic groups.
29. The third chase step is of remanifested role of 8 space as domain fold of hyper cube 8 which as domain fold accept
hyper cube 9 in its origin fold role for hyper cube 8 as domain fold.
30. Hyper cube 9 is a four fold manifestation layer ( $7,8,9,10$ ) which accept summation value $7+8+9+10=34$, which accept reorganization as $34=17+17$, which is parallel to the placement values for Northern Hemi-sphere along the spatial order format of pair of axes with each axis coordinating the Northern and Southern Hemi-spheres and thereby there emerges a reach for $(17+17)+(19+19)=72=6 \times 12$ coordinate fixation of transcendental boundary ( 5 space as boundary) of self referral domain ( 6 space).
31. It would be blissful to take note that Ganita Sutra 1 text is a composition of pair of formulation with first formulation Ekadhikena begins with the $6^{\text {th }}$ vowel of transcendental code value 6 and geometric format of 6 space while the first letter of the second formulation Purvena is the first letter of the fifth row of verga consonant which accept transcendental code value 5 and parallel geometric format being 5 space.
32. And further as that 5 space plays the role of boundary of 6 space

| Srimad Bhagwad Gita Study - Zone |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{a}{2}$ | $\frac{a^{2}}{4 a}$ | $\frac{a^{3}}{6 a^{2}}$ | $\frac{a^{4}}{8 a^{3}}$ | $\frac{a^{5}}{10 a^{4}} \frac{a^{6 i}}{12 a^{5}} \frac{a^{5}}{10 a^{4}}$ | $\frac{a^{2}}{8 a}$ | $\frac{a^{3}}{6 a^{2}}$ | 42 |  |
|  |  | 4 |  |  |  | 7 |  | T |
| $\begin{aligned} & 2 \times 1 \\ & =2 \\ & \hline \end{aligned}$ | $\begin{gathered} 4 \times 2 \\ =8 \end{gathered}$ | 683 $=18$ | $8 \times 4$ $=32$ |  | $8 \times 4$ $=32$ | $6 \times 3$ $=18$ | 4x | 2 x $=2$ |
| Orbitals |  |  |  | $350+350=700$ |  |  |  |  |
| 2 | 6 | 10 | 14 | $18=5+6+7$ |  |  |  |  |

37. Still further as that the study zone of Srimad Bhagwat Geeta is the reach of 6 space domain enveloped within 5 space domain and it permits depiction as abve.
38. Let us visit and re visit the above expression of study zone of Srimad Bhagwat Geeta and the above chase feature of Mathematics of Ganita Sutra 1 and imbibe these values .
39. 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 .
40. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
41. One may have a pause here and take note that domains split spectrum at $6^{\text {th }}$ step takes to 70 entities spectrum .
42. This range of domains disintegration spectrum of values $(1,2,5,12,29,70)$ further brings to focus that reach at $6^{\text {th }}$ step of spectrum entities along with transcendental boundary coordinates $6 \times 12=72$ makes a values pair $(70,72)$ of the format features of ( dimension, domain).

File-4, Ganita Sutra 2 and
intelligence field

## GANITA SUTRA 2 AND INTELLIGENCE FIELD

## I <br> GANITA SUTRA 2 TEXT

निखिलं नवतश्चरमं दशतः

## Nikhilam Navatascramam Dasatah <br> All from nine and last from ten

Letter-wise chase

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| न् | इ | ख् | इ | ल्व | अ | $\cdot$ | ने | अ | व् |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| अ | त् | अ | श | च. | अ | र | अ | म् | अ |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |  |  |
| $\cdot$ | द् | अ | श् | अ | त् | अ | : |  |  |

1. Ganita Sutra 2 is the second organization step, in continuity of the first organization step of Ganita Sutra 1.
2. Ganita Sutra 1 text avails 16 letters which leads to value 16 which is parallel to transcendental code value 16 of word formulation " Pran" ( Life).
3. Ganita Sutra 2 text avails 28 letters which leads to value 28, parallel to which is transcendental code value 28 of word formulation "Braham".
4. It is this feature of continuity as of " Pran" and "Braham", which deserves to be comprehended well .
5. The feature of this continuity will help us appreciate the enrichment process of intelligence field of human mind.
6. Prana is Braham.
7. Prana is fulfilled with the virtues of Braham.
8. Brahaman values manifest as Prana.
9. It is this intelligence field and enrichment step which deserve to be imbibed.
10. It is this value which is to be inculcated during learning and teaching process.
11. It is this value which is to be appreciated well and to be thoroughly imbibed to acquire deep insight and full
enlightenment about existence phenomenon within human frame.

## II <br> TRANSITION FROM GANITA SUTRA 1 TO GANITA SUTRA 2

1. Ganita Sutra 1 has first step and Ganita Sutra 2 has second step, as such as a transition gap in between .
2. This transition gap is bridged as Ganita upsutra 1.
3. The text of Ganita upsutra 1 is the text of 10 letters.

## Ganita Upsutra-1

## UPSUTRA - I

आनुरूप्ये

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| आ | न् | उ | र् | ऊ | प् | य् | ए | प् | अ |
| Total Letters | Vowels | Nasels | Consonents |  |  |  |  |  |  |
|  | 10 | 5 | - | 5 |  |  |  |  |  |

4. Values triple of the text letters of Ganita Sutra 1, Ganita upsutra 1 and Ganita Sutra 2 is " $16,10,28$ ".
5. The value of the letters of Ganita Sutra 1 and Ganita upsutra 1 is $16+10=26$.
6. The values pair ( 26,28 ) is of the format of ( dimension, domain).
7. One may have a pause here and take note that the first pair of letters of the text of Ganita Sutra 1 accepts values pair ( 6,4 ) which is of the format of ( domain, dimension )/ ( 6 space as domain, 4 space as dimension ).
8. 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 .
9. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
10. It would be blissful to imbibe the values of above organization features of transition from Ganita Sutra 1 to Ganita Sutra 2 with transition gap being fulfilled and bridged by Ganita upsutra 1.
11. One may have a pause here and take note that the value 10 is parallel to the transcendental code value 10 of word formulation " Shakti".
12. This, as such blissfully takes us to transcendental code value of Pran Shakti as 26.
13. It is this Pran Shakti which takes to Braham ( transcendental code value 28).
14. It is this feature of our existence phenomenon which deserves to be properly comprehended and to be fully appreciated to have its complete imbibing.
15. It is with this imbibing that the intelligence field will get enriched properly.
16. Further here it also would relevant to take note that the word formulation "Shodus" accepts number value 16.
17. Further as that the word formulation Shodus accept transcendental code value 26.
18. It is this feature which deserve to be comprehended well and same to be thoroughly appreciated.
19. One may further have a pause here and take note that " Shodusi" formulation accepts transcendental code value 29 parallel to the transcendental code value of word formulation Brahma .
20. It would be blissful to glimpse the inter-relationship of the values pair $(29,28)$ as transcendental code values pair of ( Brahma, Braham).

## III VALUES PAIR ( $\mathbf{1 6 , 2 8 )}$

1. The values pair $(16,28)$ as per the organization of text of Ganita Sutras 1 and 2 as double and triple words composition lead us to ( $9+7,7+14+7$ ).
2. The organization $(16=9+7)$ is parallel to values pair $(9,7)$ being parallel to the format of (domain, dimension ).
3. Further as that the organization $28=7+14+7$ takes us to values triple ( $7,14,7$ ) which accepts reorganization as ( 7 x 1, $7 \times 2,7 \times 1$ ).
4. It further takes us to organization $7(1,2,1)$.
5. It leads us to the format of an interval which permits reach for its middle from its both ends.
6. It takes us to 2 space in the role of origin fold of hyper cube 1 ( interval).
7. It would further be blissful to take note that $16=2^{4}$, which is parallel to quadruple values ( $2,2,2,2$ ) parallel to spatial dimensional frame of four dimensions of 4 space set up.
8. Further as that 5 space plays the role of origin of 4 space.
9. Still further as that number value 28 is the second perfect number and it accepts 5 proper divisors namely ( 1,2,4,7,14).
10. One may have a pause here and take note that this leads us to reorganization of number value $28=1+2+4+7+14=$ $7+14+7$, parallel to the format of the text of Ganita Sutra 2 .
11. 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 .
12. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
13. It would further be blissful to take note that number value 16 permit organization as $16=4 \times 4$.
14. It leads to grid format $4 \times 4$.
15. This grid format accommodates values range ( $1,2,3,4,5,6,7$ ) as of 4 consecutive four fold manifestation layers namely ( $1,2,3,4),(2,3,4,5), \quad(3,4,5,6)$ and $(4,5,6,7)$.
16. With it the values pair $(16,28)$ with their organization as $(4$ $\mathrm{x} 4,4 \times 7$ ) will help us appreciate inter-relationship thereof , in terms of the above organization format feature of $4 \times 4$ grid format, in particular .
17. 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 .
18. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## IV <br> LETTERS AND THEIR TRANSCENDENTAL CODE VALUES FEATURES

1. One other way to glimpse the transition and continuity of the organization format set up of the range Ganita Sutra 1 to Ganita Sutra 2 is to glimpse the text letters and their transcendental code values
2. Hereunder is tabulated the number of text letters and summation values of the transcendental code values of the texts of Ganita Sutras and Ganita upsutras.

| S.No. | G.S./G.U.S. | Letter | T.C.V.Values |
| :---: | :--- | :---: | :---: |
| 1 | Ganita Sutra-1 | 16 | 74 |
| 2 | Ganita Sutra 2 | 28 | 107 |
| 3 | Ganita Sutra 3 | 15 | 58 |
| 4 | Ganita Sutra 4 | 17 | 51 |
| 5 | Ganita Sutra 5 | 20 | 71 |
| 6 | Ganita Sutra 6 | 19 | 66 |
| 7 | Ganita Sutra 7 | 24 | 91 |
| 8 | Ganita Sutra 8 | 16 | 68 |
| 9 | Ganita Sutra 9 | 16 | 59 |
| 10 | Ganita Sutra 10 | 9 | 41 |
| 11 | Ganita Sutra 11 | 14 | 45 |
| 12 | Ganita Sutra 12 | 20 | 74 |
| 13 | Ganita Sutra 13 | 20 | 80 |
| 14 | Ganita Sutra 14 | 17 | 83 |
| 15 | Ganita Sutra 15 | 16 | 56 |
| 16 | Ganita Sutra 16 | 16 | 55 |
| 17 | Ganita upsutra 1 | 10 | 42 |
| 18 | Ganita upsutra 2 | 18 | 74 |
| 19 | Ganita upsutra 3 | 23 | 96 |


| 20 | Ganita upsutra 4 | 21 | 92 |
| :---: | :--- | :---: | :---: |
| 21 | Ganita upsutra 5 | 8 | 41 |
| 22 | Ganita upsutra 6 | 18 | 85 |
| 23 | Ganita upsutra 7 | 17 | 143 |
| 24 | Ganita upsutra 8 | 16 | 52 |
| 25 | Ganita upsutra 9 | 11 | 40 |
| 26 | Ganita upsutra <br> 10 | 16 | 56 |
| 27 | Ganita upsutra <br> 11 | 17 | 73 |
| 28 | Ganita upsutra <br> 12 | 9 | 44 |
| 29 | Ganita upsutra <br> 13 | 32 | 112 |
| Total: | 29 |  | 519 |

## V <br> LETTERS AND TCV TRIPLES OF GANITA SUTRA 1, GANITA UPSUTRA 1 AND GANITA SUTRA 2

1. Letters triple is $(16,10,28)$.
2. TCV values triple is $(74,42,107)$.
3. Letters difference of Ganita Sutras 1 and 2 is (28-16=12).
4. TCV values difference of Ganita Sutra 1 and 2 is ( 107$74=33$ ).
5. Number value 33 is of parallel placements for pair of digits $(3,3)$ parallel to the placement of a pair of 3 dimensional frame of half dimensions along with eachother at the common origin of the 3 dimensional frame of full dimensions.
6. The split of a 3 dimensional frame into a pair of 3 dimensional frame of half dimensions results into release of the origin which is of the spatial order of 4 space set up.
7. One may have a pause here and take note that the release of spatial order 4 space as origin of 3 space is parallel to the number value " 42 ", which is the transcendental code value of Ganita upsutra 1.
8. Further as that the split of 3 dimensional frame as above leads to the set up of value $3+4+3=10$.
9. One may have a pause here and take note that before split, origin of 3 space/centre of cube as a point of 3 space/point of cube will lead us to value set up $3+3+3=9$.
10. One may have a pause here and take note that this values pair ( 9,10 ), as such goes parallel to the features of the working rule of Ganita Sutra 2, i.e.. " all from 9 and last from $10^{\prime \prime}$.
11. One may further have a pause here and take note that values pair ( 9,10 ) also accept reorganization as $9=2 \times 4+1$
which is parallel to 9 geometries range of 4 space parallel to which are 9 versions of hyper cube 4 .
12. Further $10=2 \times 5$ is parallel to creative boundary ( 4 space as boundary ) of transcendental domain ( 5 space) of 10 components.
13. One may have a pause here and take note that all steps along the geometries range of 4 space are of value 9 while a step ahead, as the last step will take to the creative boundary of 10 components of transcendental domain.
14. A still further, it also would be relevant to take note that 3 space is a linear order space and same leads to the value " 31 " which constitute a (domain, dimension relationship) as values pair $(33,31)$.
15. Further as that value 42 is the value of spatial order 4 space.
16. still further as that value 31 permit organization as ( $1+2+3+4+5)+1+(1+2+3+4+5)$.
17. And further value 42 permits reorganization as ( $2+3+4+5+6)+2+(2+4+5+6)$.
18. One may have a pause here and take note that these organizations of values pair $(31,42)$ is parallel to the synthesis value of a pair of linear order 5 fold transcendence ranges and of a pair of spatial order transcendence ranges of 5 steps.
19. These features deserve to be comprehended well.
20. This dimensional synthesis feature deserve to be comprehended thoroughly.
21. 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 .
22. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## VI VALUES PAIR (9,10)

1. The values pair $(9,10)$ is parallel to 9 numeral range of 10 place value system.
2. This is further parallel to 9 geometries range of 4 space and 10 components of boundary of 5 space.
3. With it, the boundary of 5 space provides a format of 10 place value system.
4. One may have a pause here and take note that 5 space accepts $2 \times 5+1=11$ geometries range.
5. One may further have a pause here and take note that $9 \times 11$ grid accommodates all the 99 double digit numbers of 10 place value system including numbers ( 01 , 02,03,04,05,06,07,08,09 ) as well being double digit numbers for that count of 99 double digit numbers of 10 place value system.
6. It would be a blissful exercise to revisit the organization format of 99 double digit numbers as arranged along $9 \times 11$ grid format and to notice the partition of the grid as upper and lower part of 54 and 45 double digit numbers with upper part constituting 25 reflection pairs of double digit numbers and 4 as self reflecting artifices ( $11,22,33,44$ ).
7. On the other hand the lower part consists of 20 pairs of reflection pairs digits and a range of 5 as self reflecting artifices ( $55,66,77,88,99$ ).
8. The organization format features of upper part of the grid provides further structural keys for reach to the mathematical domain of Ganita Sutras 1 to 16 and Ganita upsutras 1 to 13 .
9. It would be blissful to chase this organization, which shall be focusing upon as :
10. There are 99 double digit numbers of 10 place value system.
11. These 99 double digit numbers permit organization of $9 \times 11$ grid as under:

| 01 |  | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 09 |  |  |  |  |  |  |  |  |
| 10 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 |  |  |  |  |  |  |  |  |
| 19 |  | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 |  |  |  |  |  |  |  |  |
| 28 |  | 29 | 30 | 31 | 32 | 33 | 34 | 35 |
| 36 |  |  |  |  |  |  |  |  |
| 37 |  | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| 45 |  |  |  |  |  |  |  |  |
| 46 |  | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 54 |  |  |  |  |  |  |  |  |
| 55 |  | 56 | 57 | 58 | 59 | 60 | 61 | 62 |
| 63 |  |  |  |  |  |  |  |  |
| 64 |  | 65 | 66 | 67 | 68 | 69 | 70 | 71 |
| 72 |  |  |  |  |  |  |  |  |
| 73 |  | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 |  |  |  |  |  |  |  |  |
| 82 |  | 83 | 84 | 85 | 86 | 87 | 88 | 89 |
| 90 |  |  |  |  |  |  |  |  |
| 91 |  | 92 | 93 | 94 | 95 | 96 | 97 | 98 |
|  | 99 |  |  |  |  |  |  |  |

3. Let us have a pause here and have a fresh visit to above organization .
4. It brings to focus that the coordination line of numbers ( $10,20,30,40,50,60,70, .80,90)$ separates the lower portion from the above portion of the grid.
5. The coordination line becomes the mirror line .
6. Further it also comes to focus as that the upper part with its coordination line along values quadruple ( $11,22,33,44$ ) as well plays the role of a mirror line).
7. Likewise the coordination line of 5 values range ( $55,66,77,88,99$ ) of the lower part plays the role of a mirror line for the lower part.
8. Let us revisit the upper part which consist of values organization as under:

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

09
$\begin{array}{llllllll}10 & 11 & 12 & 13 & 14 & 15 & 16 & 17\end{array}$
18
27
36
45
54
63
$\begin{array}{llllll}20 & 21 & 22 & 23 & 24 & 25\end{array}$
26

| - | - | 30 | 31 | 32 | 33 | 34 | 35 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 36 |  |  |  |  |  |  |
|  | - | - | 40 | 41 | 42 | 43 | 44 |


| - |  | - | - | - | 50 | 51 | 52 | 53 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 54 |  |  |  |  |  |  |  |
| - | - | - | - | 60 | 61 | 62 |  |  |
|  | 63 |  | - | - | - | - | 70 | 71 |

81

90
9. The 9 values pair, namely ( 01,10 ), ( 02,20 ), ( 03,30 ), ( $04,40),(05,50), \quad(06,60),(07,70),(08,80),(09,90)$ constitute 9 reflection pairs of double digit numbers.
10. Further quadruple artifices/values ( $11,22,33,44$ ) avail same digit for both places and as such these are of the organization format of self reflecting artifices as the mirror placement in
between this format shall be swapping digits but as the digits are same so the reflection, as such will remain un manifest despite its happening.
11. One may further have a pause here and take note that these 4 self reflecting artifices together with above enlisted 9 self reflecting double digit numbers $\quad(01,10),(02,20),(03$, $30)$, ( 04,40 ), $(05,50),(06,60),(07,70),(08,80)$, 09,90 ) accept one of the digit being zero in all cases and these $9+4=13$ makes a class different than those of remaining 16 pairs of double digit reflection pairing numbers of distinct digits.
12. These 16 double digit reflection pairing numbers of distinct digits are:
$(12,21),(13,31),(14,41),(23,32),(15,51)(24,42),(16,61),($ $25,52),(34,43),(17,71),(26,62),(35,53),(18,81),(27,72),($ $36,63)$ and $(45,54)$ and these constitute a distinct class.
13. This pair of classes of 16 double digit numbers pairings and 13 double digit pairings are parallel to the organization of 16 sutras and 13 upsutras.
14. As such here is another structural feature which shall be distinctively help us for chase of the mathematical domains of Ganita Sutras 1 t o 16 as well as of Ganita upsutras 1 to 13 .
15. One may have a pause here and take note that the above organization format of upper part of 29 double digit numbers reflection pairings is the format of chapter 13 of Srimat Durga Satsatti.
16. The chapter 13 of Srimat Durga Satsatti is the scripture in which there are uvachas, ardhshalokas and full shalokas which accept the organization format features of above quadruple self reflecting artifices for uvachas, reflection pairings with 1 digit as 0 as format for ardh shalokas and remaining 16 reflection pairings of double digits of distinct digits as format for full shalokas.
17. 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 .
18. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
19. It would be a blissful to reach at tabulation in sequential order of 1 to 16 sutras and 1 to 16 double digit pairings of distinct digits.
20. It shall be bringing us face to face with Ganita Sutra 1 and of double digit pairing ( 12,21 ).
21. Ganita Sutra 2 shall be bringing us face to face with double digit pairing $(13,31)$.
22. Sutra 3 shall be bringing us face to face with double digit pairing ( 14,41 ).
23. Sutra 4 shall be bringing us face to face with double digit pairing ( 23,32 ).
24. Sutra 5 shall be bringing us face to face with double digit pairing $(15,51)$.
25. Sutra 6 shall be bringing us face to face with double digit pairing $(24,42)$.
26. Sutra 7 shall be bringing us face to face with double digit pairing $(16,61)$.
27. Sutra 8 shall be bringing us face to face with double digit pairing $(25,52)$.
28. Sutra 9 shall be bringing us face to face with double digit pairing $(34,43)$.
29. Sutra 10 shall be bringing us face to face with double digit pairing $(17,71)$.
30. Sutra 11 shall be bringing us face to face with double digit pairing $(26,62)$.
31. Sutra 12 shall be bringing us face to face with double digit pairing $(35,53)$.
32. Sutra 13 shall be bringing us face to face with double digit pairing $(18,81)$.
33. Sutra 14 shall be bringing us face to face with double digit pairing $(27,72)$.
34. Sutra 15 shall be bringing us face to face with double digit pairing $(36,63)$.
35. Sutra 16 shall be bringing us face to face with double digit pairing $(45,54)$.
36. Now let us visit the second class of reflection pairing.
37. Let us chase the second class of self reflecting pairing artifices in the sequence in which these mark their presence.
38. The first artifices pairings is $(01,10)$.
39. It leads us to Ganita upsutra 1.
40. Second reflection pairing $(02,20)$ takes to Ganita upsutra 2.
41. Self reflecting artifice 11 takes to Ganita upsutra 3..
42. Third pairings $(03,30)$ takes us to Ganita upsutra 4.
43. Reflection pairing $(04,40)$ takes to Ganita upsutra 5.
44. Self reflecting artifice (22) takes us to Ganita upsutra 6.
45. Reflection pairing $(05,50)$ takes to Ganita upsutra 7.
46. Reflection pairing 6,7 takes to Ganita upsutra 8.
47. Self reflecting artifice (33) takes to Ganita upsutra 9.
48. Reflection pairing $(07,70)$ takes to Ganita upsutra 10.
49. Reflection pairing $(08,80)$ takes to Ganita upsutra 11.
50. Self reflecting artifice (44) takes to Ganita upsutra 12.
51. The last reflection pairing $(09,90)$ takes to last Ganita upsutra 13.
52. One may have a pause here and take note that the above reflection pairing feature leads us to the organization format of Ganita Sutras and Ganita upsutras along the format of Ganita Sutra 2.
53. It would be blissful to take note that Ganita Sutra 1, in terms of its 16 letters provides us first range of structural
keys for chase of mathematical domains of Ganita Sutras 1 to 16 .
54. Now here Ganita Sutra 2 in terms of its $9 \times 11$ format for 10 place value system , in terms of organization of 29 reflection pairings of the above referred upper part of the grid provides us second range of features for reach at the mathematical domains of Ganita Sutras 1 to 16 as well as to Ganita upsutras 1 to 13 .
55. 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 .
56. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## VII GANITA SUTRA 2 AND GANITA UPSUTRA 1

1. The symmetry rule of Ganita upsutra 1 together with the rule of Ganita Sutra 2 shall be leading to all the place value system organization format features.
2. The format of $9 \times 11$ grid format will become the particular case of $\quad(\mathrm{N}-1, \mathrm{~N}+1)$ grid format of N place value system with $\mathrm{N}=10$
3. As such the reach for double digit numbers of 9 place value system would be as along the grid ( $8 \times 10$ ) format.
4. Likewise the reach for double digit numbers of 8 place value system will take us to the grid format ( 7,9 ), and so on for other place value systems as well.
5. It would be a blissful exercise to visit the 80 double digit numbers of 9 place value system accepting organization as under:

## GRID 8 X 10

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 30 | 31 | 32 | 33 | 34 | 35 |
| 36 | 37 | 38 | 40 | 41 | 42 | 43 | 44 |
| 45 | 46 | 47 | 48 | 50 | 51 | 52 | 53 |
| 54 | 55 | 56 | 57 | 58 | 60 | 61 | 62 |
| 63 | 64 | 65 | 66 | 67 | 68 | 70 | 71 |
| 72 | 73 | 74 | 75 | 76 | 77 | 78 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 |

## VIII <br> INTELLIGENCE PERFECTION STEPS

1. Availing the organization format features of Ganita Sutra 2 read with Ganita upsutra 1, it would be blissful exercise to convert number value 28 of 10place value system in other place value systems.
2. Here below is the tabulation for a specimen range of place value systems conversion for number value 28 of 10 place value system.

| Numb er value | $$ |  | $\quad$8 <br> Plac <br> $e$ <br> valu <br> $e$ | $\begin{aligned} & \hline 7 \\ & \text { Plac } \\ & \mathrm{e} \\ & \text { valu } \\ & \mathrm{e} \\ & \hline \end{aligned}$ |  | $\quad$$\quad 5$ <br> Plac <br> $e$ <br> valu <br> $e$ | 11 <br> Plac e valu e | $\begin{aligned} & \hline 12 \\ & \text { Plac } \\ & \mathrm{e} \\ & \text { valu } \\ & \mathrm{e} \\ & \hline \end{aligned}$ | $\begin{aligned} & 13 \\ & \text { Plac } \\ & \mathrm{e} \\ & \text { Valu } \\ & \mathrm{e} \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | 28 | 31 | 34 | 40 | 44 | 103 | 26 | 24 | 22 |

3. The above difference is only because of the difference in the place value of the digits ( as numerals) of the concerned place value system.
4. The roof at 28 units height will remain 28 units height when the scale is of 10 place value system. However, if scale is of 9 value system, it would lead to the value 31. And like that would be the different measurements of different scales of different place value systems.
5. The point of focus here that the organization format of Ganita Sutras as such is availing 10place value system as the general place value system, however the mathematics of conversion of 10 place value system into other place value system is inherently imbedded in the mathematical domains of Ganita Sutras.

## IX <br> PLACE VALUES RANGE

$\cdots-------1^{4}, 10^{\mathbf{3}}, \mathbf{1 0}^{\mathbf{2}}, \mathbf{1 0}^{1,} \mathbf{1 0}^{\mathbf{0}}, \mathbf{1 0}^{-1}, \mathbf{1 0}^{-2}, \mathbf{1 0}^{-3}, \mathbf{1 0}^{-4}$

1. The 10 place value format acquires place values for digits of numbers availing this format as (-----------104, $10^{3}, 10^{2}, 10^{1,} 10^{0}$, $10^{-1}, 10^{-2}, 10^{-3}, 10^{-4}$------------)
2. Of it the whole numbers avail the format for (------------10 $10^{4}, 1$, $10^{2}, 10^{1,} 10^{0}$.
3. The numbers in general permit expression along the full format (----------- $\left.10^{4}, 10^{3}, 10^{2}, 10^{1,} 10^{0}, 10^{-1}, 10^{-2}, 10^{-3}, 10^{-4}-----------\right)$.
4. Of it the negative powers format is designated as " Decimal expression format ".
5. The word "Decimal" is a feature of (Deci) which means value 10.
6. However, with the change of the value from 10 to 9 , there would be a shift from 10 place value to 9 place value .
7. The format, accordingly, for 9 place value set up would be of the feature:

8. The negative powers part of the above format, namely " $9^{-1}$, $9^{-2}, 9^{-3}, 9^{-4}$ may be given designation as "Nanimal" part.
9. Now if thevalue ( $1 / 2$ ) is to be converted in decimal form, it shall be leading us to $1 / 2=.5$.
10. However, if it is to be converted as a value of 9 place value system, then it will lead us to $1 / 2=.4 .4$-----------.
11. One shall have a pause here and see the conversion in decimal system and in nacimal system different mathematics results stand reach.
12. As such for perfection of intelligence, students of Mathematics shall be very gently exposed to the conversion of values from one system to another system
13. The expression of fraction, and vulgar fraction in different place value system will bring us face to face with different values systems of Mathematics of different place value systems.

## X PERFECT NUMBERS TRIPLE (6,28,496)

1. To have proper insight about the organization format of 9 numerals of 10 place value system, one shall revisit first triple perfect numbers $(6,28,496)$.
2. Number value 6 accepts only 3 proper divisors namely ( $1,2,3$ ).
3. Number value 28 accepts only 5 proper divisors namely ( $1,2,4,7,14$ ).
4. Number 496 accepts only 9 proper divisors namely( $1,2,4,8,16,31,62,124,248$ )
5. One may have a pause here and take note that of 9 numeral range, numeral 5 is of middle placements.
6. Further as that of 5 numeral range, numeral 3 is of middle placement.
7. Further in the context of proper divisors of numbers triples ( $6,28,496$ ) it comes to pointed attention as that the biggest prime proper divisor of number 6 is 3 .
8. Further as that biggest prime proper divisor of number 28 is 7.
9. still further as that biggest prime proper divisor of number 496 is 31.
10. One may have a pause here and take note that primes triple ( $3,7,31$ ) lead us to coordinated geometric format features as that 3 space accepts 7 geometries range and that it is the reach of linear order feature, as much as that the value 31 is parallel to the creation of 1 space as dimension of 3 space as creative domain.
11. One may further have a pause here and take note that number value 31 accepts reorganization as $1+2+3+4+5)+1$ $+(1+2+3+4+5)=31$, a synthetic value of a pair of linear order transcendence ranges of 5 folds.
12. One may further have a pause here and take note that number value 28 of 10 place value system gets expression as number value 31 of 9 place value format.
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 features formats
14. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## XI <br> DISTINCTIVE FEATURES OF EACH OF THE 9 NUMERALS OF 10 PLACE VALUE SYSTEM

1. Let us revisit 9 numerals range ( $1,2,3,4,5,6,7,8,9$ ).
2. Numeral 1 is unique, as it is the first amongst the numerals.
3. Further as that it does not accept any divisor other than itself.
4. Numeral 2 is unique as it is the first even number.
5. Further as that it is the first prime number.
6. Still further as that it is the only even prime number.
7. Still further as that it accepts reach as $1+1=2$, as well as 1 x $2=2$.
8. Numeral 3 is unique, as it is the first odd prime.
9. Numeral 4 is unique as it accepts reorganization as $4=2+2=$ $2 \times 2=(-2) \times(-2)$.
10. Further as that $2^{4}=4^{2}$.
11. Numeral 5 is unique as that $5+5=10$.
12. Further as that it is of middle placement of 9 numeral range.
13. Numeral 6 is unique as it is the first perfect number.
14. Further as that $6=1+2+3=1 \times 2 \times 3=2+2+2=2 \times 3=3+3$.
15. Numeral 7 is unique as it is the biggest prime numeral of this numeral range.
16. Numeral 8 is unique as that it accepts reorganization as $8=$ $2^{3}$ and with it, it becomes the even value cube .
17. Number value 9 is unique as it accepts reorganization as $9=$ $3^{2}$ 。
18. The values pair $(8,9)$ because of reorganization $2^{3}, 3^{2}$ accepts inter-relationship as of a vertical format reflection pairing due to swapping of places at base and index.
19. Further as that 9 is the biggest numeral.
20. Number value 10 is unique as that it constitutes a reflection pairing of horizontal format along a number value 01 and with it the range acquires its reach limit between the end values pairing ( 10,01 ).
21. 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 .
22. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## XII <br> TRANSCENDENTAL VALUE RANGE <br> ( 1,2,3,4,5,6,7,8,9)

1. Transcendental values range ( $1,2,3,4,5,6,7,8,9$ ) covers the whole range of vowels as well as the consonants of Devnagri alphabets
2. This coverage range extends over all the 42 vowels and consonants coordinated by 14 Maheshwara sutras.
3. This range of transcendental code values ( $1,2,3,4,5,6,7,8,9$ ) also goes parallel to 9 vowels range of Devnagri alphabet.
4. $\quad 9$ vowels get grouped and classified as per the coordination of Maheshwara sutras $1,2,3 \& 4$.
5. This coordination amounts to classification and grouping of ( $3,2,2,2$ ) vowels.
6. Further 9 vowels accept geometric formats of dimensional frames of 1 space to 9 space.
7. These dimensional frames lead to values ( -1 ), ( 0,0 ), ( 1,1,1), ( 2,2,2,2), ( 3,3,3), ( 4,4,4,4,4,4), ( 5,5,5,5,5,5,5), ( 6,6,6,6,6,6,6,6) and 7,7,7,7,7,7,7,7,7).
8. 25 verga consonants organized as 5 rows and 5 columns, sequentially accept transcendental code values ranges( $1,2,3,4,5)$, ( $2,3,4,5,6$ ), ( $3,4,5,6,7)$, ( $4,5,6,7,8$ ) and ( 5,6,7,8,9).
9. First column letters accept format of dimensional orders ( linear, spatial, solid, creative and transcendental ).
10. Second column letter accept format of boundary ( spatial, solid, creative and transcendental self referral ).
11. Third column letter accepts format of domain ( solid, creative and transcendental self referral and unity state ).
12. Fourth column letters accept origin formats (creative and transcendental self referral and unity state, 8 fold nature state ).
13. Fifth column letters accept base format (transcendental self referral and unity state, 8 fold nature state and 9 fold Brahamman ).
14. 4 Antsatha letters sequentially accept dimension of dimension state transcendence reach as ( linear, solid, transcendental and unity state).
15. Ushmana letters accept format of synthesis during transcendence reach as (spatial, solid, self referral and Brahamman state).
16. 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 .
17. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## XIII <br> TRANSCENDENTAL PHENOMENON OF BRAHMA MULTIPLYING <br> AS 10 BRAHMAS

1. The transcendental phenomenon of Brahma multiplying as 10 Brahmas deserve to be comprehended well and same to be appreciated fully by complete imbibing and glimpsing of the phenomenon .
2. With this glimpsing, one shall be acquiring deep insight and enlightenment of transition and transformation from the format of idol of Lord Brahma to the format of idol of transcendental lord Shiv.
3. It is with this glimpsing of transition and transformation of manifested creation along hyper cube 4 format and transcendence there from to hyper cube 5 format, that one shall be fulfilling one's intelligence field with transcendental values.

Folder No. SKK 10,2016, V.M.Teachers' Mannual

File 5, Ganita Sutra 3 and
intelligence field

## GANITA SUTRA 3 AND INTELLIGENCE FIELD

I
GANITA SUTRA 3

| ऊर्ध्वतिर्यिभ्याम |
| :---: |
| Urdhvatiryagbhyam |
| Vertically and crosswise |
| Vertically and crosswise |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ऊ | घू | र | व् | अ | त् | इ | र् | य् | अ |
| 11 | 12 | 13 | 14 | 15 |  |  |  |  |  |
| ग् | भ् | यू | आ | म् |  |  |  |  |  |

1. Ganita Sutra 3 is of third placement in the organization sequence of Ganita Sutras 1 to 16 .
2. With it number value 3 gets associated with it.
3. This, that way also puts it in the sequential arrangement reach parallel to first triple values ( $1,2,3$ ).
4. With it the reach goes parallel to the reach of first 3 letters of the text of Ganita Sutra 1.
5. Accordingly the values triple ( $6,4,2$ ) parallel to transcendental code values triple of first 3 letters of the text of Ganita Sutra 1 gets associated as values reach steps for Ganita Sutras 1,2 \& 3 respectively.
6. Here it also would be relevant to take note that the placements of Ganita upsutras 1 to 13 in between the gaps of reach of Ganita Sutras 1 to 16 also have their role to play.
7. As per this organization arrangement, the sequential reach steps come to be:
i) At first step: Ganita Sutra 1.
ii) At second step of first gap placement: Ganita Sutra 1
iii) At third step: Ganita Sutra 2.
iv) At fourth step, as second gap placement: Ganita upsutra 2.
v) At fifth step: Ganita Sutra 3
8. This organization arrangement shall be taking us from Ganita Sutra 1 to Ganita upsutra 1 to Ganita Sutra 2 to Ganita upsutra 2, Ganita Sutra 3 to Ganita upsutra 3.
9. With it the specific importance of numbers of letters and transcendental code value of 20 Ganita Sutras and upsutras will have their role to play .
10. For ready reference, the tabulation is being reproduced hereunder about these features of this range of sutras and upsutras:

| S.No. | G.S./G.U.S. | Letter | T.C.V.Values |
| :---: | :--- | :---: | :---: |
| 1 | Ganita Sutra-1 | 16 | 74 |
| 2 | Ganita upsutra 1 | 10 | 42 |
| 3 | Ganita Sutra 2 | 28 | 107 |
| 4 | Ganita upsutra 2 | 18 | 74 |
| 5 | Ganita Sutra 3 | 15 | 58 |
| 6 | Ganita upsutra 3 | 23 | 96 |

## II <br> GANITA SUTRA 1 AND GANITA UPSUTRA 1 FORMAT REACH

1. The reach of Ganita Sutra 1 and of Ganita upsutra 1 is of ( $16+10)=26$ letters.
2. This reach as of transcendental code values of Ganita Sutra 1 text and Ganita upsutra 1 text comes to be $(74+42)=116=$ $29 \times 4$.
3. One may have a pause here and take note that this organization feature is of value as of " four folds".
4. One may have a pause here and take note that NVF ( four folds) $=116$.
5. One may further have a pause here and take note that TCV ( Brahma) $=29$.
6. Lord Brahma is a four head Lord.
7. Lord Brahma is the over Lord of 4 space.
8. 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 .
9. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
10. The transcendental code values expression of this 26 letters long joint text of Ganita Sutra 1 and Ganita upsutra 1 takes us to values range as :
( 6,4,2,7,2,4,6,8,1,5,6,7,6,2,7,1,2,8,3,3,6, 5,1,6,1,7).
11. Let us revisit this values range expression of 20 steps.
12. This is a values range of 8 values range of different frequencies.
13. The values range is of values $(1,2,3,4,5,6,7,8)$.
14. The frequencies of these values are

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 4 | 2 | 2 | 2 | 6 | 4 | 2 |

15. One may have a pause here and take note that dimensional synthesis wise, the above frequencies bring us face to face with following features:
i) $\quad(4,4)=6$ i.e. a pair of creative dimensions ( 4 space as dimension ) synthesized value 6 .
ii) $\quad(2,2,2)$ as triple spatial dimensions ( 2 space in the role of dimension ) synthesized value 6.
iii) The values triple $(6,4,2)$ is parallel to transcendence triple ( 6 space, 4 space, 2 space).
16. Further the above frequencies as these are get organized as that frequency 2 " Two" marks its presence 3 times.
17. The frequency 4 also marks its presence 3 times.
18. Frequency 6 marks its presence only once.
19. One may have a pause here and take note that the above ( $3,3,1$ ) frequencies of frequencies value leads to a geometric format parallel to the split of a 3 dimensional frame into a
pair of 3 dimensional frames ( of half dimensions) and in the process there being a release of origin ( 4 space origin) .
20. 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 .
21. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## III

## GANITA SUTRA 2 AND GANITA UPSUTRA 2 FORMAT REACH

1. Ganita Sutra 2 and Ganita upsutra 2 together make a joint/combined text of $28+18=46$ letters.
2. One may have a pause here and take note that double digit numbers $(46,64)$ constitute a reflection pair.
3. It is parallel to the organization of 4 space as dimension creating 6 space and on the other hand -6 space as dimension creating -4 space.
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 features formats .
5. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
6. Ganita Sutra 2 text leads to transcendental code value 107 while Ganita upsutra 2 takes to transcendental code value 74 and these together make out a values range 181.
7. One may have a pause here and take note that digits 1 and 8 as values 1 and 8 accept reorganization as $1=1^{3}$ and $8=2^{3}$.
8. One may have a pause here and take note that values pair ( $1^{3}, 2^{3}$ ) go parallel to a pair of consecutive members of the sequence of cubic value of whole numbers).
9. The 46 letters range brings us face to face with corresponding 46 transcendental code values range associated with this range of letters, which comes to be 8,2,2,2,5,1,9,8,1,7,1,4,1,2,2,1,3,1,9,1,9,6,1,2,1,4,1,13), ( 2,2,6,1,1,4,6,2,6,6,1,4,1,9,4,6,1,3).
10. These 46 transcendental code values are of different frequencies of 10 values range ( $1,2,3,4,5,6,7,8,9,13$ ).
11. Of these, value 1 is of frequency 15.
12. Value 2 is of frequency 9 .
13. Value 3 is of frequency 3.
14. Value 4 is of frequency 4.
15. Value 5 is of frequency 1.
16. Value 6 is of frequency 5 .
17. Value 7 is of frequency 1.
18. Value 8 is of frequency 2.
19. Value 9 is of frequency 4
20. Value 13 is of frequency 2.
21. These frequencies occurrence is of 5 steps values $1,2,3,4,5,9$ \& 15 i.e. a 7 steps long range.
22. The 10 frequency range of values ( $1,2,3,4,5,6,7,8,9,13$ ) marks repeated presence of frequencies along 7 steps long range values ( $1,2,3,4,5,9 \& 15$ ).
23. The repeated presence of once occurrence is twice.
24. Repeated twice occurrence is again twice.
25. Repeated thrice frequency occurrence is once.
26. Likewise repeated occurrence $5,9 \& 11$ as well is once.
27. However, repeated occurrence of frequency 4 is twice.
28. This way repeated occurrence for frequencies $1,2 \& 4$ is twice while for frequencies, $3,5,9 \& 15$ is once.
29. This makes a beautiful feature as that triple frequency ( 1,2 \& 4) marking their presence twice while the quadruple frequencies ( $3,5,9 \& 15$ ) marking their presence only once.
30. 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 .
31. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## IV <br> GANITA SUTRA 3 AND GANITA UPSUTRA 3 FORMAT REACH

1. Ganita Sutra 3 text and Ganita upsutra 3 text avail 15 and 23 letters respectively .
2. This makes a range of 38 letters.
3. Corresponding transcendental code values range is of value $58+96=154=77+77=11 \times 14$.
4. This 38 transcendental code values range is of values expressions steps :
( 6,7,3( 2), 7,1,4,2,3(2),1,1,3,8,1,2,9), ( 2, 6,1,1,9,2,6,1, $\mathbf{6 , 8 , 2 , 8 , 4 , 1}, 1,9,1, ~ 8,4,1,6,8,1)$.
5. This expression range of 38 transcendental code values steps are of repeated frequencies of 8 values steps ( $1,2,3,4,6,7,8$ \& 9).
6. These values range ( $1,2,3,4,6,7,8 \& 9$ ) organize occurrence frequency of values ( $12,5,3,3,5,2,5,3$ ).
7. This frequencies range ( $12,5,3,3,5,2,5,3$ ) have the repeated presence of 4 steps values ( $2,3,5,12$ ).
8. These 4 steps repeated presence values ( $2,3,5,12$ ) are of frequencies ( $1,3,3,1$ ).
9. This further is of pair of values steps ( 1,3 ) of repeated frequency 2 for value 1 as well as for value 3 .
10. This way at third stage, same frequency (2) makes the fixation at single value step (1) of frequency 2 and then value 2 being a single value single frequency stage and state of attainment.
11. 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 .
12. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## V <br> THREE FOLD CHASE STEPS OF ORGANIZATION FORMAT OF <br> (GANITA SUTRA 1, GANITA UPSUTRA 1), GANITA SUTRA 2, GANITA UPSUTRA 2) AND GANITA SUTRA 3, GANITA UPSUTRA 3.

1. One shall sit comfortably and permit the transcending mind to have sequential glimpse of above emerging $26,46 \& 38$ steps long transcendental code values ranges of (GANITA SUTRA

## 1, GANITA UPSUTRA 1), GANITA SUTRA 2, GANITA UPSUTRA 2) AND GANITA SUTRA 3, GANITA UPSUTRA 3.

2. For convenient reference these values ranges are being reproduced hereunder to facilitate comprehensive glimpse thereof to acquire insight and enlightenment about their sequential values:
i) 26 steps long expression range of text of Ganita Sutra 1 and Ganita upsutra 1.
( 6,4,2,7,2,4,6,8,1,5,6,7,6,2,7,1,2,8,3,3,6, 5,1,6,1,7).
ii) 46 steps long expression range of text of Ganita Sutra 2 and Ganita upsutra 2
(
$\mathbf{8 , 2 , 2 , 2 , 5 , 1 , 9 , 8 , 1 , 7 , 1 , 4 , 1 , 2 , 2 , 1 , 3 , 1 , 9 , 1 , 9 , 6 , 1 , 2 , 1 , 4 , 1 , 1 3}$
), (2,2,6,1,1, 4,6,
$\mathbf{2 , 6 , 6 , 1 , 4 , 1 , 9 , 4 , 6 , 1 , 3 )}$.
iii) 38 steps long expression range of text of Ganita Sutra 3 and Ganita upsutra 3.

$$
\begin{aligned}
& \text { ( 6,7,3( 2), 7,1,4,2,3(2),1,1,3,8,1,2,9), } \\
& \mathbf{6 , 1 , 1 , 9 , 2 , 6 , 1 , ~ 6 , 8 , 2 , 8 , 4 , 1 , ~ 1 , 9 , 1 , ~ 8 , 4 , 1 , 6 , 8 , 1 ) . ~}
\end{aligned}
$$

## VI <br> SATHAPATYA MEASURING ROD CHASE

1. Hereunder are being tabulated features of Sathapatya Measuring Rod to facilitate comprehension and chase of sequential steps along the format of Sathapatya Measuring Rod.

| Feature | 1 space | 2 space | $3$ <br> space | $4$ <br> space | 5 space | $6$ <br> space | $7$ <br> space |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Body | $\begin{aligned} & \text { Hype } \\ & \mathrm{r} \\ & \text { cube- } \\ & 1 \end{aligned}$ | Hype <br> r <br> cube- $2$ | $\begin{aligned} & \text { Hype } \\ & \mathrm{r} \\ & \text { cube- } \\ & 3 \end{aligned}$ | $\begin{aligned} & \text { Hype } \\ & \text { r } \\ & \text { cube- } \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { Hype } \\ & \mathrm{r} \\ & \text { cube- } \\ & 5 \end{aligned}$ | $\begin{array}{\|l} \hline \text { Hype } \\ \mathrm{r} \\ \text { cube- } \\ 6 \\ \hline \end{array}$ | Hype <br> r <br> cube- <br> 7 |
| Domain | $\mathrm{A}^{1}$ | $\mathrm{A}^{2}$ | $\mathrm{A}^{3}$ | $\mathrm{A}^{4}$ | $\mathrm{A}^{5}$ | $\mathrm{A}^{6}$ | $\mathrm{A}^{7}$ |
| Boundary | $2 \mathrm{a}^{0}$ | $4 \mathrm{~A}^{1}$ | $6 \mathrm{~A}^{2}$ | $8 \mathrm{~A}^{3}$ | $10 \mathrm{~A}^{4}$ | $12 \mathrm{~A}^{5}$ | $14 \mathrm{~A}^{6}$ |
| Dimension | $\begin{gathered} (-1) \\ \text { space } \end{gathered}$ | (0) <br> space | (1) space | (2) space | (3) space | (4) space | (5) space |
| Dimensional frame | $\begin{gathered} 1 \\ \text { axis } \end{gathered}$ | $\begin{gathered} 2 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 3 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 4 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 5 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 6 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 7 \\ \text { axes } \end{gathered}$ |
| Dimensional value | (-1) | 0 | 3 | 8 | 15 | 24 | 35 |
| Geometries | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| Four folds | $\begin{gathered} \hline-1 \\ 0 \\ 1 \\ (2) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ 1 \\ 2 \\ (3) \end{gathered}$ | $\begin{gathered} \hline 1 \\ 2 \\ 3 \\ (4) \end{gathered}$ | $\begin{gathered} \hline 2 \\ 3 \\ 4 \\ (5) \end{gathered}$ | $\begin{gathered} \hline 3 \\ 4 \\ 5 \\ \hline(6) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ 5 \\ 6 \\ (7) \end{gathered}$ | $\begin{gathered} \hline 5 \\ 6 \\ 7 \\ (8) \\ \hline \end{gathered}$ |
| Summation value | 2 | 6 | 10 | 14 | 18 | 22 | 26 |
| Dimensional Frame value | $\begin{aligned} & -1 \times 1 \\ & =-1 \end{aligned}$ | $\begin{aligned} & 0 \times 2 \\ & =0 \end{aligned}$ | $\begin{aligned} & 1 \times 3 \\ & =3 \end{aligned}$ | $\begin{aligned} & 2 \times 4 \\ & =8 \end{aligned}$ | $\begin{aligned} & 3 \times 5 \\ & =15 \end{aligned}$ | $\begin{aligned} & 4 \times 6 \\ & =24 \end{aligned}$ | $\begin{aligned} & 5 \times 7 \\ & =35 \end{aligned}$ |
| Transcendenc | -3, | -2 | -1, | 0, | 1, | 2, | 3 , |


| e <br> Triple <br> value | -1, <br> 1 | 0, <br> 2 | 1, <br> 3 | 2, <br> 4 | 3, <br> 5 | 4, <br> 6 | 5, <br> 7 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Product <br> value | 3 | 0 | -3 | 0 | 15 | 48 | 105 |
| Addition <br> value | -3 | 0 | 3 | 6 | 9 | 12 | 15 |

2. It would be blissful to revisit above range of 13 sets of features of Sathapatya Measuring Rod and to comprehend it fully for its complete appreciation to imbibe these values to attain insight and enlightenment about the organization format features of Sathapatya Measuring Rod to chase organization format features of the text of Ganita Sutras and their mathematical domains, as well as the processing steps and working rules of Vedic Mathematics.
3. 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 .
4. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## VII <br> LEARNING \& TEACHING STEPS

1. Devnagri alphabet.
2. Transcendental code values of Devnagri alphabet letters.
3. Vedic code values of Devnagri alphabet.
4. Parallel geometric format of Devnagri alphabet letters.
5. The Devnagri alphabet letters being availed by the text of Ganita Sutras and Ganita upsutras.
6. Frequencies of occurrence of individual Devnagri alphabet letters in the text of 519 letters of Ganita Sutras and Ganita upsutras.
7. Words formulations of the text of Ganita Sutras and Ganita upsutras.
8. Sub formulations of the formulations of the text of Ganita Sutras and upsutras.
9. Transcendental code values range of each Ganita Sutra and Ganita upsutra .
10. Transcendental code value range of each word formulation of text of Ganita Sutras and Upsutras,.
11. Transcendental code values range of each sub formulation of the text of Ganita Sutras and upsutras.
12. Geometric format of each sub formulation
13. Geometric formats of each formulation .
14. Geometric formats of each sutra and upsutra.
15. Geometric formats of sutras and of their gaps as formats of Ganita upsutras.
16. Structural keys of Ganita Sutras parallel to the letters of the text of Ganita Sutra 1 .
17. Structural keys of sutras and upsutras parallel to reflection pairs of the upper part of double digit numbers of 10 place value system along $9 \times 11$ grid format .
18. The geometric formats of Ganita Sutra 1 and of Ganita upsutra 1 for reach uptil Ganita Sutra 2.
19. Geometric format of Ganita Sutra 2 and of Ganita upsutra 2 for reach uptil Ganita Sutra 3.
20. Geometric format of Ganita Sutra 3 and of Ganita upsutra 3 for reach uptil Ganita Sutra 4.
21. The organization format features of Sathapatya Measuring Rod.
22. The sequential chase of Sathapatya Measuring Rod as four fold manifestation layers.
23. Sequential chase of Ganita Sutras and upsutras along the range of number values 1 to 29 .
24. Sequential chase of numbers values 1 to 29 as 1 to 16 and 1 to 13 .
25. Ganita Sutras chase along the values $2,4,6,8,10,12,14$, $17,19,21,23,25,27$ along the range of numbers values 1 to 29.

## VIII <br> VALUES OF FURTHER FOCUSED ATTENTION

1. Value sequence ( $1,2,3,4,5,6,--------$ ) accepts split as a pair of value sequences.
i)

1,3,5,7,9,11,
ii) $2,4,6,8,10,12$,
2. The value sequence ( $1,3,5,7,9,----------)$ is parallel to 1 geometry of 0 space, 3 geometries of 1 space, 5 geometries of 2 space, 7 geometries of 3 space, --------------
3. Values sequence ( $2,4,6,8,------------$ ) is parallel to 2 boundary components of 1 space, 4 boundary components of 2 space, 6 boundary components of 3 space,
4. The value sequence ( $1,3,5,7,--------------$ ) is parallel to 1 space as dimension of 3 space, 3 space as dimension of 5 space, 5 space as dimension of 7 space.,-------.
5. On the other hand the value sequence ( $2,4,6,8,---------)$ is parallel to 2 space as dimension of 4 space, 4 space as dimension of 6 space, 6 space as dimension of 8 space, -------------------.
6. This dimension to domain reach at each step in both sub ranges further brings to focus the domains split spectrum .
7. N space domain splits into a pair of two domains of ( $\mathrm{N}-2$ space) in the role of dimensions.
8. This leads to a sequential split entities (domains) spectrum as of values ( $1,2,5,12,29,70,169$, -------------
9. This split spectrum in case of odd spaces domain as well as of even spaces domain result into same split spectrum values organization format of steps values as ( $1,2,5,12,29,70,169$, -----------).
10. One may have a pause here and take note that if we start with 12 space domain, it shall be sequentially result into disintegration leading to split spectrum of ( 10 space domains, 8 space domains, 6 space domains, 4 space domains, 2 space domains and 0 space domains of respectively ( $1,2,5,12,29,70,169$ domains entities spectrum.
11. One may have a pause here and take note that $169=13 \mathrm{x}$ 13.
12. Further as that 6 space has 13 geometries range.
13. Further as that 6 space accepts boundary of 12 components.
14. Likewise in case of 13 space domain, sequential steps will lead to domains range ( $13,11,9,7,5,3,1$ ) of ( $1,2,5,12,29,70$ and 169) spectra .
15. It would be blissful to take note that a step ahead of 1 space reach will be as of ( -1 space reach) of 408 entities.
16. Likewise the reach ahead of 0 space reach will be at -2 space reach of 408 entities.
17. 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 .
18. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## IX <br> DIMENSIONAL SYNTHESIS PHENOMENON

1. Dimensional synthesis phenomenon of linear dimensions, as single, double, triple, quadruple and so on number of linear dimensions lead to sequential synthesis values range ( $1,3,6,10,15,21,28,36,45,55,--------)$.
2. Likewise the synthesis phenomenon of spatial dimensions of single, double, triple, quadruple and so on numbers of spatial dimension lead to synthesis values range ( $2,4,6,8,10,12,14,16,18,20,---------)$.
3. It would be blissful to take note that this pair of synthesis values ranges of linear and spatial dimensions as above, i.e. as ( $1,3,6,10,15,-----------)$ and as ( $2,4,6,8,10,-----)$, lead to a structural key for extending the reach for synthesis value of whole range of dimensional order.
4. The structural key is that from synthesis of 4,5,6 number of dimensions, at each step as from linear order to spatial order, difference value for 4 dimensions comes to be " 2 ".
5. The difference of synthesis values for 5 linear and spatial dimensions comes to be $2+3$.
6. The difference value for 6 dimensions of linear and spatial orders comes to be $2+3+4$.
7. Like that the difference value sequence comes to be $(2,2+3$, $2+3+4,2+3+4+5$, -----------).
8. With this the synthesis value for solid dimensions of $4,5,6,--$ -------- number of dimensions will be reached at as (8-2) for 4 dimensions, ( 10-5) for 5 dimensions , ( 12-9) for 6 dimensions and so on.
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 features formats .
10. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## X <br> LEARNING, TEACHING AND FURTHER EXPLORING.

1. Vedic Mathematics is ancient values Discipline.
2. This discipline has been dormant for last a few centuries.
3. The values of Vedic Mathematical domains are of very big domain reach.
4. Sequentially it permits a reach as along a four fold manifestation layer $(0,1,2,3), \quad(3,4,5,6)$ and $(6,7,8,9)$ formats of hyper cube 2 , hyper cube 5 and hyper cube 8 .
5. The focus here is upon 3 space in the role of origin, 6 space in the role of origin and 9 space in the role of origin.
6. As such the values $(2,3,5)$ become the initial triple primes format which is to be availed for Vedic Mathematical domain chase for its learning, teaching and further exploration.
7. At next step, this chase is to be expanded along the quadruple primes range $\quad(2,3,5,7)$ as the only primes range of 9 numerals set up of 10 place value system.
8. A step ahead, the chase can be extended to a set of 8 consecutive primes namely $\quad(2,3,5,7,11,13,17,19)$
9., And a step ahead, it can be extended to 9 consecutive primes ranges ( $2,3,5,7,11,13,17,19,23$ ).
9. And a step ahead, the reach shall be uptil 10 consecutive primes range ( $2,3,5,7,11,13,17,19,23,29$ ).
10. Like that the exploration may continue further to have a reach uptil prime 31 then uptil prime 37 and so on.
11. It would be blissful to take note that the number of primes uptil values range 1 to 100 is 25 only.
12. Number of primes uptil values range 1 to 26 is only 9 .
13. Considering the role of value " 1 " itself, it shall be extending the range of 9 step to 10 step and the range of 25 steps to 26 steps.
14. One may further have a pause here and take note that quadruple primes $(2,3,5,7)$ lead to values quadruple $\left(2^{2}, 2^{3}, 2^{5}, 2^{7}\right)$.
15. These quadruple values $\left(2^{2}, 2^{3}, 2^{5}, 2^{7}\right)$ further leads us to the primes quadruple ( $3,7,31,127$ ).
16. It further leads us to quadruple perfect number ( $6,28,496,8128$ ).
17. It further brings us face to face with the features of first perfect number ( 6 ) accepting only 3 proper divisors with biggest prime factor being 3 .
18. A step ahead, perfect number 28 accept only 5 proper divisors of which the biggest prime divisor is prime 7 .
19. A step ahead, perfect number 496 accept only 9 proper divisors of which the biggest prime divisor is 31 .
20. And a step ahead the perfect number 21 and 28 accept 13 divisors of which the biggest prime divisor is 127 .
21. Vedic systems chase of these quadruple perfect numbers along the sole syllable Om is a value which deserve to be learnt and to be taught and to be explored further.
22. Ayurved, the Upved of Rigved is a chase of the range of first pair of perfect number $(6,28)$ which is parallel to transcendental code values pair of formulations ( Aayu, Ayurved).
23. 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 .
24. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## XI <br> THREE PHASES OF SETTLING THE VEDIC MATHEMATICS VALUES

1. The present stage at which the Vedic Mathematics is, the same may for it to be a main stream discipline of schooling, would be requiring proper steps as a 3 phased approach for
settlement of the values, firstly for the initial learning, teaching and for further explorative research .
2. The initial learning, naturally would require properly graded text books settlement.
3. It is to be a lesson-wise compilation.
4. As numbers and bodies are the basic mathematical tools, as such the natural focus is to be upon these very values domains of numbers and geometric bodies.
5. Learning, teaching and explorations are to be of sequential order settled by Ganita Sutras ( and upsutras).
6. This way the best approach would be to follow the sequential order of the Ganita Sutras ( and upsutras) themselves.
7. The learning, teaching and further explorative chase, may phase the consolidation of Vedic Mathematical values accordingly.
8. It is really an Expert's job to phase like that.
9. It would be requiring an institutional approach .
10. The present attempt, at individual level in 3 volumes is just an initial stage compilation and phased compartmentalization just to facilitate the initiation of the process.
11. Vedic Mathematics values learning, Vedic Mathematics values teaching and Vedic Mathematics values exploration are the processes, which are going to be further and further unfolding processes and same are to be continued .
12. Vedic Mathematics values are at the base and are the basis of organization of Vedic knowledge as a single discipline availing single alphabet and as such the values of Vedic Mathematics are lively along the whole range of Vedic literature available with us
13. The applied values scriptures like Chark Samhita are the reservoir of Vedic Mathematics values .
14. Shakla Rigved Samhita to Srimad Bhagwat Geeta is a very range of Vedic Mathematics values reservoirs.
15. Let us blissfully fulfill our intelligence with Vedic Mathematics values.

$$
\begin{aligned}
& (6,7,3(2), 7,1,4, \\
& 2,3(2), \\
& 1,1,3,8,1,2,9), \\
& (2,6,1,1,9,2,6,1, \\
& 6,8,2,8,4,1, \\
& 1,9,1,8,4,1,6,8,1)
\end{aligned}
$$

GANITA SUTRA 4 TRANSCENDENTAL CODE VALUES

$$
\begin{gathered}
8,2,2,2,5,1,9,8,1,7,1,4, \\
1,2,2,
\end{gathered}
$$

1,3,1,9,1,9,6,1,2,1,4,1, 13.
$2,2,6,1,1,4,6,2,6,6,1,3$,
$1,9,4,6,1,13$

Folder No. SKK 10,2016,
V.M.Teachers' Mannual

File 6, Ganita Sutra 4

## GANITA SUTRA 4

$\stackrel{\text { I }}{\text { TEXT }}$

| परावर्त्य योजयेत् |
| :---: |
| Paravartya Yojayet |
| Transpose and unite |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| प् | अ | र. | आ | व् | अ | र | त् | यू | अ |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |  |  |  |
| य् | ओ | ज् | अ | य् | ए | त् |  |  |  |

1. Text of Ganita Sutra 4 avails 17 letters for its text.
2. Text of Ganita Sutra 4 is a composition of a pair of words formulations namely ( I. परावर्त्य ;Paravartya) and II. योजयेत Yojayet).
3. This pair of words formulations respectively avail 10 and 17 letters.
4. This sutra deserve to be chased along with Ganita upsutra 4.
5. Text of Ganita upsutra 4 is as under:

Ganita Upsutra-4:

## UPSUTRA - IV <br> केवलैः ससकं गुण्यात्

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| क् | ए | व् | अ | ल् | ऐ | $\vdots$ | स् | अ् | प् |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| त् | अ | क् | अ |  | ग् | अ | प् | य् | आ |
| 21 |  |  |  |  |  |  |  |  |  |
| त् |  |  |  |  |  |  |  |  |  |
| Total Letters | Vowels | Nasels | Consonents |  |  |  |  |  |  |
| 21 | 8 | 2 | 11 |  |  |  |  |  |  |

6. Ganita Sutra 4 letters accept association of total transcendental code values summation as " 51 ".
7. Ganita upsutra 4 accepts transcendental code values for its letters of summation value 92 .
8. The total letters of the combined text of Ganita Sutra 4 and Ganita upsutra 4 are $17+21=38$.
9. Total transcendental code values for all the letters of Ganita Sutra 4 and Ganita upsutra 4 comes to be $51+92=143$.
10. The number of letters being 38 which accepts organization as $38=19+19$.
11. The total transcendental code value comes to be 143 which accepts reorganization as $143=11 \times 13$.
12. For proper appreciation of the organization features of this phase and stage of a reach of Ganita Sutra 4 and Ganita upsutra 4 , it would be of help to revisit the sequential reach uptil this phase and stage of the organization, which for convenient reference is the tabulated hereunder:

| S.No. | G.S./G.U.S. | Letter | T.C.V.Values |
| :---: | :--- | :---: | :---: |
| 1 | Ganita Sutra-1 | 16 | 74 |
| 2 | Ganita upsutra 1 | 10 | 42 |
| 3 | Ganita Sutra 2 | 28 | 107 |


| 4 | Ganita upsutra 2 | 18 | 74 |
| :---: | :--- | :---: | :---: |
| 5 | Ganita Sutra 3 | 15 | 58 |
| 6 | Ganita upsutra 3 | 23 | 96 |
| 7 | Ganita Sutra 4 | 17 | 51 |
| 8 | Ganita Upsutra <br> 4 | 21 | 92 |

13. The 26 letters transcendental code values range format is as under:
14. 

( 6,4,2,7,2,4,6,8,1,5,6,7,6,2,7,1,2,8,3,3,6, 5,1,6,1,7).
15. The 46 letters of transcendental code values range format is as under:
16. (8,2,2,2,5,1,9,8,1,7,1,4,1,2,2,1,3,1,9,1,9,6,1,2,1,4,1,13), ( 2,2,6,1,1,4,6,2,6,6,1,4,1,9,4,6,1,3).
17. The 38 letters of transcendental code values range format is as under
( $6,7,3(2), 7,1,4,2,3(2), 1,1,3,8,1,2,9)$, ( 2, 6,1,1,9,2,6,1, $\mathbf{6 , 8}, 2,8,4,1,1,9,1, ~ 8,4,1,6,8,1)$.
18. The 38 letters of transcendental code values range format is as under
19. (

$$
5,1,3,2,7,1,3,4,1,1,1,7,4,1,1,6,4)
$$

$1,6,7,1,5,8,13,3,1,5,4,1,1,1,9,3,1,7,1,2,4)$
20. The sequential transition of above 4 steps deserve to be chased.
21. 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 .
22. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## SEQUENTIAL ORGANIZATION STEPS

1. Ganita Sutras $1,2,3$ \& 4 are 4 consecutive sequential organizations steps.
2. This sequence accepts association of values of quadruple numbers ( $1,2,3,4$ ).
3. Further these also sequentially accept parallel to first 4 letters of the text of Ganita Sutra 1, quadruple transcendental code values $(6,4,2,7)$ as the structural keys for reach at the organization format features of Ganita Sutras $1,2,3$, \& 4 respectively .
4. Still further 4 double digit numbers pairings as a reflection pairing of the double digit numbers, being distinct and neither of them being zero, namely
i) $(12,21)$
ii) $(13,31)$
iii) $(14,41)$
iv) $(23,32)$
provide further structural keys for reach to the organization format feature of Ganita Sutras $1,2,3 \& 4$.
5. A step ahead the text of Ganita upsutras $1,2,3$ \& 4 respectively are bridging the gaps between the domains of Ganita Sutras $1,2,3 \& 4$ and as such the sequential chase will take us in terms of 4 sequential formats steps of
i) Ganita Sutra 1 and Ganita upsutra 1
ii) Ganita Sutra 2 and Ganita upsutra 2
iii) Ganita Sutra 3 and Ganita upsutra 3 and
iv) Ganita Sutra 4 and Ganita upsutra 4.
6. One may have a pause here and take note that this as such puts Ganita Sutra 4 and Ganita upsutra 4 at the $7^{\text {th }}$ and $8^{\text {th }}$ placements of above organization .
7. With it values pair $(7,8)$ comes into play .
8. This values pair $(7,8)$, in a way is the fourth pair, following the first 3 pairs values $(1,2)$, $(3,4)$ and $(5,6)$ of above organization.
9. This, in a way, brings to focus functioning with pairs as units.
10. It is going to be parallel to the mathematics of 2 as 1 and simultaneously as of " 1 " as " 2 ".
11. With it, values range ( $1,2,3,4,5,6,7,8,9$ ) shall be leading us to the format of 9 pairs which shall be extending these 9 pairs members range parallel to the values range ( $1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18)$.
12. One may have a pause here and take note that this 18 steps long range is parallel to organization of Srimad Bhagwat Geeta as of 18 yogas aspects/disciplines of 18 Adhiyayas of Srimad Bhagwat Geeta.
13. The values pair $(7,8)$ shall be taking us to Adhiyayas $7 \& 8$ of Srimad Bhagwat Geeta .
14. One may further have a pause here and take note that values pair $(7,8)$ is also parallel to the organization format of 7 geometries range of 3 space and solid boundary of 8 components of 4 space.
15. Still further it also brings us face to face with the linear order reach uptil 7 geometries range, and a step ahead is the domain of spatial order reach of 4 space.
16. It would be blissful to take note that 3 space accepts 1 space in the role of dimension while 4 space accepts 2 space in the role of dimension.
17. It would further be blissful to take note that hyper circle 1 to 7 increase while hyper circle 8 onwards decrease.
18. Still further it also would be blissful to take note that cube accept 7 versions and at the same time cube permits split into 8 sub cubes.
19. The formulation ( Visarga Adhi) is a composition of 3 letters accepting association of triple transcendental code values $(1,7,2)$ which is parallel to the reach of 1 space order uptil 7 geometries range and ahead is the domain of spatial dimensional order.
20. Still further it also would be blissful to take note that the quadruple dimensions values come to be $(1,2,3,8)$ as these being the values range of organization format ( $1 \times 1,1 \times 2$, $1 \times 3,2 \times 4$ ), making it as that while first 3 dimensions would be of linear order format, but a step ahead, the $4^{\text {th }}$ dimension would be of spatial order format .
21. Still further It also would be blissful to take note that the formulation Adhi as $\mathbf{A d h}+\mathbf{E}$ brings us face to face with its values format of features " Half Two".
22. With it, one can appreciate the transcendental code values triple of $3^{\text {rd }}, 4^{\text {th }}$ and $5^{\text {th }}$ letter of the text of Ganita Sutra 1.
23. One may have a pause here and take note that the transition at $4^{\text {th }}$ transcendence step of 6 space domain ( $6,4,2,0$ ) alongwith the transcendence quadruple steps at its transcendental boundary ( $5,3,1,-1$ ) will help us comprehend and appreciate the transcendental code value (7) for the $4^{\text {th }}$ letter of the text of Ganita Sutra 1 marking its presence and playing its role of sequential continuity.
24. Still further it also would be blissful to take note that Adhiyaya 7 of Srimad Bhagwat Geeta is closing by raising 7 questions which are being taken up for their answers in Adhiyaya 8 of Srimad Bhagwat Geeta .

## III

## QUADRUPLE VALUES ( $1,2,3,4$ ) AND QUADRUPLE SPACES ( 1 SPACE, 2 SPACE, 3 SPACE \& 4 SPACE)

1. Vedic systems accept reality of 4 space.
2. The present day mathematical system, other than Vedic system, are not working out 4 space reality.
3. 4 space is a spatial order reality.
4. Here in 4 space 2 space plays the role of dimension .
5. 4 spatial dimensions constitute the dimensional frame of 4 space.
6. Here it would be blissful to take note that 3 space is a linear order space.
7. In 3 space is the availability of a dimensional frame of 3 linear dimensions.
8. One may have a pause here and take note that triple values ( $1,2,3$ ) are non- composite value while the value (4) is the first composite value of the sequence of quadruple values ( $1,2,3,4)$.
9. Interval, square and cube are the representative regular body of $1,2 \& 3$ spaces.
10. Hyper cube 4 is the representative regular body of 4 space.
11. Vedic Mathematics teachers shall very gently expose for firm comprehension of the reality of 4 space.
12. One may take the help of interval, square and cube.
13. One can sequentially take up one feature after the other feature of these triple bodies.
14. First feature can be taken as length, area and volume values of interval, square and cube respectively.
15. The second feature may be taken as interval having 2 end points, square having 4 boundary lines and cube having 6 surfaces.
16. The above first feature may be associated with the sequential arrangement of ( $1,2,3$ ).
17. The second above feature may be associated with ( $1 \times 2,2 \times$ 2, $3 \times 2$ ).
18. One can very gently extend values triple ( $1,2,3$ ) to values quadruple ( $1,2,3,4$ ).
19. Likewise values triple $(2,4,6)$ can be extended to values quadruple ( $2,4,6,8$ ).
20. One can have a pause here and bring to pointed attention that like the availability of value 4 ahead of values $1,2,3$, we
can expect existence of the geometric body ahead of the formats of interval, square and cube.
21. Here it can further be brought to pointed notice that interval as one space body has 2 end points, square as 2 space body has 4 boundary lines and cube as 3 space body has 6 surfaces, so a step ahead, 4 space body shall be having solid boundary of 8 components.
22. Here it may be appropriate to bring to pointed attention as that 1 space body has 1 dimension, 2 space body has 2 dimensions, 3 space body has 3 dimensions and 4 space body has 4 dimensions .
23. Further as that 1 space body has boundary of 2 components, 2 space body has boundary of 4 components, 3 space body has boundary of 6 components and 4 space body has boundary of 8 components.
24. Still further it also can be brought to pointed attention as that points ( 0 space bodies) constitute the boundary of 1 space body, lines ( 1 space bodies) constitute the boundary of 2 space bodies, surfaces ( 2 space bodies) constitute the boundary of 3 space body and a step ahead, solids ( 3 space bodies) constitute the boundary of 4 space body).
25. Still further, here at this stage, it can be brought to pointed attention that we can represent 1 space body as $\mathrm{A}^{1}, 2$ space body as $A^{2}, 3$ space body as $A^{3}$ and 4 space body as $A^{4}$.
26. Still further it also can be brought to pointed notice as that boundary of 1 space body can be represented as $2 a^{0}$, boundary of 2 space body can be represented as $4 a^{1}$, boundary of 3 space body can be represented by $6 a^{2}$ and boundary of 4 space body can be represented as $8 a^{3}$.
27. In one another way as well, one can be exposed to the reality of 4 space.
28. It can be pointed as that the track of a moving point, 0 space body, is a line ( 1 space body).
29. The track of a moving line ( 1 space body) is the format of 2 space body ( surface).
30. The track of a moving surface ( 2 space body) is the format of 3 space body ( solids).
31. We are seeing the reality of moving solids.
32. The track of a moving solids will take us to the existence reality of 4 space and format of 4 space body ( hyper cube 4).
33. One shall visit and revisit above features and to glimpse the reality of 4 space.
34. One shall comprehend the reality of the space in which we are existing is not a 3 space.
35. It is the four space.
36. It permits the dynamic state for the solids.
37. It would be blissful to comprehend and realize as that we with our body of a solid frame, has a freedom of motion in the space around us, and as such the reality of 4 space is self evident.
38. One shall never permit oneself to be a victim of mental state forseeing to accept space as a 3 space.

## IV

## 4 SPACE CREATION FORMAT

1. Vedic Mathematics students shall be further very gently be exposed to the creation format of 4 space.
2. Lord Brahma, 4 Head Lord with a pair of eyes equipped in each head and sitting on the lotus seat of 8 petals meditates within cavity of his own heart upon transcendental Lord and with the grace of transcendental Lord, Lord Brahma multiplies as 10 Brahmas.
3. These features of the idol of Lord Brahma are parallel to the format of hyper cube 4 .
4. hyper cube 4 is a four fold manifestation layer $(2,3,4,5) / 2$ space in the role of dimension, 3 space in the role of boundary, 4 space in the role of domain, 5 space in the role of origin.
5. The origin fold is at the centre of 4 space domain parallel to the origin of 4 space within 4 space.
6. The origin fold is of one degree higher dimensional order than that of the domain fold of hyper cube.
7. The four folds format is of values of quadruple formulations ( Vyakta, Avyakta, Snatana, Pursha), as per the enlightenment of Adhiyaya 8 of Srimad Bhagwat Geeta .
8. These quadruple formulations accept transcendental code values quadruple ( $15,16,28,24$ ).
9. One may have a pause here and take note that the values triple ( $15,16,28$ ) is parallel to the number of letters of the text of Ganita Sutras $1,2 \& 3$.
10. Number of letters of Ganita Sutras $1,2 \& 3$ constitute values triple ( $16,28,15$ ) in a linear sequence.
11. Their placement along the circular format leads to as many as 6 formation strings viz. ( $16,28,15$ ), ( $28,15,16$ ), ( $15,28,16)$, ( $16,15,28$ ), $(28,16,15)$ and ( $15,16,28$ ).
12. One may have a pause here and take note that the values triple ( $15,16,28$ ) , as values triple of formulations ( Vyakta, Avyakta, Snatana) is one of these 6 formations.
13. One may further have a pause here and take note that the fixation of the middle point of a given pair of points, would be reached in triple steps with first step being to fix the first point.
14. The second step would be to fix the second point.
15. The third step would be to fix the middle of the pair of points of previous two steps.
16. One may have a pause here and take note that the above sequential order of the steps of fixation of the middle point of the pair of given points, in fact is reached at the third step.
17. One may have a pause here and take note that as per the organization, the first point, middle point and second point make an order.
18. However, the reach steps are as first step, third step, second step to attain above order of first point, middle point, end point.
19. One may further have a pause here and take note that taking first point, middle point and second point as values triple ( $1,2,3$ ) the same for their fixation will lead to the first step, third step, second step and parallel to it would be the values triple of order ( $1,3,2$ ) .
20. It is this feature which deserve to be comprehended well.
21. Here One may have a pause and to revisit the sequential order of triple formulations ( Aadi, Madhya, Ant)/( beginning, middle, end).
22. These triple formulations ( Aadi, Madhya, Ant) accepts transcendental code values triple ( $10,19,14$ ).
23. One may have a pause here and take note that the middle value ( 19 ) is the placement value of the Southern Hemisphere.
24. The Northern Hemi-sphere is having placement value (17).
25. Further as that 5 space in the role of origin of the creation format ( $2,3,4,5$ ), and it is in a unmanifest form within the domain fold.
26. Further as that it is being in an unmanifest form is free of the boundary and dimensional frames.
27. Accordingly 11 geometries range of 5 space, at its $11^{\text {th }}$ phase of 11 geometries, as 5 space content lump will be releasing its origin ( 6 space) and that with the release of it, the 11 geometries range will extend into $11+6=17$ values steps range.
28. One may have a pause here and take note that value 17 and parallel to it transcendental code value 17 takes us to the formulation ( Dravya) ( Content).
29. One may have a pause here and take note that transcendental code value of Dravya is 17 which is the placement of Northern Hemi-sphere .
30. One may further have a pause here and take note that the formulation ( Divya) as well is accepting transcendental code value 17.
31. As such the placement value 17 is of the format of " Transcendental content"/ 5 space content.
32. Being a 5 space content, which is inherently of a solid dimensional order, as such it shall be permitting each constituent of transcendental content to be of the same format and features.
33. It is this feature of the transcendental domain ( 5 space content) as domain fold but free of its boundary and dimensional frame, which deserve to be comprehended well and to be thoroughly appreciated for its complete imbibing to glimpse the distinction between space content and the manifested body of the space with its space content manifesting as a framed domain fold of respective hyper cube as representative body of the concerned space.
34. 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 .
35. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## V

## SETTLING LESSONS OF VEDIC MATHEMATICS

1. The settlement of $4^{\text {th }}$ lesson of Vedic Mathematics is to be in a graded phased manner.
2. The sequence of organization format of Ganita Sutras and upsutras is to be maintained.
3. Ganita Sutras mathematical domain is accepting numbers, bodies and manifestation format, as well as transcendence steps there from as the inter connected related values as the mathematical values basis as inter-related manifested mathematical tools, entities and processes.
4. The initial values reach for the numbers values is to be of the steps of reach:
i)
1 to 9
ii) 01 to 99
iii) 001 to 999 and iv)
0001 to 9999.
5. The initial chase steps of Geometric bodies formats lessons are to be :
i) $\quad-1,0,1,2 /$ hyper cube 1
ii) $0,01,2,3 /$ hyper cube 2 .
iii) $1,2,3,4 /$ hyper cube 3 .
iv) 2,3,4,5/hyper cube 4
v) $3,4,5,6 / \mathrm{hyper}$ cube 5
vi) 4,5,6,7/hyper cube 6
6. Sathapatya Measuring Rod format feature be sequentially chased for the sequential values and formats as are tabulated hereunder:

| Feature | 1 <br> space | $2$ <br> space | $3$ <br> space | $4$ <br> space | 5 space | $6$ <br> space | $7$ <br> space |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Body | Hype <br> r <br> cube- <br> 1 | Hype <br> r <br> cube- <br> 2 | Hype <br> r <br> cube- <br> 3 | $\begin{aligned} & \text { Hype } \\ & \text { r } \\ & \text { cube- } \\ & 4 \end{aligned}$ | Нуре <br> r <br> cube- <br> 5 | Hype <br> r <br> cube- <br> 6 | Hype <br> r <br> cube- <br> 7 |
| Domain | $\mathrm{A}^{1}$ | $\mathrm{A}^{2}$ | $\mathrm{A}^{3}$ | $\mathrm{A}^{4}$ | $\mathrm{A}^{5}$ | $\mathrm{A}^{6}$ | $\mathrm{A}^{7}$ |
| Boundary | $2 \mathrm{a}^{0}$ | $4 \mathrm{~A}^{1}$ | $6 \mathrm{~A}^{2}$ | $8 \mathrm{~A}^{3}$ | $10 \mathrm{~A}^{4}$ | $12 \mathrm{~A}^{5}$ | $14 \mathrm{~A}^{6}$ |
| Dimension | $\begin{gathered} (-1) \\ \text { space } \end{gathered}$ | (0) space | (1) <br> space | (2) <br> space | (3) space | (4) <br> space | (5) space |
| Dimensional | 1 | 2 | 3 | 4 | 5 | 6 | 7 |


| frame | axis | axes | axes | axes | axes | axes | axes |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dimensional <br> value | $(-1)$ | 0 | 3 | 8 | 15 | 24 | 35 |
| Geometries | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| Four folds | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ | $(8)$ |  |
| Summation <br> value | 2 | 6 | 10 | 14 | 18 | 22 | 26 |
| Dimensional <br> Frame <br> value | $-1 \times 1$ | $0 \times 2$ | $1 \times 3$ | $2 \times 4$ | $3 \times 5$ | $4 \times 6$ | $5 \times 7$ |
| $=-1$ | $=0$ | $=3$ | $=8$ | $=15$ | $=24$ | $=35$ |  |
| Transcendenc <br> e | -3, | -2 | -1, | 0, | 1, | 2, | 3, |
| Triple <br> value | -1, | 0, | 1, | 2, | 3, | 4, | 5, |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Product <br> value | 3 | 0 | -3 | 0 | 15 | 48 | 105 |
| Addition <br> value | -3 | 0 | 3 | 6 | 9 | 12 | 15 |

7. The upper and lower parts of 99 double digit numbers organized along $9 \times 11$ grid format as under to be chased distinctively.
01 02
$03 \quad 04$
05
06
07
08 09
10
11
12
13
14
15
16
17
18
19
20
22
$23 \quad 24$
25
26 27

8. The upper part of the above grid leads to the structural keys of the organization of Ganita Sutras 1 to 16 and of Ganita upsutras 1 to 13 and this feature as organization of reflection pairs of double digit numbers be tabulated for their specific imbibing in the sequential order of Ganita Sutras and Ganita upsutras with Ganita upsutras bridging the gaps between the sutras:

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | 09


| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 18 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| - | 27 |  | 30 | 31 | 32 | 33 | 34 | 35 |
| - | 36 | - |  |  |  |  |  |  |
| - | - | - | 40 | 41 | 42 | 43 | 44 |  |
|  | 45 | - | - | - | 50 | 51 | 52 | 53 |
| - | 54 |  |  |  |  |  |  |  |


| - |  | - | - | - | - | 60 | 61 | 62 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 63 | - | - | - | - | - | 70 | 71 |
|  | 72 |  |  |  | - | - | - | 80 |
| - | - | - | - |  |  |  | - |  |
|  | 81 | - | - | - | - | - | - |  |

8. The lower part of the above grid is of following organization features.

| - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | - | - | - | - | - | - |
| 28 | 29 | - | - | - | - | - |
| 37 | 38 | 39 | - | - | - | - |
| 46 | 47 | 48 | 49 | - | - | - |
| 55 | 56 | 57 | 58 | 59 | - | - |
| 64 | 65 | 66 | 67 | 68 | 69 | - |
| 73 | 74 | 75 | 76 | 77 | 78 | 79 |


| 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 |

9. Let us have a revisit of the organization format feature of above lower part of the $9 \times 11$ organization format feature and it will come to pointed attention as that the mirror line is of 5 steps placements of values ( $55,66,77,88,99$ ) .
10. This mirror line of placement values ( $55,66,77,88,99$ ) accepts reorganization as ( $11 \times 5,11 \times 6,11 \mathrm{x} 7,11 \mathrm{x} 8$, 11x9).
11. This leads to the features of 11 geometries range of 5 space and parallel to it 11 versions of hyper cube 5 which accepts dimensional frame of 5 dimensions for each of the 11 versions and thereby the dimensional value of all the 11 versions of hyper cube 5 leads to $11 \times 5=55$ dimensions ( of solid order).
12. Further as that the $11^{\text {th }}$ version of hyper cube 5 is the set up of 5 space content lump as domain fold free of its boundary envelop ( boundary fold ) thereby a transcendence phenomenon will take place as the origin of 5 space domain which shall be sequentially taking us to the transcendence range beginning with 5 space ( domain) and sequentially leading to 6 space, 7 space, 8 space and 9 space as compactified origins at the origin seat of transcendental domain ( 5 space domain).
13. One may have a pause here and take note that this transcendence phenomenon within 5 space domain framed within its solid dimensional frame of 5 dimensions, that way leading to the happening of transcendence as of dimensional values $11 \times 5,11 \times 6,11 \times 7,11 \times 8$, and $11 \times 9$.
14. One may have a pause here and take note that it is this reach of the organization format of the lower part of $9 \times 11$ grid
format which deserve to be comprehended well and same is to be appreciated fully for its thorough imbibing to acquire deep insight and to attain enlightenment about this phenomenon .
15. One may have a pause here and take note that the upper part of $9 \times 11$ grid is of the organization format features and values of manifestation while the lower part of this organization is about the transcendence at the origin fold of the manifested layers creation format .
16. One may have a pause here and take note that the transcendence range ( $5,6,7,8,9$ ) leads $t$ synthesis with itself as of value $(5+6+7+8+9)+5 \quad(5+6+7+8+9)=$ $35+5+35=75$.
17. One may have a pause here and take note that the value 75 is parallel to 5 space playing the role of dimension of 7 space.
18. With it, It would be blissful to glimpse the attainment of unity state ( 7 space) through the transcendence process .

## VI <br> RECHASE OF DOUBLE DIGIT NUMBERS 00 TO 99 ALONG 10 X 10 GRID FORMAT

1. The $10 \times 10$ grid format accommodates whole range of 100 double digit numbers 00 to 99 as under:

| 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 08 | 09 |  |  |  |  |  |  |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 |  |  |  |  |  |  |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 |  |  |  |  |  |  |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
| 38 | 39 |  |  |  |  |  |  |


| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 48 | 49 |  |  |  |  |  |  |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 |
| 58 | 59 |  |  |  |  |  |  |
| 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 |
| 68 | 69 |  |  |  |  |  |  |
| 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 |
| 78 | 79 |  |  |  |  |  |  |
| 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 |
| 88 | 89 |  |  |  |  |  |  |
| 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 |
| 98 | 99 |  |  |  |  |  |  |

2. Let revisit the above organization format and it will bring to pointed attention as that the central mirror line is along the placements values ( $11,22,33,44,55,66,77,88,99$ ).
3. It would be blissful to have comparative view of organization of 99 double digit numbers 01 to 99 along 9 x 11 grid format and further organization of 100 double digit numbers of range 00 to 99 along $10 \times 10$ grid format and it would be blissfully coming to notice as that while $9 \times 11$ grid leads to a mirror line along ( $10,20,30,40,50,60,70,80,90$ ) and the both upper and lower parts as well accept further mirror lines ( $11,22,33,44$ ) and ( $55,66,77,88,99$ ) , however in case of $10 \times 10$ grid the mirror line is $(11,22,33,44,55,66,77,88,99)$.
4. Now let us further have a visit to the above organization format features of both grids ( $9 \times 11$, as well as $10 \times 10$ ) and to glimpse the distinguishing organization format features along both the grid formats.
5. Further, we have rearranged the above double digit numbers along $10 \times 10$ format beginning with 01 and having a reach uptil 99 and the last value reach, which is to be of 100 , but it being a triple digit number, so the last grid point will
remain vacant and the number value 100 will not be accommodated.
6. It would be a blissful exercise to tabulate the grid $10 \times 10$ for double digit numbers 01 to 99 with last grid zone remaining vacant.
7. It would be a blissful exercise to have comparative view of the above 3 grids and to have comparative view of grid 9 x 11 and $10 \times 10$ for the double digit numbers 01 to 99 .
8. Further one shall glimpse the distinguishing features of the double digit numbers organization along above both $10 \times 10$ grid.
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 features formats .
10. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## VII <br> FURTHER SETTLEMENT OF LESSONS WITH FOCUS UPON STRUCTURED POINT SETS

1. Vedic systems approach manifested creations universe ( $s$ ) as well as the universal set as the set of universes having structured point as its elements.
2. The concept of the structured point is one of the basic concepts.
3. Structured point is one of the basic mathematical tool/entity/element of Vedic Mathematics .
4. In fact structured point is in itself a complete mathematical domain.
5. The sole syllable Om accepts Bindu Sarovar ( point reservoir of structures) as its first component.
6. The second component is Ardhmatra.
7. Third component is Tripundram.
8. Fourth component is Swastik Pada.
9. The sole syllable Om unfolds as a range of its synonyms namely Pranva, Aum, Omkar, Udgit and Vashtkar.
10. This six steps long range ( Om, Pranva, Aum, Omkar, Udgit and Vashtkar) is the basic values range of Vedic systems, as well as of Vedic Mathematics, Science \& Technology, and also as of Vedic Mathematical domains.
11. Beginning with Bindu Sarovar ( the point reservoir of structures), the whole range of chase steps are sequentially chased reaching uptil the full coverage as per the above 6 steps long range (Om, Pranva, Aum, Omkar, Udgit and Vashtkar).
12. The initial lessons of Bindu Sarovar are to be under the caption " structured point".
13. The structured point, at its initial stage may be taken as a point of domain fold of hyper cube format.
14. It, as such shall be fulfilling the point with the structures of space content of the concerned space manifesting as domain fold of the hyper cube as the representative regular body of the concerned space.
15. Illustratively the point of hyper cube 1 /interval as such will be a point fulfilled with structures of 1 space as domain ( 1 space content lump) manifesting as domain fold of hyper cube 1 as representative regular body of 1 space.
16. Each structured point of 1 space as such shall be having full features of 1 space.
17. It would be like point being " 1 line".
18. Here It would be blissful to take note that NVF ( Point) $=$ NVF ( 1 line).
19. One may have a pause here and take note that the structured point of 1 space as such is the constituent of 1 space .
20. And also it is full 1 space domain.
21. 1 space as 1 space body and as1space domain shall be providing a format along which the points of 0 space can be set .
22. The setting of 0 space point along 1 space format, that way will bring into play 0 space point and 1 space point merging their formatting organization .
23. 0 space points set along 1 space domain shall be constituting a distinct set than that of the set of constituents of 1 space domain i.e. structured points fulfilled with structures of 1 space domains.
24. The dynamic state of 0 space points and the set of 1 space domain points, as well will deserve to be chased for their parallel as well as for their distinguishing mathematical values reach.
25. Sequentially the 0 space point, 1 space point, 2 space point and so on, the whole range of dimensional spaces points deserve to be distinctively comprehended and imbibed for their values.
26. The chase of all these features of sets of structured points, as and along Sathapatya Measuring Rod of sequential emergence as of hyper cube 1 , hyper cube 1 and hyper cube 2 , hyper cube 1 , hyper cube 2 and hyper cube 3 , and so on makes a distinct mathematical domain whose comprehension and imbibing will require proper settlement of lessons for the young minds as well as for High and Higher Secondary classes, as well as for senior classes.
27. The parallel chase of Arithmetic as well as Algebra etc., as well will require proper settlement of lessons.
28. As each dimensional space is going to have its distinct mathematics, sciences and technologies, as such each space mathematics deserve to be learnt and taught distinctively .
29. 4 years education at High and Higher Secondary School level may be sequentially devoted to 3 space, 4 space, 5 space and 6 space Mathematics,Sciences and Technologies.
30. This chase, as such, initially is to be the chase of format of hyper cube $3,4,5 \& 6$ respectively .
31. As hyper cube format is a four fold format and as each space has distinct roles as dimension fold, boundary fold , domain fold, origin fold and base fold, as such the chase along $4 \times 4$ and $5 \times 5$ grid format as well is to be undertaken with specific focus and reference to 3 space, 4 space, 5 space and 6 space respectively .
32. Simultaneously the applied values of $3,4,5 \& 6$ spaces deserve to be undertaken as part of High and Higher Secondary classes.
33. As human body itself is the manifested creation along hyper cube 4 format, as such the values of Vedic Mathematics, Science \& Technology deserve to be properly imbibed and to be availed.
34. Further as the whole range of existence phenomenon of our Solar Universe is approached by Vedic system as a single discipline along Sathapatya Measuring Rod having Mathematical basis of Ganita Sutras, as such the integrated approach to all disciplines of knowledge should be the guiding principle of learning, teaching and exploration of the values and virtues of Vedic Mathematics .

Folder No. SKK 10,2016,
V.M.Teachers' Mannual

File 7, Ganita Sutra 5 \& 6 and

## GANITA SUTRA 5 \& 6 AND CONSCIOUSNESS STATE I CHASE OF SEQUENTIAL UNFOLDING OF GANITA SUTRAS

1. Organization format of Ganita Sutras is of compactified formats.
2. Text of Ganita Sutras as such sequentially unfold their mathematical domains.
3. One way to approach mathematical domains for their learning, teaching, explorations and attainments is to approach Ganita Sutras 1,2,3,4 as intelligence field chase, Ganita Sutras 5 \& 6 as chase of consciousness state, Ganita Sutras $7,8 \& 9$ as explorations stages and Ganita Sutras $10,11 \& 12$ as of intensified explorations and finally Ganita Sutras $13,14,15 \& 16$ for the attainments.
4. As the Ganita upsutras bridge the gaps of sequential arrangements of Ganita Sutras as such the above corresponding chases steps shall also cover respective Ganita upsutras coming under the organization arrangements for bridging the gaps respectively between Ganita Sutras 1 to 4,5 to 6,7 to 9,10 to 12 and 13 to 14 .
5. The initial stage of chase of Ganita Sutras 1 to 4 and Ganita upsutras 1 to 4 as initial chase parallel to intelligence field values, as such the emerging $\quad(26,46,38,38)$ letters organization of Ganita Sutras 1 and Ganita upsutra 1, Ganita Sutra 2 and Ganita upsutra 2, Ganita Sutra 3 and Ganita upsutra 3 and Ganita Sutra 4 and Ganita upsutra 4 deserve to be comprehended well .
6. For convenient reference these organization formats of values ( $28,46,38,38$ ) , is being reproduced hereunder:
i) Chase steps of Ganita Sutra 1 and Ganita upsutra 1.
ii) Chase steps of Ganita Sutra 2 and Ganita upsutra 2.
(8,2,2,2,5,1,9,8,1,7,1,4,1,2,2,1,3,1,9,1,9,6,1,2,1,4,1,13), ( 2,2,6,1,1,4,6,2,6,6,1,4,1,9,4,6,1,3).
iii) Chase steps of Ganita Sutra 3 and Ganita upsutra 3
( 6,7,3( 2), 7,1,4,2,3(2),1,1,3,8,1,2,9),

6,1,1,9,2,6,1, 6,8,2,8,4,1, $1,9,1,8,4,1,6,8,1)$.
iv) Chase steps of Ganita Sutra 4 and Ganita upsutra 4 5,1,3,2,7,1,3,4,1,1,1,7,4,1,1,6,4),

## 1,6,7,1,5,8,13,3,1,5,4,1,1,1,9,3,1,7,1,2,4)

7. The integrated text of Ganita Sutras and Ganita upsutras with upsutras getting placement at the gaps in between the consecutive sutras, it leads to a format of intelligence field being sustained by the consciousness state set up of human mind.
8. Accordingly the above format of 26 letters text of Ganita Sutra 1 and Ganita upsutra 1 leads to rearrangement of above 26 values range i.e.
$\mathbf{6 , 4 , 2 , 7 , 2 , 4 , 6 , 8 , 1 , 5 , 6 , 7 , 6 , 2 , 7 , 1 , 2 , 8 , 3 , 3 , 6 , 5 , 1 , 6 , 1 , 7 )}$ parallel to the following organization arrangement of the integrated text of Ganita Sutras 1 to 16 and of Ganita upsutras 1 to 13

| S.No. | G.S./G.U.S. | Letter | T.C.V |
| :---: | :--- | :---: | :---: |
| 1 | Ganita Sutra-1 | Letter 1 sutra 1 |  |
| 2 | Ganita upsutra 1 | X |  |
| 3 | Ganita Sutra 2 | Letter 2 sutra 1 |  |
| 4 | Ganita upsutra 2 | Letter 1 upsutra 1 |  |
| 5 | Ganita Sutra 3 | Letter 3 sutra 1 |  |
| 6 | Ganita upsutra 3 | Letter 2 upsutra 1 |  |
| 7 | Ganita Sutra 4 | Letter 4 sutra 1 |  |
| 8 | Ganita Upsutra 4 | Letter 3 upsutra 1 |  |


| 9 | Ganita Sutra-5 | Letter 5 sutra 1 |  |
| :---: | :--- | :---: | :--- |
| 10 | Ganita upsutra 5 | Letter 4 upsutra 1 |  |
| 11 | Ganita Sutra 6 | Letter 6 sutra 1 |  |
| 12 | Ganita upsutra 6 | Letter 5 upsutra 1 |  |
| 13 | Ganita Sutra 7 | Letter 7 sutra 1 |  |
| 14 | Ganita upsutra 7 | X |  |
| 15 | Ganita Sutra 8 | Letter 8 sutra 1 |  |
| 16 | Ganita sutra 9 | Letter 9 sutra 1 |  |
| 17 | Ganita Upsutra- 8 | Letter 6 Upsutra 1 |  |
| 18 | Ganita sutra 10 | Letter 10 Sutra 1 |  |
| 19 | Ganita Upsutra 9 | Letter 7 Upsutra 1 |  |
| 20 | Ganita sutra 11 | Letter 11 sutra 1 |  |
| 21 | Ganita Upsutra 10 | Letter 8 Upsutra 1 |  |
| 22 | Ganita sutra 12 | Letter 12 sutra 1 |  |
| 23 | Ganita Upsutra 11 | Letter 9 Upsutra 1 |  |
| 24 | Ganita sutra 13 | Letter 13 sutra 1 |  |
| 25 | Ganita Upsutra 12 | Letter 10 Upsutra 1 |  |
| 26 | Ganita Sutra 14 | Letter 14 Sutra 1 |  |
| 27 | Ganita Upsutra 13 | X |  |
| 28 | Ganita sutra 15 | Letter 15 Sutra 1 |  |
| 29 | Ganita Sutra 16 | Letter 16 sutra 1 |  |
|  |  |  |  |

9. One may have a pause here and take note that above organization arrangement of 29 steps value-wise, as per this arrangement is of 29 expression values steps as under:

$$
)_{\substack{6,0,4,2,2,8,}}^{7,3,2}
$$

10. This 20 steps reorganized range of integrated text of Ganita Sutra 1 and Ganita upsutra 1 deserve to be read in reference to

26 steps organization of the text of 16 letters of Ganita Sutra 1 and 13 letters of Ganita upsutra 1.

## II

SEQUENTIAL EMERGENCE OF STRUCTURAL KEYS

1. The virtue of organization format of Ganita Sutras is that it sequentially leads to structural keys.
2. To begin with the selection of values range 1 to 29 , in itself is inherently preserving the structural keys .
3. The first feature here is that value 29 is parallel to transcendental code value of formulation Brahma, overhead Lord, Creator of the Supreme.
4. Further as that it takes in 4 steps for the coverage of four fold manifestation layer ( $26,27,28,29$ ) in its reverse orientation for hyper cube 28 with number value 28 being parallel to transcendental code value of word formulation Braham.
5. One may have a pause here and take note that 29 points coverage is parallel to 28 units coverage.
6. The other feature inherent herein in this choice of values range 1 to 29 is that with value 29 as the value of origin fold it leads to dimensional order value as 26 .
7. Further as that value 29 is of prime nature; Number 29 is prime.
8. Number 28 is the second perfect number.
9. Number value 26 permit reorganization as $26=5+6+7+8$ which is parallel to four fold manifestation layer $(5,6,7,8)$ of hyper cube 8 .
10. One may have a pause here and take note that number value 8 is parallel to transcendental code value 8 of word formulation " Ek ".
11. Still further as that values range 1 to 26 as such is parallel to values range of 26 steps beginning with 1 and covering whole range of 25 primes uptil 1 to 100 .
12. Still further as that the pair of primes ( 23,29 ) is having jump over a range of 5 consecutive numbers namely ( 24,25,26,27,28).
13. This range accepts reorganization as ( $4 \times 6,5 \times 5,2 \times 13$, $3 \times 3 \times 3,7 \times 4$ ).
14. These features with parallel transcendental code values range ( 24 to 28) brings to focus words formulation string ( Pursha, Vishnu, Bhishaj, Nimit \& Braham).
15. Pursha to Braham with the in between phases and stages of Vishnu, Bhishaj and Nimit is a very big reservoir of values whose chase requires insight for attainment of enlightenment.
16. One may have a pause here and take note that the last triple of primes of numbers range 1 to 100 is ( $83,89,97$ ).
17. It would be blissful to take note that the 13 steps long range of values in between the end pair of primes $(83,97)$ is of the feature that this range of 13 consecutive numbers accepts only one prime namely " 89 ".
18. The placement of prime " 89 " in the range ( $84,85,86,87,88$, $89,90,91,92,93,94,95,96$ ) has a split of sub strings of 5 and 7 composite numbers around value /prime ( 89).
19. This pair of strings are of values ranges ( $84,85,86,87,88$ ) and ( $90,91,92,93,94,95,96$ ) .
20. We have previously noted that the pair of primes $(23,29)$ are the end values of the in between 5 steps long numbers range (24,25,26,27,28) .
21. As such it would be a blissful exercise to make enlistment of primes holding composite numbers strings on their either side.
22. The biggest pair of strings being held are of prime 89 which holds sub strings of 5 and 7 composite numbers on its either side.
23. It would be blissful to take note that number 89 avails a pair of digits 8 and 9 which on their reorganization as $\left(2^{3}\right.$, $3^{2}$ ) constitute a reflection pair along the vertical format .

## SECOND FEATURE:

1. The second feature of the choise of number value 29 for the organization of Ganita Sutra is that it accepts reorganization as $29=16+13$.
2. The values pair $(16,13)$ is parallel to 16 sutras and 13 upsutras.
3. Further values pair $(16,13)$ is parallel to pair of words formulations ( Praan, Vayu).
4. It would be blissful to take note that values triple ( $29,16,13$ ) and parallel formulation triple (Brahma, Praan, Vayu) is the enlightenment of our existence phenomenon itself.

## THIRD FEATURE:

1. The third feature of number value 29 is that it is parallel to fourth stage domains split spectrum as that the domain ( as single entity, value 1) at first step splits into a pair of domains of dimensional order of the domain.
2. And sequentially the split spectrum progresses as value 1 to value 2 , value 2 to value 5 , value 5 to value 12 and at fourth step as value 12 to value 29 .

## FOURTH FEATURE:

1. Fourth feature of value $29=16+13$, further leads us to organization as $16=5+6+5$ and $13=4+5+4$.
2. The organization $5+6+5$, as such is parallel to the split of 5 space domain in to a pair of 5 space domains and thereby there being a release of 6 space origin of 5 space.
3. Likewise the split of 4 space domain as a pair of 4 space domain will lead to release of 5 space as origin of 4 space.
4. It would be blissful to take note that 4 space plays the role of boundary of 5 space and as such the above split phenomenon at the domain as well as at the boundary is going to be of the format feature permitting consolidation in terms of number value 29 .
5. Still further as that 5 space plays the role of origin of 4 space and 4 space plays the role of dimension of 6 space with 5 space also being in the role of boundary of 6 space, and thereby there is going to be the consolidation of such a big split and synthesis phenomenon .
6. Further as that 5 space is a solid dimensional order space and its dimensional frame is of value $3 \times 5$ parallel to the values of 5 solid dimensions .
7. Further as that 15 points coverage is having 14 units coverage as 14 gaps of a range of 15 points.
8. It is this organization of $15+14=29$ which deserve to be comprehended well and to be thoroughly appreciated to have insight of the organization format feature of the text of Ganita Sutras and upsutras being 29 texts in all.
9. With it Ganita Sutras 1 to 16 accept structural keys of numbers values 1 to 16 ( in that sequence and order).
10. One may have a pause here and take note that the sole syllable Om as well accepts transcendental code value 16 .
11. With it the Om as the structural source reservoir in its first component as Bindu Sarovar fulfilled with Brahaman domain( 9 space) manifests parallel to its dimensional order as 7 streams flow.
12. This deserve to be chased.
13. It is the chase step of Ganita Sutra 1 manifesting itself as a pair of word formulations of 9 and 7 letters respectively .
14. One shall have a pause here and revisit Vedic systems which organize themselves parallel to the organization of sole syllable Om sequentially unfolding itself as Om, Paranva, Aum, Omkar, Udgit and Vashtkar.
15. This 6 steps long range becomes the initiation point.
16. It brings a value 6 as the value for the very first letter of the text of Ganita Sutra 1.
17. One shall sit comfortably and permit the transcendending mind to go parallel to the sequential unfolding process of Om as Ganita Sutra 1 and of Ganita Sutra 1 as Ganita Sutra 1 to 16 .
18. This shall be bringing us face to face with the following sequential unfolding steps, parallel to which will emerge the structural keys .
i) Numbers 1,2,3,4,5,6,7,8,9,
ii) Primes: 2,3,5,7
iii) Perfect Numbers : 6,28,496, 8128,
v) Powers: $2^{2}, 2^{3}, 2^{5}, 2^{7}$,
vi) Spaces: 1 space, 2 space, 3 space, 4 space,
$\qquad$
vii) Bodies: Hyper cube 1, hyper cube 2, hyper cube 3, hyper cube 4
viii) Orders: Linear, Spatial, Solid, Creative, -------------
ix) Boundary: Linear, Spatial, Solid, Creative
x) Dimensional frames: $(-1 \times 1),(0 \times 2),(1 \times 3),(2$ x 4) ,(3 x 5),-------
xi) Boundary components: $2,4,6,8,---------------$
xii) Transcendence triple ( $1,-1,-2$ ) , ( $2,0,-2$ ), ( $3,1,-1$ ), ( 4,2,0),------
19. The transcendence phenomenon sequentially takes us as under:
i)
1,
2 ,
3 ,
4,
5,

This will be extending manifestation layer ( $1,2,3,4$ ) along first axis extending as ( $1,2,3,4,5$ ).

Further along second axis the extension would be columnwise as of values $(4,4)$.

One may have a pause here and take note that the starting point is of value : $1+2+3+4=10$.

The extension as ( $1,2,3,4,5$ ) and also as ( 4,4 ) along the second axis, as such shall be creating diagonal path from value 5 to value 4 and it will take to the middle of the surface created within the pair of axes and this reach would be of value $(1+2+3+4)+(5)+(4)=19$.

Further the end reach within pair of axes will be of value $(1+2+3+4)+4=14$.

One may have a pause here and take note that this values triple $(10,19,14)$ is parallel to transcendental code value triple of triple formulation ( Aadi, Madhya, End) .
ii) The transcendence along the second manifestation layer ( $2,3,4,5$ ) shall be leading us to values triple ( $14,25,19$ ).
iii)

Third manifestation layer on transcendence shall be leading us to values triple $(3+4+5+6=18,31$, 24)
20. One may have a pause here and take note that the above sequential reach as ( Aadi, Madhya, Ant)/ ( Beginning, Middle, End reach) is of different values triple and is of different geometric formats for different manifestation layer of respective hyper cubes sequence ( hyper cube 3, hyper cube 4 , hyper cube 5 , hyper cube $6,--------------$ ).
21. The above sequential steps along the formats of hyper cubes $3,4,5,6,7$ shall be leading us to their parallel dimensional roles as of quadruple values formulation (Vyakta, Avyakta, Sanatana, Pursha).
22. One may have a pause here and take note that Pursha is "Atman".
23. The word formulation "Atma" accept transcendental code value 17.
24. With it, the quadruple values $(15,16,28,17)$ along their placements in a circular format shall be also taking us to its reorganization sequence as ( $16,28,15,17$ ) as well being parallel to the number of letters of the text of Ganita Sutras 1,2,3,4 respectively .
25. 4 space is a spatial order space.
26. Ganita Sutra 2 brings to focus 10 place value system format .
27. Single digit, double digit, triple digit and quadruple digit numbers shall be further providing us structural keys for reach along the format of Ganita Sutras $1,2,3$ \& 4 respectively .
28. The reflection pairs of double digit numbers along the grid format of $9 \times 11$ grid for 10 place value system will further provide us the structural keys for whole range of Ganita Sutras 1 to 16 in terms of the upper part of this grid ( 9 x 11).

| 01 |  | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 09 |  |  |  |  |  |  |  |  |
| 10 |  | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 |  |  |  |  |  |  |  |  |
| - |  | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 |  |  |  |  |  |  |  |  |
| - |  | - | 30 | 31 | 32 | 33 | 34 | 35 |
| 36 |  |  |  |  |  |  |  |  |
| - |  | - | - | 40 | 41 | 42 | 43 | 44 |
| 45 |  |  |  |  |  |  |  |  |
| - |  | - | - | - | 50 | 51 | 52 | 53 |
| 54 |  |  |  |  |  |  |  |  |
| - |  | - | - | - | - | 60 | 61 | 62 |


| - |  | - | - | - | - | - | 70 | 71 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 72 |  |  |  |  |  |  |  |  |
| - | - | - | - | - | - | - | 80 |  |
| 81 |  |  |  |  |  |  |  |  |
| - | - | - | - | - | - | - | - |  |
|  | 90 |  |  |  |  |  |  |  |

29. However, the lower part of the above grid shall be further providing us structural keys for reach at reorganization of the organization format of Ganita Sutras and Ganita upsutras as of values range (16-6) and (13-3).
30. This reach is also of the feature of Ganita Sutras $4,8,9,10,11,12,13,14,15,16$ accepting structural keys in terms of reflection pairing of double digit numbers along 1,3,5 \& 7 columns while Ganita upsutras $2,3,4,5,6,8,9,10,12$ accepting structural keys along $2,4,6 \& 8$ columns reflection pairing of the lower part of the above grid.

| 19 | - | - | - | - |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ${ }^{-}$ |  |  |  |  |  |
| 28 | 29 | - | - | - |  |
| ${ }^{-}$ |  |  |  |  |  |
| 37 | 38 | 39 | - | - |  |
|  | - | 47 | 48 | 49 | - |
| 46 |  |  |  |  |  |
| 55 |  | 56 | 57 | 58 | 59 |


| 64 | 65 | 66 | 67 | 68 | 69 | - | - |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| - | 74 | 75 | 76 | 77 | 78 | 79 | - |
| $73-$ |  |  |  |  |  |  |  |
| $82-$ | 83 | 84 | 85 | 86 | 87 | 88 | 89 |
| $99^{-}$ | 92 | 93 | 94 | 95 | 96 | 97 | 98 |

## III <br> WORD FORMULATIONS PURVENA AND ANURUPEN

1. The second word formulation of text of Ganita Sutra 1 is Purvena.
2. The single word formulation of text of Ganita upsutra 1 is Anupurvena.
3. The integrated text of Ganita Sutras and Ganita upsutras with Ganita upsutra 1 getting placement at the gap between Ganita Sutra 1 and Ganita Sutra 2,
4. As such, as has been noticed above in Para I (8), the Ganita upsutra 1 is the starting point and it is from Ganita upsutra 2 that the structural keys stand provided by letters 1 to 10 of text of Ganita upsutra 1 itself.
5. Here itself, it may be noticed with proper attention as that Ganita upsutra $1,7 \& 13$ are not getting structural keys in terms of 10 letters of the text of Ganita upsutra 1.
6. 10 letters of the text of Ganita upsutra 1 provides structural keys for Ganita upsutras $2,3,4,5,6,8,9,10,11,12$ only.
7. Here it would be relevant to note that the key for this structural organization is inherently imbedded in the organization format of the word formulations (Purvena of Ganita Sutra 1 and Anurupen of Ganita upsutra 1.
8. It would be blissful to revisit the text of this 13 formulations which for convenient reference are being produced hereunder:

## पूर्वेण Purvena

| 10 | 11 | 12 | 13 | 14 | 15 | 16 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| प | उ | र् | व् | ए | ण् | अ |  |

## UPSUTRA - I <br> आनुरूप्ये

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| आ | न् | उ | र | ऊ | प् | य् | ए | ण् | अ |
| Total Letters | Vowels | Nasels | Consonents |  |  |  |  |  |  |
|  | 10 | 5 | - | 5 |  |  |  |  |  |

9. One may have a pause here and take note that the values pair $(01,10)$ constitutes a reflection pair .
As such reversal of orientation feature gets imbedded here from the first letter of formulation पूर्वेण Purvena
10. It would further be relevant to note that the first letter of this formulation accept transcendental code value (5).
11. Further as that 5 space accept creative boundary of 10 components.
12. The last letter of the above formulation accept transcendental code value 1 .
13. These features will help us re-reach above organization of the text of this formulation in its reverse orientation, as much as that the last letter to be approached as the first letter and the first letter in that sequence chase will become the last letter.
14. It is this feature which will help us comprehend the organization format of the formulation Anurupena.
15. The acquaintance with the script format of Devnagri alphabet together with the features and values of geometric format of first Maheshwara sutra, will help us comprehend and appreciate about the reach from second formulation of Ganita Sutra 1 to Ganita upsutra 1, in the process of reversal of orientation and under the rule of ' Transpose and Unite" of Ganita Sutra 4.
16. This, as such will further help us comprehend and appreciate as to why the text of 10 letters of Ganita upsutra 1 is supplying structural keys beginning with upsutra 2 , and not from Ganita upsutra 1 itself as here the reversal of orientation is playing its own role and there remains no need for any additional feature for bridging the gap here between Ganita sutra 1 and Ganita upsutra 1.
17. 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 .
18. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

> IV
> FORMULATIONS OF VALUES
> $(1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20)$

# ( Ek, Duo, Trey, Chatur, Panch,Shast, Sapt,Asht,Nav,Dus,Ekadus,-- 

 ----)1. The formulations of values ( $1,2,3,4,5,6,7,8,9,10,11,12,13,14$, 15,16,17, 18, 19,20) Ek, Duo, Trey, Chatur, Panch,Shast, Sapt,Asht,Nav,Dus,Ekadus,-----accept transcendental code value (8,16,8,12,15,18,14,11,17,10,19,-----------).
2. It would be blissful to approach these transcendental code values as consecutive pairs ( 8,16 ), ( 16,8 ), ( 8,12 ), ( 12,15,$),(15,18),(18,14)$, ( 14,11 ), ( 11,17 ), ( 17,10 ), ( 10,19 ),-----------
3. These pairs permit us to reach at their reorganizations to comprehend the progression ratios of these respective pairs.
4. The first pair $(8,16)$ leads us to the progression ratio $(1,2)$.
5. The second pair $(16,8)$ leads us to the progression pair $(1,1 / 2)$.
6. Third pair $(8,12)$ leads us to progression pair $\left(1,1 \frac{1}{2}\right)$.
7. Fourth pair ( 12,15 ) leads us to progression pair ( $1,1 / 1 / 4$ )
8. Fifth pair $(15,18)$ leads us to progression pair $(1,11 / 5)$.
9. Sixth pair $(18,14)$ leads us to progression pair $(12 / 7,1)$
10. Seventh pair ( 14,11 ) leads us to progression pair ( $13 / 11,1$ )
11. Eighth pair ( 11,17 ) leads us to progression pair ( $1,16 / 11$ )
12. Ninth pair ( 17,10 ) leads us to progression pair ( $17 / 10,1$ )
13. Tenth pair ( 10,19 ) leads us to progression pair ( $1,19 / 10$ )
14. One shall have a pause here and take note that the above sequential relationship deserve to be comprehended well and to be properly appreciated to imbibe their features and values to acquire deep insight and appropriate enlightenment about the sequential transcendental code values for values range ( $1,2,3,4,5,6,7,8,9,10$,---$-----)$ and the geometric formats which are going to be accepted in that sequential order.
15. 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 .
16. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## V <br> TRANSCENDENTAL CODE VALUES RANGE ( $8,16,8,12,15,18,--------)$.

1. The transcendental code values range ( $8,16,8,12,15,18-\cdots-----)$ when sequentially approached for geometric formats accepted by them, a reach to it is sequential steps will help us comprehend and appreciate, amongst others, the following formats and features.
2. Value 8 accepts reorganization as $8=2^{3}$.
3. This , as such makes a second member of the sequence $\left(1^{3}, 2^{3}\right.$, $3^{3},------$ ).
4. The value 16 accepts reorganization as $16=8+8=2^{3}+2^{2}$.
5. It shall be helping us comprehend and appreciate as that this reach from first member to second member of the above sequence is going to be parallel to the format of single axis to a pair of axes.
6. It shall be leading us from linear format to a spatial format .
7. The value triple $(8,16,8)$ as such is taking us back from pair of axes to a single axis.
8. Sequentially $8,16,8$ is a triple values range and as such it shall be inherently taking us to single axis, pair of axes and triple axes.
9. One may have a pause here and take note that single axis makes a line, pair of axes makes a surface and triple axes make a solid ( 3 axes).
10. The third axes is like the first axis.
11. In fact all axes are linear.
12. However, pair of axes constitute a surface.
13. It is the motion of linear axes which constructs a surface.
14. A step ahead, the motion of surface constructs solids/3 space set up.
15. With it, it comes to focus as that that approach to 3 space set up can be like that as that third axes can be taken like first axis.
16. It shall be helping us have a motion format for the surface to constitute coverage for 3 space.
17. One may have a pause here and take note that the third member of the sequence $\left(1^{3}, 2^{3}, 3^{3}\right.$,-------) takes us to the value $3^{3}$.
18. It brings to focus the value of a solid dimensions, 3 in number.
19. It further brings to focus as half of the dimensional frame of 3 solid dimensions .
20. One may have a pause here and take note that it shall be helping us comprehend $t \quad$ the coverage of 3 space above the upper face of the surface having motion along the vertical line.
21. As with in 3 space, surface is having a pair of faces, as such, the upper face shall be availing half of the vertical line progressing upward.
22. The second half of line, will be progressing downward from the second face of thesurface.
23. It would be blissful to take note that NVF ( Half) $=27$.
24. Further as that vedic systems work out existence phenomenon for both Hemi spheres in terms of the organization format of 27 Nakshatras.
25. It as such further brings to focus that the vertical line as one space content lump ( domain) in the role of dimension, shall be constructing 3 space ( domain).
26. It further brings to focus that within 4 space, which is of a spatial order, there is a split for axes into a pair of half axes.
27. One may further have a pause here and take note that 4 space accepts 5 space in the role of origin.
28. Further as that 5 space is a solid order space.
29. As such the solid dimension ( axis)splits into a pair of half axes.
30. Here it also would be blissful to takenote that NVF ( Axis) is 53 which is parallel to the organization format of 3 space in the role of dimension of 5 space.
31. Further as that value 53 is parallel to the synthesis of a pair of solid dimensional order transcendental ranges ( $3,4,5,6,7$ ).
32. Value $53=(3+4+5+6+7)+3+(3+4+5+6+7)$.
33. One may have a pause here and take note that from the transcendental origin ( 5 space as origin) there is a transcendental flow of solid order ( 3 space as dimension into the spatial order domain).
34. Still further as that 3 space structures 5 space.
35. It structures as a four fold manifestation layer ( $3,4,5,6$ ) with summation value 18 .
36. It would be blissful to take note that formulation Shashth accepts transcendental code value 18 .
37. Further as that formulation Shunya also accept transcendental code value 18 .
38. still further as that $0=0 \times 0,0+0=(-0) \times(-0)$ as such absorbs Vridhi ( addition), Guna ( multiplication) as well as Pravartiya ( Reversal of orientation ).
39. As such 0 is of affine state.
40. Further as that 0 is the whole number.
41. It leads to value triple $(-0,0,+0)$.
42. It also leads to $(-1,0,1)$.
43. This pair of triples values $(-0,0,+0)$ and $(-1,0,1)$ brings to focus (Anurupey) parallel equal symmetrical formatting values which distinctively are being focused as Ganita Sutras 5 \& 6 .
44. Further as that $5=2+3$.
45. $\quad 6=2 \times 3$.
46. 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 .
47. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
48. It would be a blissful exercise to glimpse organization of pair of values triple $(7,8,9)$ and of $(17,18,19)$.
49. It wouldfurther be a blissful exercise to reach from the format of hyper cube 4 to the format of hyper cube 5 .
50. It would be a transition and transformation from the format of hyper cube 4 to the format of hyper cube 5 .
51. It shall be bringing us face to face with the organization features of Ganita Sutras and Upsutras, as that it is only accepting in its text the formulation "Verg/square".
52. Square is a representative regular body of 2 space as 2 space content manifests as domain fold of square as hyper cube 2 and as that 2 space ( domain) in the role of dimension structures 4 space reality.
53. 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 .
54. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
55. It would be a blissful exercise to firstly glimpse the reality of 4 space.
56. And then at next step to glimpse the reality of 5 space.

Folder No. SKK 10,2016,
V.M.Teachers' Mannual

File 8, Basic queries about Vedic
Mathematics

## BASIC QUERIES ABOUT VEDIC MATHEMATICS

Query 1 Whether Vedic Mathematics is of different values than that of Mathematics known as Indian Mathematics of values of works of Arya Bhatt and Indian Mathematicians of his times and around?

Ans. Vedic Mathematics is at base and is basis of organization of Vedic knowledge. Initially whole range of knowledge stood organized as single Ved. Thereafter this wisdom was reorganized as 4 Vedas. This way Vedic period is of two phases, first is of single Ved period and second is of 4 Vedas period. The referred Indian Mathematics is of post Vedic period. The Mathematics of Vedic and post Vedic period are different values.

Query 2 What is the basic distinction between the Vedic Mathematics and other Mathematics system?

Ans. Whole difference is in the comprehension reach. And accordingly is the difference in the processing steps. And further, there also happens to be distinct sets of axioms and postulates of Vedic Mathematics and post Vedic period Mathematics.

Query 3 Whether there is any specific compilation of Vedic Mathematics values and of their features steps?

Ans. At the outset, the answer, in the context is that let us first comprehend, appreciate and imbibe the values of Atharv Ved Ganita Sutras, which are 16 in numbers and which together with text of 13 upsutras, in a combined way availing just 519 letters, and the same to be taken as the compilation of Vedic Mathematics values and their features steps, as are being looked for .

With glimpsing of these values, one may have an idea of the reach of values and virtues of Vedic Mathematical domain and it will also give us the view of values of ganita sutras and their reach.

Query 4. Whether the values of Ganita Sutras and upsutras are of the reach of the range of the knowledge of Vedas (Vedic knowledge domain)?

Ans. Answer is in the affirmative.
Query 5 Then how is it that Ganita Sutra and Upsutras are not even mentioned as Vedangas ( Shikhsha, Vyakaran, Meeghantu/Nirukt, Chhandus, Jyotish and Kalp).
Ans. Ganita Sutras and Upsutras are at the base of these Vedangas.

Query 6. Whether Vedangas can be comprehended in terms of the values of Ganita Sutras and Upsutras?

Ans. Answer is in the affirmative

Query 7 If it is so, then how there is to be initiation of approach to Ganita Sutras and Upsutras text when the same is also in a composed form, like other compositions availing same alphabet letters of Devnagri alphabet?

Ans. It is the self referral feature of Vedic systems, which is at work. Here, beginning and end is at the same meant. Values at the base as basis of organization of values are the values of the knowledge itself. These values are designated as the self organizing powers of pure knowledge. Pure and applied values of knowledge run parallel to each other.

Accordingly, composed text avail organization formats. These formats are the applied values of the pure knowledge. Further, at the same time, while the Text becomes the applied values, the organization format becomes the reservoir of pure knowledge.

Parallel to it while Sutras accept Upsutras as gaps bridging organization, this leads to the text as pure values while organization of thereof becomes the applied values. On the other hand where Sutras play the role of organization for gaps bridging for Upsutras, the same leads to the text itself being the reservoir of applied values and organization being lively reservoir of pure values.

As such Ganita Sutra and Upsutras as composed text are to be approached as per Vedic systems, which supply parallel processing system of Yoga Nishtha and that of Sankhya Nishtha.

Query 8. What are the features, values and virtues of this parallel processing system having simultaneous availability of Yoga Nishtha and Sankhya Nishtha system?

Ans. Yoga Nishtha presume the existence of artifices of numbers but avails the dimensional frames. On the other hand Sankhya Nishtha presumes the existence of dimensional frame but avails artifices of numbers. It is this unique feature of co-relation of presumptions and availability of working frames, which makes simultaneous availability of Yoga Nishtha and Sankhya Nishtha to be uniquely potential system.

Query 9. Then, what are the initial steps in respect of artifices of numbers and dimensional frames?

Ans. Numbers values range ( $1,2,3,4,5,6,7,8,9,10$ ) and hyper cubes 1 to 6 ( geometric bodies of 1 to 6 space).

Query 10. Whether the reality extends beyond 3 space?
Ans. Yes. It is here where, really Vedic comprehension differ from our present day comprehension basis of processing systems.

Query 11. Whether $4,5 \& 6$ spaces are real spaces?
Ans. Yes.
Query 12 If so, whether the reality of 4 space is demonstrable?
Ans. Yes. Point moves and creates line ( 1 space body). Line moves and creates surface ( 2 space body ). Surface moves and creates solid ( 3 space body) and solids in motion is a reality and this is the reality of space being 4 space.

Query 13. Then what about 5 space reality?
Ans. Within space we see air moving. It is because of space being of 5 space reality as well being there. In fact it is the compactified nature of the dimensional spaces reality feature which deserve to be glimpsed, comprehended and to be appreciated and to be realized by proper imbibing and attainment of suitable insight and enlightenment about this feature of the existence phenomenon. This feature of existence phenomenon reality is of compactified value. This compactified value takes us to simultaneous inward and outward expansion feature of compactification. The reality of 6 space is
demonstrable as the existence of Sun being within space as 6 space being compactified as origin of 5 space ( Akash Tattav).

Query 14 Whether Ganita Sutras and upsutras are taking care of all these features values and virtues of the existence phenomenon as is being expressed being of the value of compactified nature of space manifestation as a sequential range of dimensional spaces?

Ans. Answer is in the affirmative.
Query 15. What are the initiation steps for this reach of Mathematical domain of Ganita Sutras?

Ans. Beginning is to be with the Devnagri alphabets. The organization format features of Devnagri alphabet accepting association of numbers values for its letters and also the parallel availability of geometric format for the individual letters, that way become the initiation point of the processing systems of Ganita Sutras.
Query 16 What precisely are the values being associated with the individual alphabet letters?

Ans. Sole syllable $\boldsymbol{O m}$ Y TCV value 16

## Vowels

Letter अ इ उ ऋ लृ ए
ओ ऐ औ

TCV values 123456
789

## consonants

Letters
TCV values
Letters
TCV values
Letters
TCV values
Letters
TCV values
Letters
TCV values
Other letters
Letters
TCV values
य व र ल
1357
स्मजजमते
TCV values 2369

Letters Yamas

## - ※ $\because:=$ <br> 

## $\begin{array}{llllllll}9 & 10 & 11 & 12 & 13 & 14 & 15 & 16\end{array}$

## Thy synonym is Parnava.

 (Tasey Vachka Parnava) प्रणवः TCV value (प्रणवः) $=36$Query 17 What are the features of the geometric format associated with individual letters of Devnagri alphabet?

Ans. The vowels are 9 in numbers and these respectively accept geometric format of dimensional frame of 1 space to 9 space of single dimension to 9 dimensions set up of order of -1 space to 7 space for each of the dimension for the respective dimensional frame

The first column of verga consonant accept sequential dimensional order ( linear, spatial, solid, creative and transcendental for its first to fifth letter.

The second column of verga consonant accept sequential boundaries of ( linear, spatial, solid, creative and transcendental for its first to fifth letter

The third column of verga consonant accept sequential domains formats of ( linear, spatial, solid, creative and transcendental for its first to fifth letter

The fourth column of verga consonant accept sequential Origin formats of ( linear, spatial, solid, creative and transcendental for its first to fifth letter

The fifth column of verga consonant accept sequential basefold formats of ( linear, spatial, solid, creative and transcendental for its first to fifth letter.

4 Antsatha letters are of sequential transcendence reach of dimension of dimension level of formats of 1 space, 3 space, 5 space and 7 space respectively

4 Ushmana letters accept synthetic set ups during transcendence as of values of 2 space, 3 space, 6 space and 9 space.

8 Yama letters respectively are of the reach of transcendence of solid order from origin of 4 space to boundary of 4 space at its first, second, third, fourth, fifth, sixth, seventh and eighth boundary components.

Query 18 Whether such distinctive values and geometric format of each individual letter are at work in the text of Ganita Sutras?

Ans. Yes. It is this which makes mathematical domains of Ganita Sutras and upsutras being of very rich spectrum. It is very blissful reach. It is a reach of the order of Solar universe.

Query 19. Whether Ganita Sutras mathematical domain works out the reality of $3,4,5 \& 6$ spaces.?

Ans. Yes. It is in fact, it is this which makes Vedic Mathematics of much wider values. Each of these 1 to 6 spaces have distinct mathematics, sciences and technologies. The 3 space mathematics is the mathematics of 1 as 1 . The mathematics of 4 space is of 2 as 1 , the mathematics of 5 space is of 3 as 1 and
mathematics of 6 space is 4 as 1 . In fact these 4 distinct disciplines of $3,4,5 \& 6$ spaces deserve to be chased sequentially . And then subsequently as an integrated chase format of Sathapatya Measuring Rod .

Query 20. What is this Sathapatya Measuring Rod ?
Ans. For the present it may be taken that Sathapatya Measuring Rod is the synthetic set up of hyper cubes 1 to 6 . Lord Vishnu, the presiding Lord of 6 space is the presiding deity of this measuring rod. Lord Brahma, the overlord of 4 space is the presiding deity of the measure of this measuring rod. Transcendental values of transcendental domain ( 5 space ) presided by Lord Vishnu flow along the format of this measuring rod.

Query 21. Whether Lord Brahma, Lord Shiv and Lord Vishnu are the Vedic Mathematical systems values?

Ans. Idols of Lord Brahma, Lord Shiv and Lord Vishnu are of format features values, virtues and orders parallel to those of hyper cubes $4,5 \& 6$ respectively within Creator's space ( 4 space).

Query 22. It appears we are going metaphysical way?
Ans. It may be viewed like that in the context of modern conceptual frame but from Vedic systems point of view, it is the reality.

Query 23. How this discipline can be the main stream discipline of instructions?

Ans. It is here where we have to pool in our knowledge, experience and resources. Everything is available. But still everything is to be organized from a scratch. Graded text books need be settled. Teachers training and orientation programmes are to be projected. Research is to be encouraged. And learn and teach methodology is to be adopted. This methodology is to be supplemented by self and guided explorations and research .

Query 24 It means that State is to step in?
Ans. Naturally individuals efforts need institutional cover and institutionalized mechanism is to be within the State Appratus.

Query 25. What are the broad features of hyper cubes?
Ans. Here is tabulation of some of the prominent features but the same deserve to be comprehended well.

| Feature | $1$ <br> space | $2$ <br> space | $3$ <br> space | $4$ <br> space | 5 space | 6 space | $7$ <br> space |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Body | Hype <br> r <br> cube- <br> 1 | Hype <br> r <br> cube- <br> 2 | Hype <br> r <br> cube- <br> 3 | Hype <br> r <br> cube- <br> 4 | Hype <br> r <br> cube- <br> 5 | $\begin{aligned} & \text { Hype } \\ & \text { r } \\ & \text { cube- } \\ & 6 \end{aligned}$ | Hype <br> r <br> cube- <br> 7 |
| Domain | $\mathrm{A}^{1}$ | $\mathrm{A}^{2}$ | $\mathrm{A}^{3}$ | $\mathrm{A}^{4}$ | $\mathrm{A}^{5}$ | $\mathrm{A}^{6}$ | $\mathrm{A}^{7}$ |
| Boundary | $2 \mathrm{a}^{0}$ | $4 \mathrm{~A}^{1}$ | $6 \mathrm{~A}^{2}$ | $8 \mathrm{~A}^{3}$ | $10 \mathrm{~A}^{4}$ | $12 \mathrm{~A}^{5}$ | $14 \mathrm{~A}^{6}$ |
| Dimension | $\begin{gathered} (-1) \\ \text { space } \end{gathered}$ | (0) space | (1) space | (2) <br> space | (3) space | (4) space | (5) space |
| Dimensional frame | $\begin{gathered} 1 \\ \text { axis } \end{gathered}$ | $\begin{gathered} 2 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 3 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 4 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 5 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 6 \\ \text { axes } \end{gathered}$ | $\begin{gathered} 7 \\ \text { axes } \end{gathered}$ |
| Dimensional | (-1) | 0 | 3 | 8 | 15 | 24 | 35 |


| value |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Geometries | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| Four folds | $\begin{gathered} \hline-1 \\ 0 \\ 1 \\ (2) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ 1 \\ 2 \\ (3) \end{gathered}$ | $\begin{gathered} 1 \\ 2 \\ 3 \\ (4) \end{gathered}$ | $\begin{gathered} \hline 2 \\ 3 \\ 4 \\ (5) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ 4 \\ 5 \\ \hline(6) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4 \\ 5 \\ 6 \\ \hline(7) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ 6 \\ 7 \\ (8) \\ \hline \end{gathered}$ |
| Summation value | 2 | 6 | 10 | 14 | 18 | 22 | 26 |
| Dimensional Frame value | $\begin{aligned} & -1 \times 1 \\ & =-1 \end{aligned}$ | $\begin{aligned} & 0 \times 2 \\ & =0 \end{aligned}$ | $\begin{gathered} 1 \times 3 \\ =3 \end{gathered}$ | $\begin{aligned} & 2 \times 4 \\ & =8 \end{aligned}$ | $\begin{aligned} & 3 \times 5 \\ & =15 \end{aligned}$ | $\begin{aligned} & 4 \times 6 \\ & =24 \end{aligned}$ | $\begin{aligned} & 5 \times 7 \\ & =35 \end{aligned}$ |
| Transcendenc e Triple value | $\begin{gathered} -3, \\ -1, \\ 1 \end{gathered}$ | $\begin{gathered} -2 \\ 0, \\ 2 \end{gathered}$ | $\begin{gathered} -1, \\ 1, \\ 3 \end{gathered}$ | $\begin{aligned} & 0, \\ & 2, \\ & 4 \end{aligned}$ | $\begin{aligned} & 1, \\ & 3, \\ & 5 \end{aligned}$ | $\begin{gathered} 2, \\ 4, \\ 6 \end{gathered}$ | $\begin{aligned} & 3, \\ & 5, \\ & 7 \end{aligned}$ |
| Product value | $\begin{aligned} & \hline 3 \\ & 0 \end{aligned}$ | 0 | -3 | 0 | 15 | 48 | 105 |
| Addition value | -3 | 0 | 3 | 6 | 9 | 12 | 15 |

Query 26. How it is suggested to proceed further?
Ans.
Let the beginning be from the very beginning.

File 9, Glimpse of values of Vedic Mathematical domain

GLIMPSE OF VALUES OF VEDIC MATHEMATICAL DOMAIN

I

1. Vedic period permits division in two periods; first, uptil the reach of organization of knowledge as a single Ved, and second, uptil the reach at the organization of single Ved as 4 Vedas.
2. Sole syllable Om is the transcendental source reservoir of values of Ved, and first Atharv Ved sutra ( Ekadhikena Purvena) is the source mathematical values reservoir of Vedic Mathematics of 4 Vedas period.
3. Sole syllable Om sequentially unfolds itself as " Om, Pranva, Aum, Omkar, Udgit and Vashtkar".
4. Atharv Ved Ganita Sutra 1 unfolds itself and the range of Ganita Sutras 1 to 16 and Ganita upsutra 1 to 13 .
5. Sole syllable Om virtues manifests as Brahma and it also transcends these manifested values as Braham.
6. Braham to Brahma is the reach from one Ved to 4 Vedas values range.
7. Brahma to Braham is the reach from 4 Vedas range to single Ved.

## II <br> GLIMPSE OF VALUES OF VEDIC MATHEMATICAL DOMAINS <br> OF GANITA SUTRAS AND UPSUTRAS

## GANITA SUTRA 1 TEXT

TEXT

| एकाधिकेन पूर्वेण |
| :---: |
| Ekadhiken Purvena |
| One more than before |

Letter wise chase

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ए | क् | आ | ध् | इ | क् | ए | न् | अ |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |  |  |
| प् | उ | र | व् | ए | ण् | अ |  |  |

8. This composition of text of Ganita Sutra 1 is a pair of words I. Ekadhikena एकाधिकेन II. Purvena ( पूर्वेण
9. The formulation Ekadhikena has its first letter as sixth vowel.
10. The formulation Purvena has its first letter being the first letter of the fifth row of ` the verga consonant .
11. As such first letter of formulation Ekadhikena accepts number value " 6 ".
12. The first letter of the formulation Purvena accepts number value " 5 ".
13. The number value 6 accepts parallel geometric format of 6 space.
14. The number value 5 accepts parallel geometric format of 5 space.
15. 6 space accepts hyper cube 6 as its representative regular body.
16. 5 space accepts its representative body as hyper cube 5 .
17. The domain fold of hyper cube 6 is manifested 6 space content lump.
18. The domain fold of hyper cube 5 is manifested 5 space content lump.
19. With it, the values of mathematical domain reach of Ganita

Sutra 1, and as such of Ganita Sutras are of the reach of values of 6 space content and of 5 space content.
20. Further as that the sixth vowel accepts geometric format, as per its placement as dimensional frame of 6 space.
21. The dimensional frame of 6 space is the set of 6 dimensions of creative dimensional order ( 4 space in the role of dimension of 6 space).
22. The first letter of the $5^{\text {th }}$ row of verga consonant, as per its placement in the first column of verga consonant accept geometric format of transcendental dimensional order ( 5 space in the role of dimension ).
23. One may have a pause here and take note that 5 space plays the role of origin of 4 space
24. As such 5 space is lively in the role of origin in respect of each of the 6 creative dimensions of dimensional frame of 6 space.
25. Further as that 4 space itself is of spatial dimensional order ( 2 space in the role of dimension, while 5 space itself is of a solid dimensional order ( 3 space in the role of dimension ).
26. One may have a pause here and glimpse these values and geometric formats available for the very first letter of the text of Ganita Sutra 1 itself.
27. 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 .
28. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
29. It would be blissful to take note that transcendence as the origin of creative dimension, as such becomes the reach of mathematical domain of Ganita Sutras.
30. Transcendence at the origin of dimension and dimension itself being the manifested domain, and that way it brings us face to face with as that the mathematical domain of Ganita Sutras is of following foundation:
i) $\quad 4$ space content as 4 space domain of hyper cube 4, playing the role of dimension of 6 space.
ii) 5 space plays the role of origin of 4 space.
iii) 4 space plays the role of dimension and at the same time it permits transcendence within 4 space itself at its origin ( 5 space).
31. It would be blissful to glimpse that the dimension takes to domain and transcendence at the origin takes to the base of the origin.
32. The reach from dimension to domain is of the format ( N space as dimension , $\mathrm{N}+2$ space as domain.
33. The transcendence at the origin takes from N space as origin to $\mathrm{N}+1$ space as base of the origin which is of the format $(, \mathrm{N}+1$ space as origin and $\mathrm{N}+2$ space as base of origin)
34. One may have a pause here and take note that this two fold reach firstly along the format ( $\mathrm{N}, \mathrm{N}+2$ ) and second along the format ( $\mathrm{N}+1, \mathrm{~N}+2$ ) in a way splits the organization format of triple values ( $\mathrm{N}, \mathrm{N}+1, \mathrm{~N}+2$ ) as of the feature $(\mathrm{N}+1, \mathrm{~N}+2)$ and then as of ( $\mathrm{N}, \mathrm{N}+2$ ).
35. This in the opposite orientation as ( $\mathrm{N}+2, \mathrm{~N}+1, \mathrm{~N})$ will amount to a reach at first step as $\mathrm{N}+2, \mathrm{~N}+1$ and at next step as $(\mathrm{N}+2$, N).
36. One may have a pause here and take note that values triple ( $4,5,6)$ as it is brings us face to face with the inter coordinated roles of 4,5 , \& 6 spaces.
37 It would be blissful to take note that along $4 \times 4$ format, the inter-relationship of $4,5 \& 6$ spaces gets coordinated as under:

| $(1$, | 2, | 3, | $4)$ |
| :--- | :--- | :--- | :--- |
| $(2$, | 3, | 4, | $5)$ |
| $(3$, | 4, | 5, | $6)$ |
| $(4$, | 5, | 6, | $7)$ |

## III

## VALUES RANGE OF THE TEXT OF GANITA SUTRA 1

1. Letter-wise chase of the text of Ganita Sutra 1 is of following sequential placements 1 to 16 .

## Letter wise chase

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ए | क् | आ | ध् | इ | क् | ए | न् | अ |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |  |  |
| प् | उ | र | वृ | ए | ण् | अ |  |  |

2. Transcendental code values of 16 letters availed by the text of Ganita Sutra 1 comes to be as under:

Letter wise transcendental code values. FIRST WORD

| S.No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Letter | ए | क् | आ | ध् | इ | के | ए | न् | अ |
| TCV | 6 | 4 | 2 | 7 | 2 | 4 | 6 | 8 | 1 |
| $2^{\text {nd }}$ Word |  |  |  |  |  |  |  |  |  |
|          <br> S.No. 1 2 3 3 5 6 7  <br> Letter प उ र् व् ए ण अ  <br> TCV 5 6 2 7 6 7 1  |  |  |  |  |  |  |  |  |  |$>.$|  |
| :--- |

3. The values range of the text of Ganita Sutra 1 is of 2 parts, each in respect of its pair of words Ekadhikena and Purvena respectively. These sub ranges may be designated as strings of values.
4. First string of values ( $6,4,2,7,2,4,6,8,1$ ) is of 9 steps.
5. The second string of values ( $5,6,2,7,6,7,1$ ) is of 7 steps.
6. However, in respect of the second string, its third step value ( 2 ) in respect of third letter of formulation Purvena, in the composed form of the formulation as it is takes this third letter to its fifth placement and accordingly value ( 2 ) will also have its placement as of $5^{\text {th }}$ placement feature .
7. This, as such will make second string as of values step ( 5,6,7,6,2,7,1).
8. One may have a pause here and take note that as value 2 is of double placement feature as such the second string may permit its expression as of 8 steps, with one of its step being of double feature and this may permit expression as [ 5,6(2),7,6,2,7,1] .
9. One may further have a pause here and take note that the second letter of formulation Purvena is an elongated third vowel.
10. Accordingly value 6 of $2^{\text {nd }}$ letter will permit its chase as its organization feature as $6=(3+3)$, which that way will permit it its expression as 3,3 .
11. Accordingly the above expression of $2^{\text {nd }}$ string will have reorganize expression as $[5,(3,3)(2), 7,6,2,7,1]$.
12. One may have a pause here and take note that this reorganize expression of $2^{\text {nd }}$ string, that way, in an reorganized format become of 9 steps.
13. With it, we are face to face with the first string as well as the $2^{\text {nd }}$ string both being of 9 steps long values ranges:
Ist String ( 6, 4, 2, 7, 2, 4, 6, 8, 1)
$2^{\text {nd }}$ String
$[5,(3,3)(2), 7,6,2,7,1]$
14. One may further have a pause here and take note that the first string of 9 steps long values range with split of value 2 of third step of third letter ( elongated first vowel as first vowel + first vowel as of value $2=1+1$ will extend 9 steps long values string into 10 steps long values strings.
15. One may have a pause here and take note that it as such shall be making the values string, as an integrated string of whole range of value for the entire text as to be of values range $10+9=19$.
16. One may have a pause here and take note that value 19 accepts parallel transcendental code value 19 parallel to the word formulation Krishan, the incarnation of Lord Vishnu of

Dwapar Yuga when Braham Rishi Ved Vyas reorganized single Ved into 4 Vedas.

## IV

## GLIMPSE OF MATHEMATICS OF VALUES AND FORMATS OF TEXT OF GANITA SUTRA 1 AS A PAIR OF FORMULATIONS

## IST WORD VALUES STRINGS

1. First word formulation of the text of Ganita Sutra 1 is Ekadhikena.
2. The formulation Ekadhikena avails 9 letters, which are of sequential placement as under:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ए | क् | आ | ध् | इ | क् | ए | न् | अ |

3. These letters as per their sequential placements when lead to the values string (
( $6,4,2,7,2,4,6,8,1$ ) with structural reach at the third letter value 2
$=1+1$ and that way making it as of 10 steps long values string (
$6,4,(1,1), 7,2,4,6,8,1)$ brings us face to face with and gives us the glimpse of the mathematical domain of geometrical format parallel to these values steps.

## FIRST STEP VALUE:

1. The first step value is 6 .
2. Parallel to it is the format of 6 space.
3. This as such brings us face to face with the 6 space domain .
4. The values and features of 6 space domain as such become the starting point.
5. It is the initiation point.
6. The initiation is along and within 6 space domain.
7. Accordingly it gives the glimpse of the reach of mathematical domain which is going to be of the order of 6 space set up.
8. Ultimately 6 space in its entire manifestation is to settle the reach of mathematical domain of Ganita Sutras.

## SECOND STEP VALUE:

1. The second step value is 4 .
2. Parallel to it is geometric format of 4 space.
3. 4 space is Creator's space.
4. It is of spatial dimensional order.
5. It in its role as dimension structures 6 space in the role of domain .

## REACH FROM FIRST STEP TO SECOND STEP

1. The reach from first step to second step, as such is a reach from 6 space as domain to 4 space as dimension.
2. It leads us to Sathapatya Measuring Rod with Lord Vishnu , overlord of 6 space being the presiding deity of this measuring Lord while Lord Brahma, Creator of the Supreme, the over Lord of 4 space as the presiding deity of the measure of this measuring rod.
3. One may have a pause here and take note that this coordination of the roles of 6 space and 4 space, as domain fold and as dimension fold , further brings to focus the interrelationship of parallel inter-relationship of artifices of pair of numbers $(6,4)$.
4. One may have a pause here and take note that it is the basic comprehension of Vedic systems as that the dimensional frame and artifices of numbers run parallel to each other.
5. It is the basis of parallel availability of Yoga Nishtha and Sankhya Nishtha, as much as that Yoga Nishtha presumes the existence of artifices of numbers and avails dimensional frame, and on the other hand, Sankhya Nishtha presumes the existence of dimensional frame and avails artifices of numbers.
6. With this reach, the processing format as well gets settled .
7. It is of the values of the reach from domain to dimension .
8. It is a reach from 6 space in the role of domain to 4 space in the role of dimension.
9. It, as such brings to focus the first role of space content as domain fold and second role of space content being that as a domain fold it is to play the role of dimension as well.
10. This further brings to focus as that space content manifests as domain fold.
11. Then manifested space content as domain fold plays further role, of which one is as dimension fold .
12. This as such brings us face to face with that once it is the domain fold which is playing the role of dimension then it will also take us to the role of dimension of dimension .
13. 6 space as domain leads to 4 space domain as dimension, which at next step will take 4 space domain to 2 space domain as dimension of dimension of 6 space.
14. One may further have a pause here and take note that the second letter of the text is the first verga consonant ( Ka ).
15. Scriptures preserve as that Ka is Brahma, as well as Ka is Shiv.
16. Lord Brahma is the over lord of 4 space.
17. Within the cavity of heart of Lord Brahma is the transcendental seat of Lord Shiv .
18. As such as domain fold the reach is as 4 space domain but as origin fold the reach is of 5 space domain in the role of origin which will permit transcendence .
19. 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 .
20. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## THIRD STEP VALUE:

1. Third step value is 2 .
2. It is the value of elongated first vowel.
3. It accepts organization as $2=1+1$.
4. It leads to the set up of a pair of linear axis.
5. The value 2 as one of the value of values triple $(6,4,2)$ takes us to the transcendence format of reach of 6 space domain to 4 space domain as dimension and a step ahead 4 space domain leading to 2 space domain as dimension of dimension.
6. The linear pair of axes, as along first axis shall be taking and shall be providing a step ahead in the linear sequential order, which would mean from third placement to $4^{\text {th }}$ placement.
7. However, the $2^{\text {nd }}$ axis will lead to the spatial order.
8. It would amount to a transcendence at the origin.
9. The transcendence from 2 space will be to zero space.
10. It would be reach of $4^{\text {th }}$ value of the quadruple $(6,4,2,0)$.
11. One may have a pause here and take note that of the pair of axes $(1,1)$ as such shall be making each axis being of half value as $1=2 / 2$.
12. One may have a pause here and take note that 1 space in the role of dimension structuctures 3 space of 7 geometries range.
13. The fourth letter of the text of Ganita Sutra 1 is the fourth letter of the fourth row of verga consonant and same is of value 7 and it is in the role of origin.
14. Further as that $4 \times 4$ grid accommodates 7 steps long range ( 1,2,3,4,5,6,7).
15. Still further as that Bindu Sarover as the first component of Om formulation leads to 7 steps long Divya Ganga Flow from Brahman domain.
16. The formulations Aadh and Adh are of values $1 / 2$ of $1 / 2$, and $1 / 2$ respectively .
17. The formulations Aadh and Adh are the formulations of $3^{\text {rd }}$ and $4^{\text {th }}$ letter of the text of Ganita Sutra 1.
18. The third letter as elongated first vowel together with fourth letter makes Aadh/ $1 / 2$ of $1 / 2$.
19. The elongated first vowel as a pair of first vowel, as such as first vowel and fourth letter shall be making the formulation Adh/1/2.
20. 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 .
21. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## REACH FROM SECOND TO THIRD LETTER AND AHEAD TO FOURTH LETTER

1. The reach from second to third letter is $(4,2)$ as well as ( 4,1,1).
2. This reach firstly takes us to the transcendence triple $(6,4,2)$ as a reach from domain to dimension to dimension of dimension.
3. And secondly it also takes us to a reach along the first of the pair of axis of 2 space to the fourth letter of the text of Ganita Sutra 1 of value 7.
4. One may have a pause here and take note that 2 space accepts a pair of axis as its dimensional frame of 0 dimensional order as that 0 space plays the role of dimension of 2 space.
5. Further as that it as such will amount to transcendence ahead which will take to quadruple values $(6,4,2,0)$.
6. One may further have a pause here and take note that value 7 which is parallel to 7 geometries range of linear order 3 space, the same is of value 0 being of 0 area within 4 space which is of a spatial dimensional order.
7. This reach while on the one hand is as quadruple ( $6,4,2,0$ ) same as a linear formatting is as quadruple ( $6,4,2,7$ ).
8. 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 .
9. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## VALUES RANGE ( 6,4,2,7,2)/ ( 6,4,( 1,1), 7,2).

1. One shall revisit the above 5 steps long range with inherent organization as of 6 steps long range.
2. One may have a pause here and take note that values pair ( 6,5 ) accept reorganization as ( $2 \times 3,2+3$ ).
3. Still further as that 5 space plays the role of boundary of 6 space, as well as 5 space also plays the role of origin of 4 space.
4. Further as that 4 space plays the role of dimension of 6 space and also as boundary of 5 space.
5. Still further as that value 4 permits reorganization as $4=$ $2+2=2 \times 2=(-2) \times(-2)$.
6. Still further as that $0=0+0=0 \times 0=(-0) \times(-0)$.
7. One shall sit comfortably and permit the transcending mind to glimpse above formats and features of values as well as of their geometric format.
8. Still further as that transcendence quadruple steps within 6 space domain takes us to quadruple value ( $6,4,2,0$ ).
9. While on the other hand, transcendence quadruple steps within 5 space domain take us to quadruple value ( $5,3,1,-1$ ).
10. In the light of above, the values range ( $6,4,2,7,2$ ) and steps ahead as ( $6,4,2,7,2,4$ ) and ( $6,4,2,7,2,4,6$ ) will bring to focus that the emerging organization format of linear sequencing in fact is going to be of parabolic format with value 7 as the vertex value.
11. One may have a pause here and take note that this parabolic format for the linear sequencing as such is a shift from straight line set up to the surface and within surface as well as of a parabolic format curve.
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 .
13. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## REVERSAL PROCESS AT THE VERTEX VALUE 7

1. One shall sit comfortably and fully comprehend and to appreciate for full imbibing the values of reversal process at work at the vertex of above sequential format of the values range of first formulation namely Ekadhikena) of the text of Ganita Sutra 1.
2. Here It also would be blissful to take note that the so far symmetrical extension along both limbs of parabolic curve around the vertex as such will permit reversal of orientation which will make, in first case, as the vertex being the lower placement of the curve, while on the other hand, the vertex as such will become the upper most placement top tick of the parabolic format curve.
3. 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 .
4. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon

## VALUES RANGE ( $\mathbf{6 , 4 , 2 = ( 1 , 1 ) , ~ 7 , 2 , 4 , 6 , 8 , 1 )}$

1. The values range of 9 letters text of word formulation Ekadhikena with its internal structural organization for its third letter as $2=1+1$ and thereby the emergence of simultaneous progression along first axis, as well as along second axis, will settle the decreasing sequential value for the first limb of the curve while in case of second limb of the curve there is going to be increasing progression ( $2,4,6,8,10$ ).
2. One may have a pause here and take note that this feature as such will bring to focus as the first limb being a single string ( sub string) while the second string ( sub-string) will be of a
pair of flow lines like a pair of symmetrical parabolic limbs as reflection image of each other .
3. One may have a pause here and take note that it will be of the following values reach
i) $\quad$ First limb of the string ( $6,4,(1+1), 7)$.
ii) Second limb of the string ( $0,2,4,6,8,10$ )

$$
\begin{equation*}
(0,2,4,6,8,10) \tag{7}
\end{equation*}
$$

4. One may have a pause here and take note that number value 10 accepts summation value for its digits as $1+0=1$.
5. Further as that $10-1=9$.
6. Still further as that the 9 letters range in terms of its internal organization is of 10 letters range .
7. 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 .
8. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## V

## GLIMPSE OF MATHEMATICAL DOMAIN VALUE AND FORMAT OF FORMULATION EKADHIKENA

1. One shall sit comfortably and permit the transcending mind to glimpse the mathematical domain value and format of formulation Ekadhikena as values range ( 6,4, $1,1,7,2,4,6,8,1$ ) as of the format of first limb of hyper bolic curve format and the second limb of this hyper bolic format marking its presence alongwith its reflection image as well.
2. One shall further sit comfortably and to comprehend, appreciate and imbibe the transcendence phenomenon within 6 space domain within creative dimensional frame of 6 dimensions with each creative dimension accepting transcendence at its transcendental origin ( 5 space as origin of 4 space in the role of dimension of 6 space).

## VI <br> GLIMPSE THE VALUES FORMAT OF THE SECOND FORMULATION PURVENA OF THE TEXT OF GANITA SUTRA 1

## TEXT:

1. The text of word formulation Purvena avails 7 letters of following sequential placements and transcendental code values , as is tabulated hereunder:
$2^{\text {nd }}$ Word

| S.No. | 1 | 2 | 3 | 3 | 5 | 6 | 7 | $\square$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Letter | पू | उ | रू | व् | ए | ण् | अ |  |
| TCV | 5 | 6 | 2 | 7 | 6 | 7 | 1 |  |

2. The above 7 steps long values string, in terms of the composition feature of placement for the third letter at its fifth placement, and further the structural organization of second letter being elongated third vowel as third vowel + third vowel value makes this values strings of 8 steps with one step being of double placement.
3. Let us revisit the above values string steps again and it will come to pointed focused attention as that :
i) Value 2 ( of third letter) is of double placement, firstly as third letter and secondly in the composite form as of fifth placement. This will bring a $(2,2)$ as a distinct pair of values as per the placement feature .
ii) The letters second and fifth elongated third vowel and sixth vowel ) are accepting value 6 each, as such it makes a pair of values $(6,6)$ further as that this pair of values for its first member as the reorganization arrangement $6=(3+3)$ and accordingly this pair of values get coordinated as $[(3,3), 6]$.
iii) Further as that the fourth letter namely the fourth Antsatha letter and $6^{\text {th }}$ letter namely the fifth letter of third row of verga consonant accept value 7 each .This as such makes a third pair of values availability $(7,7)$.
iv) The fourth pair is the pair of values $(5,1)$ of first and the last letter of the formulation Purvena.
4. The above four pairs of values namely $(5,1),(2,2),(3+3=6)$ and ( 7,7 ) deserve to be revisited individually pairwise and collectively as the whole range as integrated arrangement.
5. One may have a pause here and take note that the formulation Purvena accept its first letter as of value 5.
6. Parallel to it is 5 space.
7. 5 space is a solid order space.
8. The dimensional synthesis of pair of solid dimension $(3,3)=5$ as its synthetic value takes us from the organizational set up of the format of first letter to the second letter of the text of formulation Purvena.
9. One may have a pause here and take note that a three dimensional frame permits its split into a pair of three dimensional frame of half dimensions with a release of 4 space as its origin.
10. One may have a pause here and take note that cube ( 3 space body) accepts 4 internal diagonals.
11. At the pair of end point of each of these internal diagonals of the cube as corner points of the cube, are imbedded a pair of three dimensional frames of half dimensions.
12. One may further have a pause here and take note that the translation of this pair of three dimensional frame of half dimensions imbedded at the corner of the cube at end point of the diagonal with their reach at the centre will result into reversal of orientation for their axis and thereby there would be a synthesis of this pair of three dimensional frame of half dimensions in to a three dimensional frame of full dimension .
13. Like that there would emerge four 3 dimensional frames of full dimensions by availing 4 diagonal as the translation path for the 8 three dimensional frames of half dimensions imbedded in the corners of the cube and otherwise getting coordinated as four pairs at the end point of four diagonals of the cube.
14. One may have a pause here and take note that the fifth 3 dimensional frame of full dimension is already available at the centre of the cube itself.
15. With it, these 5 three dimensional frames of full dimensions as such shall be constituting a solid dimensional frame of 5 dimensions of 5 space which is located as origin of 4 space with its seat at centre of cube itself.
16. One shall sit comfortably and permit the transcending mind to glimpse, comprehend, appreciate and to imbibe the values and feature of this phenomenon of Churney at the centre of the cube as seat of 4 space and thereby there being a reach at 5 space at origin of the 4 space with 4 space itself being the origin of 3 space.
17. One shall sit comfortably and to revisit this phenomenon of reach from 3 space to 4 space as its origin and further from 4 space to 5 space as origin of 4 space.
18. It would be blissful exercise to revisit the structural set up of a cube.
19. It is a set up of 8 corner points, 12 edges and 8 surfaces enveloping the volume and space of the volume.
20. One may have a pause here and take note that the enveloping structural set up of 8 corner points, 12 edges and 6 surfaces makes a set up of $8+12+6=26$ components.
21. Further as the volume and the space enveloped by this structural set up of 26 components, in fact is parallel to the transcendental code value of the pair of formulations Aayetan (Volume) and Akash (Space), as much as that the formulation Aayetan accept transcendental code value 18 while the formulation Akash accepts transcendental code value 8 and summation thereof is $18+8=26$ which is parallel to the summation value of enveloping structural set up of 8 corner points, 12 edges and 6 surfaces.
22. Further as that the number value 18 accept reorganization as $18=3+4+5+6$ which is parallel to the four fold manifestation layer ( $3,4,5,6$ ) of hyper cube 5 .
23. Still further as that the value 8 accept reorganization as $8=3+5$.
24. 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
25. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
26. It would be a blissful exercise to revisit and to chase quadruple values pair (5,1), (2,2), (3+3,6) and (7,7) supplied by the text of formulation Purvena.

## FIRST VALUES PAIR (5,1)

1. One may have a pause here and take note that the first component of Om formulation is Bindu Sarovar and it accept number value " 1 ".
2. Further as that Bindu Sarovar (structured point/values reservoir ) accepts panch vritiya ( 5 folds) for flow of 7 streams ( Divya Ganga flow of Brahamman domain).
3. This as such will help us comprehend, appreciate and imbibe the pairing of values ( 5,1 ) as of first and last letter of the formulation Purvena.
4. One may have a pause here and take note that the feature of Vedic system is that these accept beginning and end values at the same meant.

## SECOND PAIR VALUES (2,2)

1. The second values pair is the single value of third letter getting repeated presence mark because of its fifth placement in the composite format of the formulation Purvena.
2. It would be blissful to take note that third and fifth placement as values pair $(3,5)$ as well are coordinated with the additional feature ( $5-3=2$ ).
3. Still further as that 2 space accept 5 geometries range and parallel to it there are 5 versions of hyper cube 2 /square.
4. Moreover, the second component of Om formulation is " Ardhmatra"/Half measure.
5. One may have a pause here and take note that 2 is half of 4 .
6. 4 space accepts 2 space in the role of dimension .
7. Synthesis value of pair of spatial dimensions $2,2=4$.
8. Further as that within 3 space, the surface plate accepts a pair of faces.
9. It as such brings to focus as that solid at value 0 is sandwiched between the pair of faces of a surfaces.
10. One may further have a pause here and take note that 5 space is of a solid dimensional order and it is at 0 value at the seat of origin of 4 space.
11. Parallel to it the cube is of 0 value at the seat of origin of 2 space and
12. Still further as that a 3 dimensional frame accept split as a pair of a 3 dimensional frame of half dimensions and during this split there is a release of 4 space origin.
13. The reach from the format of hyper cube 2 to the format of hyper cube 3 and further from the format of hyper cube 3 to the format of hyper cube 4 and still further a reach from the format of hyper cube 4 to that of the format of hyper cube 5 is a very blissful exercise whose chase will bring us face to face with the transcendence phenomenon at the seat of origin which in fact is a seat of compactified origin and that $4,5,6, \& 7$ spaces, in fact are compactified at the origin of 3 space itself.
14. 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 .
15 . It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.

## THIRD PAIR VALUES (3+3,6).

1. The split of 6 as $3+3$ and split of a three dimensional frame into a pair of 3 dimensional frame of half dimensions and the set of 6 surfaces enveloping volume are the feature which deserve to be glimpsed and chased simultaneously to acquire proper insight about this feature of 3 dimensional frame, in particular.
2. Further as that the pair of solid dimension synthesized value 5 parallel to the transcendental domain ( 5 space domain).

## FOURTH VALUES PAIR (7,7)

1. Let us revisit the structural set up of a cube .
2. All the 8 corner points of cube permit coordination in a linear, sequential progression arrangement manner in terms of only 7 edges.
3. The pair of orientations for this reach is the feature which deserve to be comprehended well for its thorough appreciation and full imbibing .
4. Let us revisit this organization of 7 edges coordination of all the 8 corner points of a cube and it will come to noticethat the 7 edges get coordinated as $7=3+1+3$ with the first 3 edgesand the last 3 edges being of arrangement of opposite orientation while the coordinating middle edge being a set up of a pair of orientations simultaneously available.
5. With it, the reach from first set up of 3 edges in a particular orientation, with reach uptil the last 3 edges would be of opposite orientation .
6. And likewise the beginning from the last set of 3 edges of their orientation with a reach uptil the first set of 3 edges will be of opposite orientation.
7. This both way reach and in both of the ways there being reversal of orientation, so it is the set up which deserve to be comprehended well.
8. It would be blissful to take note that 8 points coverage is parallel to 7 units coverage.
9. And it is happening not only along the line , or along a curve in a surface but also here in 3 space as well.
10. Further as that this organization of coordination in terms of 7 edges make remaining 5 edges as of different role to play.
11. It is this organization for 12 edges as pair of $(7,5)$ edges format deserve to be comprehended well.
12. The grid $7 \times 5$ accommodates all the 35 double digit numbers of 6 place value system.
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 features formats .
14. It is this phenomenon which deserve to be comprehended well and to be thoroughly appreciated for complete imbibing of the features of this phenomenon to acquire deep insight about the values and appropriate enlightenment about the virtues of this phenomenon.
15. It would be a blissful exercise to glimpse the structural set up of cube as hyper cube 3 in the role of solid dimension and emerging structures of transcendental domain ( 5 space) of internal and external folds of value 26 accepting organization as $26=5+6+7+8$.

## VII

GLIMPSE MATHEMATICS OF VALUES AND FORMATS OF THE TEXT OF FORMULATION PURVENA

1. The values and formats of the individual letters of the text of word formulation Purvena brings us face to face with the transcendence phenomenon within solid dimensional order of 5 space .
2. It further brings us face to face with the churney taking place at the centre of the cube as origin seat of compactified origin of $4,5,6 \& 7$ spaces.
3. One may have a pause here and take note that quadruple spaces ( 4 space, 5 space, 6 space \& 7 space) and parallel to it quadruple values ( $4,5,6,7$ ) and further parallel to it a four fold manifestation layer ( $4,5,6,7$ ) of hyper cube 6 is the phenomenon which deserve to be comprehended well.
4. The summation value $4+5+6+7=22$ is the format for 22 Visargas ( creations formulations).

## VIII <br> GLIMPSE OF THE VEDIC MATHEMATICAL DOMAIN

1. One shall sit comfortably and revisit the text of Ganita Sutra 1( Ekadhikena Purvena) and to glimpse its values strings and parallel geometric formats as along and within 6 space.
2. It would be blissful that this chase shall be sequentially bringing us face to face with the different values and features of 6 space domain as 6 space content manifested lump framed within transcendental boundary and standing integrated in terms of creative dimensional frame .
3. The transcendence phenomenon simultaneously permissible within creative dimension ( 4 space in the role of dimension ), transcendental boundary component ( 5 space in the role of boundary ) and self referral domain ( 6 space as domain) , will bring us face to face with the Vedic systems chase format of existence phenomenon within our Solar Universe.
4. This initiation is inherently potentialised to take us from Solar Universe ( 6 space universe) to Brahaman domain ( 9 space).
5. The transcendence beyond that is the transcendence phenomenon itself and its realization is the self referral nature of the transcendental phenomenon .

File 10, Processing components of Ganita Sutras Mathematics

## PROCESSING COMPONENTS OF GANITA SUTRAS MATHEMATICS <br> $\stackrel{\text { I }}{\text { TEXT }}$

Text of Ganita Sutras and Ganita Upsutras

1. ऊँ एकाधिकेन पूर्वे।
2. निखिलं नवतश्चरम दशतः।
3. ऊर्ध्वतिर्यभ्याम्
4. परावर्त्य योजयेत्।
5. शून्यं साम्यसमुच्चये
6. (आनुरूप्येद्ध) शून्यमन्यत्।
7. संकलनव्यवकलनाभ्याम्।
8. पूरणापूरणाभ्याम्।
9. चलनकलनाभ्याम्।
10. यावदूनमे।
11. व्यक्टिसमिष्टिः।
12. शेषाण्यड्केन चरमेण।
13. सोपान्त्यद्वयमन्तम्
14. एकन्यूनेन पूर्वे।
15. गुणितसमुच्चयः
16. गुणकसमुच्चयः प्रणवः

## Ganita upsutra

1. ॐ आनुरूप्येण।
2. शिष्यते शेषसंज्ञः।
3. आघमाघेनान्त्यमन्त्येन।
4. केवलैः सप्तकं गुण्यात्।
5. वेष्टनम्।
6. यावदूनं तावदूनम्।
7. यावदूनं तावदूनीकृत्य वर्ग च योजयेत्।
8. अन्त्ययोर्दशके ऽपि।
9. अन्त्ययोरेव।
10. समुच्चयगुणितः।
11. लोपनस्थपनाभ्याम्
12. विलोकनम्
13. गुणितसमुच्चयः समुच्चयगुणितः प्रणवः

## II

PRCESSING COMPONENTS ( WORDS FORMULATION OF THE TEXT

| S.No. | Sutra | Word |
| :---: | :---: | :---: |
| 1 | Sutra 1 | ऊ एकाधिकेन |
| 2 | " | पूर्वेण । |
| 3 | Sutra 2 | निखिलं |
| 4 | $"$ | नवतश्चरम |
| 5 | " | दशतः |
| 6 | Sutra 3 | ऊर्ध्वतिर्यग््याम् |
| 7 | Sutra 4 | परावर्त्य |
| 8 | " | योजयेत् । |
| 9 | Sutra 5 | शून्यं |
| 10 | " | साम्यसमुच्चय |
| 11 | Sutra 6 | (आनुरूप्ये) शून्यमन्यत् । |
| 12 | Sutra 7 | संकलवव्यवकलनाभ्याम् । |
| 13 | Sutra 8 | पूरणापूरणाभ्यामू । |


| 14 | Sutra 9 | चलनकलनाभ्याम् । |
| :---: | :---: | :---: |
| 15 | Sutra 10 | यावदूनमे। |
| 16 | Sutra 11 | व्यक्टिसमिष्टिः। |
| 17 | Sutra 12 | शेषाण्यड़केन |
| 18 | " | चरमेण। |
| 19 | Sutra 13 | सोपान्त्यद्वयमन्तम |
| 20 | Sutra 14 | एकन्यूनेन |
| 21 | " | पूर्वेण। |
| 22 | Sutra 15 | गुणितसमुच्चयः |
| 23 | Sutra 16 | गुणकसमुच्चयः |
| 24 | " | प्रणवः |
| GANITA UPSUTRA |  |  |
| 1 | Upsutra 1 | ॐ आनुरूप्येण । |
| 2 | Upsutra 2 | शिष्यते |
| 3 | " | शेषसंज्ञः। |
| 4 | Upsutra 3 | आघमाघेनान्त्यमन्त्येन । |
| 5 | Upsutra 4 | केवलैः |
| 6 | " | सप्तकं |
| 7 | " | गुण्यात्। |
| 8 | Upsutra 5 | वेष्टनम्। |
| 9 | Upsutra 6 | यावदूनं |
| 10 | , | तावदूनम्। |
| 11 | Upsutra 7 | यावदूनं |
| 12 | " | तावदूनीकृत्य |
| 13 | " | वर्ग |
| 14 | " | च |
| 15 | " | योजयेत्। |
| 16 | Upsutra 8 | अन्त्ययोर्दशके ऽपि। |
| 17 | Upsutra 9 | अन्त्ययोरेव। |


| 18 | Upsutra 10 | समुच्चयगुणितः। |
| :---: | :---: | :---: |
| 19 | Upsutra 11 | लोपनस्थपनाभ्याम् |
| 20 | Upsutra 12 | विलोकनम् |
| 21 | Upsutra 13 | गुणितसमुच्चयः |
| 22 | $"$ | समुच्चयगुणितः |
| 23 | $"$ | प्रणवः |

## III <br> SUB FORMULATION

| S.No. | Word | TCV | S.No | Word | TCV |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | एका |  | $\mathbf{2 5}$ | व्यवकलना |  |
| $\mathbf{2}$ | केन |  | $\mathbf{2 6}$ | पूरण |  |
| $\mathbf{3}$ | पूर्वे |  | $\mathbf{2 7}$ | चल |  |
| $\mathbf{4}$ | नि |  | $\mathbf{2 8}$ | चलन |  |
| $\mathbf{5}$ | खिल |  | $\mathbf{2 9}$ | यावदूनम |  |
| $\mathbf{6}$ | नव |  | $\mathbf{3 0}$ | व्यष्टि |  |
| $\mathbf{7}$ | चर |  | $\mathbf{3 1}$ | समिष्टि: |  |
| $\mathbf{8}$ | चरम |  | $\mathbf{3 2}$ | शेष |  |
| $\mathbf{9}$ | दश |  | $\mathbf{3 3}$ | द्वय |  |
| $\mathbf{1 0}$ | ऊध्व |  | $\mathbf{3 4}$ | सोपान |  |
| $\mathbf{1 1}$ | तिर्यग |  | $\mathbf{3 5}$ | न्यूने |  |
| $\mathbf{1 2}$ | भ्याम् |  | $\mathbf{3 6}$ | गुणित |  |
| $\mathbf{1 3}$ | परा |  | $\mathbf{3 7}$ | गुणक |  |
| $\mathbf{1 4}$ | वत्य |  | $\mathbf{3 8}$ | गुण |  |
| $\mathbf{1 5}$ | योजयेत् |  | $\mathbf{3 9}$ | शिष्य |  |
| $\mathbf{1 6}$ | शून्यं |  | $\mathbf{4 0}$ | संज्ञः। |  |
| $\mathbf{1 7}$ | साम्य |  | $\mathbf{4 1}$ | केवलैः |  |
| $\mathbf{1 8}$ | सम |  | $\mathbf{4 2}$ | सप्त |  |
| $\mathbf{1 9}$ | समुच्चय |  | $\mathbf{4 3}$ | वेष्टनम् । |  |


| 20 | आन | 44 | कृत्य |  |
| :---: | :---: | :---: | :---: | :---: |
| 21 | रूप्य | 45 | वर्ग |  |
| 22 | मन्यत् | 46 | अन्त्य |  |
| 23 | संकलन | 47 | के डपि। |  |
| 24 | व्यव | 48 | लोपन |  |
| 49 | स्थपना |  |  |  |
| 50 | वि |  |  |  |
| 51 | लोक |  |  |  |
| 52 | विलोकनम |  |  |  |
| 53 | आ |  |  |  |
| 54 | आघ |  |  |  |
|  | 1 श्री: 20 <br> 2 ऊ 16 <br> 3 प्रणवः 36 <br> 4 ओउम् 19 <br> 5 ओम् 16 <br> 6 ओकारः 32 <br> 7 उदगीथः 36 <br> 8 वषट्रकारः 38 <br> 9 सप्तभूमि 39 <br> 10 अष्ट प्रकृतिः <br> 42 <br> 11 नव ब्रह्म 45 <br> 12 प्र ब्रह्म 35 <br> 13 वेद 20 <br> 14 ऋक्र 5 <br> 15 यर्जु 11 <br> 16 साम 15 <br> 17 अथर्व 17 <br> 18 आर्यु 8 <br> 19 धर्नु 21 |  | 47 ऋषि 12 <br> 48 देवता 26 <br> 49 छन्दस् 22 <br> 50 स्वर 15 <br> 51 आर्चिक 10 <br> 52 काण्ड 16 <br> 53 ब्रह्म 28 <br> 54 पदम् 22 <br> 55 विष्णु 25 <br> 56 शिव 12 <br> 57 भागवत् 26 <br> 58 भविष्यत् 30 <br> 59 मार्कण्डय 30 <br> 60 स्कन्ध 21 <br> 61 ब्रहम् वैवर्त 58 <br> 62 अग्नि 14 <br> 63 नारद 21 <br> 64 नृसिंह 36 <br> 65 वराह 24 <br> Vedic mathematics, <br>  |  |



Sn Formulation TCV
1 श्रीः 20
2 Y 16
3 iz.ko\% 36
4 vksme~ 19
5 vkse~16
6 vksdkj\% 32
7 mnxhFk\% 36
8 o"kV~dkj\% 38
9 IlrHkwfe 39
10 v"V izd`fr\% 42
11 uo czã 45
12 iz czã 35
13 osn 20
14 _d~ 5
15 ;tqZ 11
16 Lkke 15
17 vFkoZ 17
18 vk;qZ 8
19 /kuqZ 21
20 xU/koZ 28
२१ स्थापत्य २१
२२ संहिता ३०
२३ ब्राह्मण ४७
२४ अरण्क १४
२६ उपनिषद् ३२
२६ शिक्षा १३
२७ व्याकरण २४
२६ निरूक्त २६
२६ निधण्टु २₹
३० छन्दस् २२
३१ ज्योतिष् २४
३२ कल्प १२
३३ सॉख्य 9६

३४ योग १२
३६ न्याय $9 ३$
३६ वैशेषिक ३३
३७ मीमॉसा ३६
३ॅ ब्रह्म सूत्र ४३
३६ मण्डल २६
४० अष्टक 9३
४१ अध्याय १३
४२ अनुवाक २३
४३ सूक्त १६
४४ वर्गा १६
४५ ऋचा ट
४६ अक्षर 9 ३
४७ ऋषि 9२
४६ देवता २६
४६ छन्दस् २२
५० स्वर १५
दू आर्चिक 90
द२ काण्ड 9६
५३ ब्रह्म २२
५४ पदम् २२
दू विष्णु २द
५६ शिव १२
६७ भागवत् २६
цఒ भविष्यत् ३०
५६ मार्कण्डय ३०
६० स्कन्थ २१
६9 ब्रहम् वैवर्त цॅॅ
६२ अग्नि १४
६३ नारद २१
६४ नृसिंह ३६
६५ वराह २४
टमकपब उंजीमउंजपबेए"बपमदबम - ज्मबीदवसवहल ३४४
६६ वामन् २を
६७ कर्म 9४
६ఒ मत्स्य 9६

```
६₹ गस्वड و६
७० ब्राह्मण्ड ४२
७` एक 乙
७२ द्वय १६
७३ त्रय 乙
७४ चत्वार १६
७५ पच्च 99
७६ षष्ट ૭७
७७ सप्त १४
७` अष्ट 99
७₹ नव १७
乙० दश 9०
乙१ व्यास १४
२२ उप पुराण ३०
\smile३ स्मृति २२
ఒ४ स्वद्र و७
ॅц आदित्य १६
ఒ६ मनु २१
```

Folder Name：13，Teacher Sequence File 1 Teaching Sequence 1 Step 1

## Teaching Sequence 1 Step 1

1．Mathemetical Doman of Ganita Sutras is of compactifide formats．
2．As such teaching of this mathematical domain，naturally is to be of different sequential series of steps．
3. Here beginning is being had of teaching sequence - 1 step 1
4. This first teaching sequence is chase of the composition of the text of Ganita Sutras as words formulations availing different letters of Devnagri alphabet.
5. The first step of this sequential chase ( Teaching Sequence 1, Step -1) is to concentrate upon Devnagri alphabet letters organization and their respective occurrence placements values.
6. During this teaching, if focus is to be upon the following organization features of the Devnagri alphabet:
i) Organization of Devnagri alphabet as a set of letters
ii) Each letter has a distinct script form .
iii) Each letter has a distinct placement in the organization of Devnagri alphabet.
iv) Letters are grouped as vowels, Verga consonants, Antsatha, Ushmana and Yama letters.
v) There are 9 vowels arranged as a range of 9 steps and each step fixes the occurrence placements of these 9 vowels as $1^{\text {st }}$ to $9^{\text {th }}$ vowel.
vi) There are 25 Verga consonants organized as $5 \times 5$ matrix / grid format of 5 rows and 5 columns.
vii) Each of the 5 rows is the range of 5 letters.
viii) Likewise each of the 5 columns as well is the column of 5 letters.
ix) There are 4 Antsatha letters and also there are 4 Ushmana letters.
x) Antsatha letters are of sequential placements. Likewise Ushmana letters are also of sequential placements.
xi) Finally there is a set of 8 Yama letters as well being of sequential placements
xii) Each of these 5 groups of letters in terms of their internal sequential placements attain association of numbers values as under:-
a) 9 vowels attain association of values $1,2,3,4,5,6,7,8,9$ respectively.
b) First row of 5 letters of Verga consonants attain association of numbers values $1,2,3,4,5$.
c) Second row of 5 letters of Verga consonants attain association of numbers values $2,3,4,5,6$
d) Third row of 5 letters of Verga consonants attain association of numbers values $3,4,5,6,7$
e) Fourth row of 5 letters of Verga consonants attain association of numbers values $4,5,6,7,8$
f) Fifth row of 5 letters of Verga consonants attain association of numbers values $5,6,7,8,9$
xiii) 4 Antasatha letters attain association of numbers values ( $1,3,5,7$ ).
xiv) 4 Ushmana letters attain association of numbers values ( $2,3,6,9$ )
xv) 8 Yama letters attain association of numbers values (9,10,11,12,13,14,15,16)
7. One may have a pause here and take note that the above numbers values of individual letters of Devnagri alphabet lead to the following organization features of Devnagri alphabet:-

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 |  |  |  |  |
| 2 | 3 | 4 | 5 | 6 |  |  |  |  |
| 3 | 4 | 5 | 6 | 7 |  |  |  |  |
| 4 | 5 | 6 | 7 | 8 |  |  |  |  |
| 5 | 5 | 6 | 8 | 9 |  |  |  |  |


| 1 | 3 | 5 | 7 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 3 | 6 | 9 |  |  |  |  |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

8. One may further have a pause here and take note that the above feature of the organization format of Devnagri alphabet deserve to be comprehended well for its thorough appreciation and full imbibing to acquire deep in sight and enlightenment for chase of the words formulations of Devnagri alphabet letters.
9. One shall further have a pause here and takenote that the transcendental source reservoir beginning formulation is Om which accepts association of numbers value 16 and the end reach is in terms of word formulation Paranva which accepts association of number value 36.
10. With this the organization of Devnagri alphabet becomes the organization of 52 numbers values with first value as 16 and the last value as 36 and in between 50 value being as are tabulated above of 9 vowels, 35 verga consonants, 4 Antasatha, 4 Ushmana and 8 Yama letters.
11. This as first step of first teaching sequence of the mathematical domain of Ganita Sutras deserve to be imbibed well as this is to play the role of foundation step for the subsequent teaching sequence.

Folder Name: 13, Teacher Sequence File 2 Teaching Sequence 1 Step 2

## LETTERS OF THE TEXTOF GANITA SUTRAS

1. 36 letters availed by the text of Ganita Sutras.
2. The second teaching step of this teaching sequence is to focus upon the letters availed by the text of Ganita sutras and Ganita Upsutras.
3. Text of Ganita Sutras and Ganita Upsutras avails 36 letters of Devnagri alphabet.
4. These 36 letters are :
i) 10 vowels namely first, second and third vowels: elongated first, second and third vowel; fourth, sixth, seventh and eighth vowel. These vowels attain association of number values ( $1,2,3$ ), ( $2,4,6$ ), (4,6,7,8)
ii) 17 Verga consonants namely:
a) first, second, third and fifth letters of first row attaining association of number values ( $1,2,3,5$ )
b) first and composite fourth and sixth letters of second row attaining association of number values ( $2,4+6=10$ ).
c) First and fifth letter of third row attaining association of number values ( 3,7 )
d) First, second, third, fourth and fifth letter of fourth row attaining association of number values ( 4,5,6,7,8)
e) First, third, fourth and fifth letter of fifth row attaining association of number ( $5,7,8,9$ )
iii) All the four Antsatha letters attaining association of number value ( $1,3,5,7$ )
iv) Ist Three Ushmana letter attaining association of number value $\quad(2,3,6)$
v) Ist and fifth Yama letters attaining association of number values
$(9,13)$
5. One may have a pause here and take note that in terms of number values, the organization of letters availed by the text of Ganita Sutras and Upsutras comes to be as under:-
i) $\quad(1,2,3),(2,4,6),(4,6,7,8)$
ii) $\quad(1,2,3,5)$
iii) $(2,4+6=10)$.
iv) $(3,7)$
v) $\quad(4,5,6,7,8)$
vi) $\quad(5,7,8,9)$
vii) $(1,3,5,7)$
viii) $(2,3,6)$
ix) $(9,13)$
6. One shall have a pause here and take note that the letters of Devnagri alphabet ( and hence the number value associated with them) be not availed by the text of Ganita Sutras and Upsutras as well play their role for reach at the mathematical domain of Ganita Sutras.
7. One may further have a pause here and take note that the composite letter of third and fifth letters of second row deserves to be comprehended well for its composition feature, as well as for the individual features of the pair of letters namely third and fifth letter of second row of Verga consonants having their distinct formats and features.
8. One shall further have a pause here and take note that the Antsatha letter Raif ( the second Antsatha letter) is of three sequential phases and stages attaining number values sequential triple ( $1,2,3$ ) but as Devnagri alphabet it is being counted an approach as a single letter.
9. Still further one shall have a pause here and take note that at one place, the first vowel is marking its praises in its absence
and this occurrence representation is of expression in a distinct script form but the same is not being counted simply as that the same is of the value of the first vowel itself, which already stands counted.
10. Here it also would be relevant to take note that beginning and end values formulations namely Om and Paranva are equally available for the text of Ganita Sutras and Upsutras as well.
11. One shall have a pause here and take note that the number values of different letters availed by the text of Ganita Sutras and Upsutras, as such, comes to be of values range 1 to 9 and 13 together with the pair and values ( 16,36 ).
12. One shall visit and revisit the organization format of Devnagri alphabet as well as the format of occurrence placements of the letters availed by the text of Ganita Sutras and Upsutras.
13. It would be blissful exercise to rechase steps 1 and 2 together to have proper comprehension of their distinguishing features.

Folder Name: 13, Teacher Sequence File 3 Teaching Sequence 1 Step 3

LETTER "RAIF"

1. Letter Raif is a class itself.
2. All the letters of Devnagri alphabet accept second Antsatha letter or pronounced with the help of the formulation " Kara".
3. However, the second Antsatha letter is pronounced as " Raif".
4. The number value of the formulation " Kara" is $7+13=20$.
5. The number value of formulation "Raif" is $16+13=29$
6. One may have a pause here and take note that number value of formulation "Ved" is 20.
7. Likewise the number value of formulation "Dev" is also 20.
8. However, the number value of word formulation "Brahma" is 29 .
9. One may have a pause here and take note that there are 16+13=29 Ganita Sutras and Ganita Upsutras.
10. The number value of formulation "Raif" is $16+13$, which is parallel to the number of sutras and upsutras.
11. With it , it would be desirable for the Sadhkas to sit comfortably and permit the transcending mind to glimpse and imbibe the values and features of letter Raif .
12. It may be recapitulated that letter Raif, otherwise as second Antsatha letter attains association of number value (3).
13. Still further it also would be relevant to take note that the Antsatha letter Raif is marking its presence in three phases and stages in the text of Ganita Sutras and Upsutras and is attaining association of number values triple ( $1,2,3$ ) respectively for its three distinct phases.
14. One may further have a pause here and take note that first and fifth Yama letter are pronounced as Anuswar and Visarjaniya.
15. The formulation Anuswar attains numbers value $1+8+3+3+7+2+3+1=28$.
16. The formulation Visarjaniya attains association of number value $7+2+3+1+2+4+1+8+4+1+1=34$.
17. One may further have a pause here and take note that in the light of pronunciation rules of individual alphabet letters with the help of the pair of formulation namely " Kara" and "Raif" one can reach at the sound frequencies values being attained by the individual alphabet letters.
18. It would be a very blissful exercise to tabulate these values for all the letters of Devnagri alphabet and in particular for the letters availed by the text of Ganita Sutras and Upsutras.
19. With this tabulation, the transition from Naad format to Jyoti format of Devnagri words formulations would become attainable.
20. One may have a pause here and take note that the formulations Naad and Jyoti attain association of numbers values $17+13=30$ and $18+13=31$.
21. One may further have a pause here and take note that the formulation Samhita attains association of number value 30 .
22. One may further have a pause here and take note that the number value 31 is of format and features of linear order structuring 3 space with cube /hyper cube 3 as its representative regular body.
23. One may further have a pause here and take note that cube /hyper cube 3 is manifested structural set up of 31 components namely 8 corner points, 12 edges, 6 surfaces, 1 volume, 3 dimensional axes and one origin.
24. One may further have a pause here and take note that the formulation Ghan attains association of number value $14+$ $13=27$ which is parallel to the value of 27 components of
the set up of the cube namely 8 corner points, 12 edges, 6 surfaces and one volume.
25. One may further have a pause here and take note that the formulation Verga as well attains association of number value $14+13=27$.
26. It would be a blissful exercise to reachat transition from the set up of Verga to the set up of cube.
27. It also would be relevant to take note that the text of Ganita sutras and Upsutras has Verga as one of its basic formulations.
28. It would further be relevant to take note that $14=2+3+4+5$ is parallel to four fold manifestation layer ( $2,3,4,5$ ) of hyper cube 4 which is of a spatial order.
29. It would further be relevant to take note that Lord Brahma, the four head Lord is the creator of the Supreme and is the presiding deity of 4 space.
30. Further as that Lord Brahma is the presiding deity of the measure of Sathapatya Measuring Rod.
31. It would be a blissful exercise to glimpse and imbibe the feature of the formulation Raif and Brahma, both attaining association of number value 29 .
32. With it, one shall visit and revisit the format and features of letter Raif and to appreciate and imbibe its value $16+13$ being parallel to the value of 16 sutras and 13 upsutras.

Folder Name: 13, Teacher Sequence File 4 Teaching Sequence 1 Step 4

## SANKHYANISHTA AND YOGA NISHTHA

1. For a reach from numbers value to parallel geometric format, the basic concept of parallel Yoga Nishta and Sankhya Nishta deserve to be comprehended well.
2. Yoga Nishta presumes the existence of artifices of numbers and avails geometric formats.
3. On the other hand Sankhya Nishta presumes the existence of dimensional spaces and avails the values of numbers.
4. Conceptually numbers and their artifices on the one hand and geometric domain with in dimensional frame on the other hand permit parallel approach for their simultaneous chase.
5. It is this conceptual comprehension for which Sadhkas shall acquire insight and enlightenment.
6. It is in terms of this sequential chase step that in sight can be acquired about the mathematical domain of Ganita Sutras.
7. First of all number value 1 and artifice 1 of this number value deserve to be distinctly comprehended . Likewise number value 2 and its pair of artifices as well deserve to be distinctly comprehended.
8. This way one shall sequentially chase number value $1,2,3,4,5$ \& 6 as well as their $1,2,3,4,5 \& 6$ artifices respectively.
9. Simultaneously on the other hand one shall comprehend one space and its dimensional frame of single dimension.
10. Further one shall comprehend 2 space and its dimensional frame of a pair of dimension.
11. Sequentially one shall chase $1,2,3,4,5 \& 6$ spaces and their dimensional frames of $1,2,3,4,5 \quad \& 6$ dimensions respectively.
12. It is this comprehension of number value 1 having 1 artifice and parallel to it one space having a dimensional frame of single dimension .
13. Which will help the Sadhkas to acquire proper in sight about the unison features of Yoga Nishta and Sankhya Nishta.
14. It would be a blissful exercise that one shall sit comfortably and permit the transcending mind to comprehend the number value to and its pair of artifices parallel to 2 space and its dimensional frame of pair of dimension.
15. Further , one shall sit comfortably and permit the transcending mind to glimpse number value 3 and its triple artifices parallel to 3 space and its dimensional frame of triple dimensions.
16. Still further, one shall sit comfortably and permit the transcending mind to glimpse number value 4 and its quadruple artifices parallel to 4 space and its dimensional frame of four dimensions.
17. This exercise the sequentially extended to number value 5 and 5 space.
18. Still further it shall be extended to number value 6 and 6 space.
19. One may have a pause here and take note that one space and one space body ( line) also plays the role of boundary lines of square/2 space.
20. One may have a pause here and take note that this brings us face to face with more than one rows for one space, namely firstly as one space body and secondly as one space bodies constituting boundary of 2 space bodies.
21. Still further, one may take note that 3 space accepts a dimensional frame of 3 linear dimension ( axes). With it , one space bodies as linear axes, brings to focus, one another role of one space body.
22. Let us have a pause here and take note that the above features bring to focus one space in the role of one space
body, one space bodies constituting boundary of 2 space bodies and one space bodies constituting a dimensional frame for 3 space bodies.
23. This as such brings to focus 3 different roles of one space as one space body, as one space bodies constituting boundary of 2 space bodies and further as that one space bodies constitute a 3 dimensional frame.
24. One may have a pause here and have the conceptual comprehension and that these three roles of one space as I I space as I space domain, II one space as boundary, and III one space as dimension .
25. Vedic system conceptually go steps ahead for following other roles of one space as well.
I. One space as origin.
II. One space as base and
III. One space as format
26. One may have a pause here and to comprehend these 6 fold roles for one
space as
I. One space as domain fold
II. One space as boundary fold

III One space as dimension fold
IV One space as origin fold
V. One space as base fold and
VI. One space as format fold beneath the base fold .
27. Likewise one can comprehend six different roles for 2 space as :
I. Two space as domain fold
II. Two space as boundary fold

III Two space as dimension fold
IV Two space as origin fold
V. Two space as base fold and
VI. Two space as format fold beneath the base fold
28. A step ahead one can comprehend parallel six roles of 3,4,5 \& 6 spaces as well.
29. With it, one shall be having a glimpse of distinct features and richness of different roles of dimensional spaces and parallel to it of numbers values.
30. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of Trans and to glimpse and imbibe all these features of spaces and their dimensional frames parallel to numbers values and their artifices in their different roles.
31. One may have a pause here and take note that these features focus upon the richness of the mathematical domain and processing systems of mathematical domain of Ganita Sutras.

Folder Name: 13, Teacher Sequence File 4 Teaching Sequence 1 Step 5

## TEACHING SEQUENCE 1 STEP 5 SATHAPATYA MEASURING ROD

1. Fifth teaching step of this sequential chase of mathematical domain of Ganita Sutras is the concept of Sathapatya Measuring Rod.
2. Sathapatya Measuring Rod is sequential synthetic set up of hyper cubes 1 to 6
3. Hyper cube 1 is representative regular body of 1 space.
4. Hyper cube 2 is representative regular body of 2 space.
5. Hyper cube 3 is representative regular body of 3 space.
6. Hyper cube 4 is representative regular body of 4 space.
7. Hyper cube 5 is representative regular body of 5 space.
8. Hyper cube 6 is representative regular body of 6 space.
9. Hyper cube is the four fold manifestation layer of 4 consecutive dimensional spaces ( contents), to be simply referred as dimensional spaces.
10. 4 consecutive dimensional spaces play the role of dimension fold, boundary fold, domain fold and origin fold.
11. The domain fold as manifested space content because of its prominent role, as dimensiwhose content manifests as the domain fold, the third fold of the four fold manifestation layer.
12. One may have a pause here and take note that, accordingly, the hyper cubes as well are designated in reference to the domain fold itself.
13. Illustratively hyper cube 3 as its domain fold as the manifested three space content fold .
14. Accordingly hyper cube 3 is the four fold manifestation layer of 4 consecutive spaces namely ( One space as
dimension fold, 2 space as boundary fold, 3 space as domain fold , 4 space as origin fold).
15. In general, hyper cube N is the four fold manifestation layer ( $\mathrm{N}-2$ space as dimension fold, $\mathrm{N}-1$ space as boundary fold, N space as domain fold, $\mathrm{N}+1$ space as origin fold)
16. It would be a blissful exercise to enlist 4 distinct fold of hyper cubes $1,2,3,4,5 \& 6$ respectively.
17. It would be a blissful exercise to take note that number values quadruple
( $\mathrm{N}-2, \mathrm{~N}-1, \mathrm{~N}, \mathrm{~N}+1$ ) would be parallel to the set up of four fold manifestation layer of hyper cube N .
18. Accordingly it can be said that the artifices of four consecutive number values get coordinated as quadruple values ( $\mathrm{N}-2, \mathrm{~N}-1, \mathrm{~N}, \mathrm{~N}+1$ ).
19. One may have a pause here and it can be said that number value N is manifested as and in terms of quadruple number values ( $\mathrm{N}-2, \mathrm{~N}-1, \mathrm{~N}, \mathrm{~N}+1$ ) and the number value $\mathrm{N}-2$ would be designated as artifice of number value N .
20. One may further have a pause here and take note that the domain boundary ratio of hyper cube $N$ is $A^{N}$ : NN, $A^{n-1}$.
21. Further as that, accordingly hyper cube N shall be of $2 \mathrm{~N}+1$ versions.
22. Still further it also would be relevant to take note that dimensional frame of N space shall be constituted by N dimension of $\mathrm{N}-2$ space playing the role of dimension.
23. It would be a blissful exercise to reach at the domain boundaryratio of hyper cubes $1,2,3,4,5 \& 6$.
24. Still further it also would be blissful to reach at total number of versions of hyper cubes $1,2,3,4,5 \& 6$ respectively.
25. Still further it also would be relevant to have comprehension of dimensional frames of hyper cubes 1,2,3,4,5 \& 6 .
26. One shall have a pause here and permit the transcending mind to glimpse and imbibe the features of hyper cubes 1 to

6 and to reach at the structural richness of Sathapatya Measuring Rod.
27. With it, one shall be acquiring deep in sight and enlightenment of the Vedic Processing Systems and the emerging Vedic mathematical domain of Ganita Sutras and Upsutras while being chased along the format and features of Sathapatya Measuring Rod.

Folder Name: 13, Teacher Sequence File 1 Teaching Sequence 2 Step 1

## TEACHING SEQUENCE 2 STEP 15 NUMERALS AND 6 NUMBERS

1. Chase of Mathematical domain of Ganita Sutras, because of its compactified formats, is in different sequential series of steps.
2. First sequential steps is about the composition of the text of Ganita Sutras as words formulations availing different Devnagri alphabet letters.
3. The present second sequence steps are focusing upon the basic conceptual values words of the text of Ganita Sutras.
4. The present teaching sequence 2 step 1 is about " 5 Numerals and 6 Numbers" being availed by the text of Ganita Sutras.
5. The text of Ganita Sutras avails conceptual values " $0,1,2,7,9,10$ "
6. The summation value of these numbers values is $0+1+2+7+9+10=29$.
7. One may have a pause here and take note that this summation value (29) is parallel to the summation value 16 +13 , as of 16 sutras and 13 upsutras.
8. One may further have a pause here and take note that the values range $\quad(0,1,2,7,9,10$ permits organization as $16=9+7$ and $13=10+2+1$.
9. One may further have a pause here and take note that the numbers pair $(9,7)$ is parallel to the composition of the text of Ganita Sutra 1 as of 9 and 7 letters respectively.
10. Still further as that numbers pair $(01,10)$ constitutes a reflection pair of numbers.
11. One may further have a pause here and take note that the first Ganita Sutras is about proportionality symmetry while
the last Upsutra is of the format of a composition of object and its reflection image.
12. Still further the above features go parallel to the format of Divya Ganga Flow through the aritifice of Om formulation.
13. One may further have a pause here and take note that the first two components of Om formulation namely Bindu Sarovar and Ardhmatra accept association of values 1 and 2 respectively being the first two components of Om formulation.
14. Further as that the Bindu Sarovar ( as transcendental source reservoir of Brahman value /Nav Braham ) permits flow of 7 streams reaching uptil the second component.
15. One may further have a pause here and take note that these features will help us appreciate the settlement of the numbers values range ( 0,1 and 9 ) being associated with Bindu Sarovar and the values ( 2 and 7 ) as of the range of reach uptil the second component.
16. One may further have a pause here and take note that $2^{0}=1$ $, 2^{1=} 2,2^{0}+2^{1+} 2^{2}=7,2^{0}+2^{1+} 2^{2}+2^{1}=9$ and $2^{0}+2^{1+} 2^{2}+2^{1+} 2^{2}=$ $10=2^{1=} 2=2^{0}+2^{2}$.
17. One may have a pause here and take note that the above range of values $\quad(1,2,7,9 \& 10)$ respectively permit expression in terms of $1,2,3,4 \& 5$ entities.
18. One may further have a pause here and take note that the value 0 will be having expression in terms of 0 number of entities.
19. One may further have a pause here and take note that the base value of the entities of value 10 above is 2 , each of the 5 entities.
20. However, the index values of said entities are respectively ( 0,1,2,1,0)
21. One may further have a pause here and take note that $2+2+2+2+2=10=1+2+3+4$
22. Further as that $0+1+2+1+0=4=1+1+1+1$.
23. One may further have a pause here and take note that the quadruple values $\quad(1,1,1,1)$ and $(1,2,3,4)$ are affine ( equal values) and sequential values quadruples.
24. One shall sit comfortably and permit the transcending mind to glimpse these features of quadruple values.
25. This will help us comprehend and appreciate to chase along the format of 4 components as of affine values and also as of sequential values.
26. One shall have a pause here and to pose oneself as to how the Ganita Sutras option for the six numbers values ( $0,1,2,7,9,10$ ), is sufficient for expression of whole range of numbers along 10 place value system, and also for the parallel geometric format of 10 place value system along the creative boundary of transcendental domain.
27. Further it also would be blissful to take note that the words formulations for the numbers values ( $0,1,2,7,9 \& 10$ ) availed by the text of Ganita Sutras are of respective transcendental code values ( $19,8,16,8,14,17,10$ )
28. It would be a blissful exercise to glimpse these features of these words formulations accepting association of the number values as these are as number values and also as transcendental code values.

Folder Name: 13, Teacher Sequence File 7 Teaching Sequence 2 Step 2

## TEACHING SEQUENCE 2 STEP 2 AMONGST SYLLABLE LORD VISHNU IS AKARA

1. Lord Krishna in his divine song (Srimad Bhagwat Gita ) enlighten as that " Akshra Naam Akaro Asmi" ( Amongst syllable I), the incarnation of Lord Vishnu is Akara.
2. The first vowel is pronounced and is of the frequencies of Akara.
3. Transcendental code value of Akara is 8 .
4. One may have a pause here and take note that transcendental code value of formulation Ank is also 8 .
5. Still further, the transcendental code value of formulation Dwye (2) is $16=8+8$.
6. One may further have a pause here and take note that Lord Vishnu is the presiding deity of 6 space and hence is the Lord of sixth vowel.
7. It would be blissful to glimpse as that the first letter of the text of Ganita Sutra 1 is the sixth vowel .
8. It would further be very blissful to glimpse and imbibe as that the choice here instead of the first vowel for the first placement is of the sixth vowel.
9. One may further have a pause here and take note that the seventh letter of the text of Ganita Sutra 1, as well is the sixth vowel.
10. One may have a pause here and take note that 6 space has 13 geometries range of which 6 are positive and 7 are nonpositive.
11. Likewise is the range of 13 versions of hyper cube 6 .
12. One may further have a pause here and take note that TCV value of formulation Akshara ( Syllable) is 13.
13. It would be a blissful exercise to take note that the $13^{\text {th }}$ version of hyper cube 6 is stripped off of all the twelve transcendental boundary components.
14. One may further have a pause here and take note that with in 4 space, 12 edged cube attains one additional edge manifesting along the format of degree of freedom of motion.
15. One may further have a pause here and take note that 13 edged cube swaps domain fold of hyper cube 4 .
16. This swapping as such touches the centre of hyper cube 4 as well but only of the value of the centre as point of 4 space domain.
17. One may further have a pause here and take note that at centre of 4 space domain is the seat of transcendental origin ( 5 space as origin of 4 space)
18. Further as that 5 space is a solid order space, and that the dimensional frame of 5 space is the composition of 5 solid dimensions which yield value $1 \times 3 \times 5=15$.
19. Further as that transcendental code value of formulation Shesh is 15.
20. If one shall sit comfortably and permit the transcending mind to glimpse the above features of the organization.
21. One may further have a pause here and take note that the transcendental code values of individual 5 letters between first and seventh letters of the text of Ganita Sutra 1 is the range of 5 values namely ( $1,2,7,2,1$ )
22. One may have a pause here and take note that first 3 values $(1,2,7)$ are having number values formulations in the text of Ganita Sutras.
23. Then as is evident value 7 is the middle placed value like the placement of a mirror at the middle and the pair of values on either side of the mirror at the middle or the object and image of each other.
24. With it the reflection operation and super imposition of pair of orientation will that way lead to the values $7+2=9$ and $7+2+1=10$.
25. One may further have a pause here and take note that this leads to values range as $(1,2,7,9,10)$ which is parallel to numbers value of the formulation of the text of Ganita Sutras.
26. One may further have a pause here and permit the transcending mind to glimpse all these features of the organization of the text of Ganita Sutras on the whole and of the text of Ganita Sutra 1, in particular.
27. One may further have a pause here and take note that the super imposition of pair of opposite orientation will create a neutralized state and hence the value Shunyam/(0) will also come into play
28. One may further have a pause here and take note that sole syllable Om as Iti Ek Akshar Braham shall be accepting value as one and also as of four quarter and thereby to have an association of value 4 parallel to 4 components.
29. Further as that Ka Brahma and Ka Shiv will further enlighten us about the organization features of working system of Ganita Sutras initiated with the first letter as the sixth vowel being of the format and features of 6 space which accepts 5 space in the role of boundary and 4 space in the role of dimension
30. One shall have a pause here and to glimpse these features for further chase of the working system of Mathematical domain of Ganita Sutras.

Folder Name: 13, Teacher Sequence File 8 Teaching Sequence 2 Step 3

## TEACHING SEQUENCE 2 STEP 3 VALUES, MEASURE AND COMPARATIVE VALUES

1. The third step of present teaching sequence-2 is to focus upon values, measures and comparative values mathematics features of Ganita Sutras.
2. The values formulations of values like $0,1,2$ etc . and comparison measures like of features Adhik (more than), Nunane( less than), sum ( equal), Samya ( Parallel), Anuroopen( proportionately symmetrical ) are being availed by the text of Ganita Sutras.
3. These formulations deserve to be tabulated alongwith their mathematical features as of values, measures and comparative values.
4. One may have a pause here and take note that Ganita Sutras mathematical systems are of compactified formats which simultaneously work out different disciplines like of geometric domain as well as of numbers system.
5. One may have a pause here and take note that Yoganishta and Sankhya Nishta work simultaneously .
6. With it the dimensional frames and artifices of numbers process as along parallel formats .
7. One may have a pause here and take note that the measures take us to dimension folds for chase of values of domain folds.
8. As such the comparison of the values and the emerging comparative values are as per the index value of the measures of dimension folds.
9. Therefore, the comparisons of features of proportionate symmetry, parallel flow, one being more than other or one being less than other or the one being equal to the other, that way of the formats of dimensional frames and of artifices of numbers.
10. One may have a pause here and take note that two basic conceptual terms of the text of Ganita Sutras Mathematical domain are
"Loka/space" and "Goon/properties". 11. Ganita Sutras Mathematical systems chase dimensional spaces and properties/features/values of dimensional domains .
11. With it the focus remains upon the geometrical formats for chase of numbers values, and on the other hand, upon the format of numbers values for chase of geometrical domains.
12. As such, it would be a very blissful exercise to tabulate the basic words formulations of the text of Ganita Sutras.
13. This tabulation shall be in the form of groups of such interconnected conceptual words formulations.
14. One may have a pause here and take note that words formulations of numbers like, Suynam, 1 etc. may be constituting one group .
15. The words formulations of directions like Purav, Udharav etc. formats shall be constituting another group .
16. The values comparisons words formulations like Adhik, Nunane etc. shall be constituting another group .
18,. The conceptual definition words formulations like Sangya, Ank, etc. shall be constituting another group of basic formulations.
17. The operational attainment formulation like Pravartiya, Sammuchya, Sankalan etc. shall be constituting another group of words formulations.
18. The word formulations of values state like Puranam, Aapuranam, Vyashti etc. shall be constituting another group of words formulations.
19. Visargas like Anu, Vi, Ni etc. shall be forming another group of words formulations.
20. It would be a very blissful exercise to reach at exhaustive enlistment and tabulation of the words formulations as conceptually interlinking groups of words formulations.
21. It would further be a very blissful exercise to reach at precise mathematical values and features of these basic conceptual words formulations of the text of Ganita Sutras.
22. One may have a pause here and take note that in terms of these classified groups of conceptual words formulations, one may be attaining proper in sight and enlightenment about the mathematical domain of Ganita Sutras.
23. Further as that, in terms of this in sight and enlightenment, one shall be in a position to have proper comprehension and appreciation of the comparative mathematical domains of modern mathematical systems as well as of Vedic Mathematical systems.
24. One may further have a pause here and take note that the Mathematical systems of mathematical domain of Ganita Sutras are the basis of the discipline of Vedic Mathematics, Science and Technologies, and as such the proper comprehension and appreciation of the values and features of mathematical domain of Ganita Sutras would be determining the comprehension and appreciation of the values of the discipline of Vedic Mathematics, Science and Technologies.

Folder Name: 13, Teacher Sequence File 9 Teaching Sequence 2 Step 4

## TEACHING SEQUENCE 2 STEP 4 SINGLE,DOUBLE, TRIPLE AND QUADRUPLE LETTERS WORDS FORMULATIONS.

1. Fourth step of present teaching sequence 2 is to focus upon the single, double, triple and quadruple words formulations of the text of Ganita Sutras.
2. The text of Ganita Sutras avails 519 letters in all .
3. These 519 letters are composed as 29 Sutras and Upsutras.
4. With it the range of 519 letters range stands organized as 29 sub ranges.
5. The range of 519 letters organized as 29 sub ranges shall be taken as formatted 519 points as 29 sequential arrangements.
6. One may have a pause here and take note that N point cover ( $\mathrm{N}-1$ ) linear unit.
7. $\mathrm{N}-1$ linear unit cover ( $\mathrm{N}-2$ ) spatial unit, and
8. ( $\mathrm{N}-2$ ) spatial unit cover ( $\mathrm{N}-3$ ) solid units.
9. As such domain fold which is the third fold shall be standing structured as its constituents.
10. Let us have a pause here and let us begin with start with range of 519 points.
11. At first step it shall be taking us to 519-29=490 units, as the range of 519 units, in fact is the range of 29 sub ranges.
12. At second step the attainment would of $490-29=461$ units.
13. At the third step, the attainment would be of $461-29=432$ units.
14. One may have a pause here and have a fresh look at the quadruple units of different degrees namely ( 519 points, 490 linear units, 461 spatial units and 432 solid units.
15. It would be a blissful exercise to chase 519 single letter formulations of the text of Ganita Sutras.
16. A step ahead, it would be a blissful exercise to chase 490 words formulations of double letters of the text of Ganita Sutras.
17. A step ahead, it would be a blissful exercise to chase 461 words formulations of triple letters.
18. And finally we shall be face to face with the range of 432 quadruple letters words formulations of the text of Ganita Sutras.
19. One may further have a pause here and take note that the quadruple numbers value ( $519,490,461,432$ ) are three digit numbers organization.
20. Of these, the second and fourth numbers values ( 490,432 ) accept reorganization as ( $49 \times 10,8 \times 104$ ).
21. One may have a pause here and take note that $49=7 \times 7$ and $104=26 \times 4$.
22. One may further have a pause here and take note that there are 26 meters of four quarter each making a range of $26 \times 4=104$ quarters range.
23. Further as that transcendental code value of Marutgan is 49.
24. $104=13 \times 8$, which is parallel to the coordination of all the 8 boundary components of hyper cube 4 with 13 edged cubes swapping the 4 space domain.
25. Still further $49 \times 10=490$ coordinates coverage would be there for the creative boundary of 10 components of the transcendental domain.
26. One may have a pause here and take note that this chase of the text of Ganita Sutras as single, double, triple and quadruple letters words formulations is going to bring us face to face with very rich structural domain of mathematics of Ganita Sutras.
27. Onemay further have a pause here and permit the transcending mind to glimpse this structural domain of mathematics of Ganita Sutras and to imbibe its values to
acquire deep insight and enlightenment of the mathematics of Ganita Sutras
28. One shall sit comfortably and permit the transcending mind to glimpse the comparative structural richness of the mathematical domains of modern systems and of Vedic Mathematical system.
29. It would further be a very blissful exercise to revisit domain fold of hyper cube as solid component, spatial component, linear component and zero value component.
30. One may further have a pause here and take note that this chase of domain fold can be had along the format of Sathapatya Measuring Rod synthesized by the format of hyper cube $0,1,2 \& 3$
31. It would be a blissful exercise to chase the domain fold of hyper cube 3 , hyper cube 4 , hyper cube 5 , hyper cube 6 respectively.
32. It would be a very blissful exercise to simultaneously chase the domain fold of hyper cube $3,4,5$, \& 6 along the format of Sathapatya Measuring Rod with in creator's space.

Folder Name: 13, Teacher Sequence File 10 Teaching Sequence 2 Step 5

## TEACHING SEQUENCE 2 STEP 5 CHASE AS 36 FREQUENCY RANGES OF TEXT OF GANITA SUTRAS.

1. The text of Ganita Sutras avails 36 letters.
2. The range of 519 letters accepts 36 sub ranges of occurrence values $(118,27,14,1,15,14,1,21,7,2,16,1,11,1,16,3$, $4,6,9,21,1,10,2,13,15,5,21,45,15,9,18,8,17,6,9,9)$.
3. The vowels, Verga consonents, Antasatha, Ushmana and Yama letters are of their distinct placements formats.
4. These formats are of geometric features as well as of parallel number values .
5. Vowels are of the formats of dimensional order manifesting as dimensional frame.
6. Verga consonant of the organization of $5 \times 5$ matrix formats of five different rows ( dimension fold, boundary fold, domain fold, origin fold and basefold) of respective values.
7. The rows and columns are of the formats of hyper cubes 3,4,5,6 \& 7 respectively.
8. One may have a pause here and take note that $3+4+5+6+7=$ 25.
9. One may further have a pause here and take note that each Verga consonant is accepting geometric format value as per the placement of the letter in the particular row and column.
10. One may further have a pause here and take note that therow and column placementof each Verga consonant determines its geometric format features.
11. Further Antsatha letters are of sequential phases of dimensional transcendence from domain fold to dimension fold to dimension of dimensionfold andstep ahead to dimension of dimension of dimension fold.
12. One may have a pause here and take note that 4 Antsatha letters are of quadruple value $1,3,5,7$ ) which is parallel to the quadruple transcendence format ( 1 space as dimension of 3 space, 3 space as dimension of 5 space, 5 space as dimension of 7 space and 7 space as the unit state domain permitting transcendence sequentially to 5 space, 3 space and 1 space respectively.
13. The Ushmana letter are of ascendance from the spatial order having a reach to solid order and ahead to Self referral and Brahman order
14. Yama letter being availed by the Ganita Sutras are Anusawara and Visarjaniya
15. These are of the formats of structured points and flow streams of structured points.
16. Accordingly the frequences of occurrence of the 36 letters availed by the text of Ganita Sutras are going to be the manifestation of features expression of the respective letters being availed by the mathematical domain of Ganita Sutras.
17. As such it would be a very blissful exercise to take up the individual letter of the text of Ganita Sutra and to first determine its manifestation feature expression at the particular placement and then to work it out as the mathematical processing step of the particular Ganita Sutras.
18. This in fact is going to be really a very challenging job for the Sadhakas.
19. However, it is going to be a very blissful exercise.
20. One shall sit comfortably and permit the transcending mind to glimpse these manifested features of the individual letters availed by the text of Ganita Sutras as per the occurrence placement of the concerned letter
21. One shall chase these manifestation features letter-wise.
22. As such, naturally it is going to be a very big and a very prolonged exercise but nevertheless it is going to be a very
blissful exercise for the Sadhakas urging to attain deep insight and enlightenment about the mathematical domain and working processes of Ganita Sutras.
23. One may have a pause here and take note that this exercise will bring the Sadhaas face to face with the inherent feature of Ganita Sutras to sequentially unfold its compactified formats and to provide reach uptil the Brahman domain.
24. To start with the Ganita Sutras shall be unfolding mathematical domain of the order of our Solar Universe. However, with the transcendence at its compactified formats, one shall be transcending to the Brahman domain .
25. One may have a pause here and take note that 3 space in the role of dimension takes us uptil 6 space in the role of origin.
26. A step ahead, 6 space in the role of dimension shall be taking us to 9 space in the role of origin

Folder Name: 13, Teacher Sequence
File 11 Teaching Sequence 3 Step 1

## TEACHING SEQUENCE 3 STEP 1 MATHEMATICAL DOMAINS OF GANITA SUTRAS

1. Mathematical domains of Ganita Sutras may be glimpsed in the formulation " Ganita Sutrani."
2. Transcendental code value of formulation is 18 while the transcendental code value of formulation Sutrani is 25 , and of formulation Sutra is 15 .
3. One may have a pause here and take note that the value 18 permits reorganization as $18=3+4+5+6$ parallel to which is the four fold manifestation layer ( $3,4,5,6$ ) of hyper cube 5 with 6 space in the role of origin.
4. One may further havea pause here and take note that the value 15 is parallel to the dimensional value of 5 space as $15=1 \times 3 \times 5=3 \times 5$.
5. One may further have a pause here and take note that $15=$ $2 \times 7+1=7+8$ which is parallel to 7 negative geometries and 1 nonnegative geometry of 15 space parallel to which are the 15 versions of hyper cube 15 .
6,. Ione shall sit comfortably and permit the transcending mind to comprehend the emerging feature of four fold manifestation layer ( $3,4,5,6$ ) and the non-negative value 8 and dimensional synthesis of a pair of self referral dimension.
6. One may have a pause here and take note that this brings us face to face with the values range ( $3,4,5,6,7,8$ ).
7. One may have a pause here and take note that Ganita Sutras text avails formulations for the values ( $0,1,2,7,9,10$ ) whereby the values range ( $3,4,5,6,8$ ) becomes the workable range of Ganita Sutras.
8. It would be blissful to comprehend these features and to imbibe the values of mathematical domain of Ganita Sutras of the values range ( $3,4,5,6,8$ ) leading us to the format of hyper cube 5 within a three dimensional frame of value 15 of which nonnegative value is " 8 ".
9. One may further have a pause here and take note that this range of values ( $3,4,5,6,8$ ) further brings us face to face with Triloki and Trimurti and Ashtprakarti.
10. With it the mathematical domain of Ganita Sutras may be glimpsed being of the format and values of Triloki, Trimurti and Ashtprakarti.
11. It would be a blissful exercise to glimpse the chase of this domain as of the format of hyper cube 5 .
12. Further it also would be a blissful exercise to chase this domain along the North-East diagonals $6 \times 4$ matrix .
13. One may have a pause here and take note that $6 \times 4$ matrix accommodates all the 24 double digit numbers of 5 place value.
14. Still further it also would be relevant to take note that this chase would be parallel to the chase along the format of hyper cube 4 as a four fold manifestation layer ( $2,3,4,5$ ) with 5 space in the role of origin of the spatial order 4 space ( Creator's space).
15. The spatial order 4 space with transcendental origin within 5 space origin shall be leading us to the seat of 4 space being of value $5+$ $5=25$ which is parallel to the transcendental code value of Sutrani.
16. One may further have a pause here and take note that the creative boundary of 5 space is of 10 components, which permits reorganization as $10=4 \times 6$, and the same further permits the chase for double digit number of 5 place value along $6 \times 4$ matrix.format to be created by the creative boundary of transcendental domain.
17. One may have a pause here and permit the transcending mind to continuously remain in prolonged sitting of Trans and to glimpse the above features of the creative boundary of transcendental domain which while on the one hand provides a format for 10 place value system, the same on the other hand provides a format of organization of double digit number of 5 place value system.
18. It is this simultaneous availability of 10 place value system, as well as for double digit number of 5 place value system, which deserve to be comprehended well and to be appreciated thoroughly to have
proper in sight and enlightenment about the mathematical domain of Ganita Sutras.
19. One may further have a pause here and take note that the organization of Ganita Sutra takes us from domain fold ( 6 space) to dimension fold ( 4 space) , and thereby this sequential process ultimately leads to the flow of transcendental value ( 5 space value).
20. One may have a pause here and take note that 6 space plays the role of origin of 5 space while 4 space plays the role of boundary of 5 space. As well as the dimension of 6 space.
22 One may have a pause here and permit the transcending mind to glimpse all these features and to acquire in sight about the mathematical domain of Ganita Sutras.

Folder Name: 13, Teacher Sequence
File 12 Teaching Sequence 3 Step 2

## TEACHING SEQUENCE 3 STEP 2 TRILOKI AND TRIMURTI

1. The mathematical domain of Ganita Sutras expressible as values range $\quad(3,4,5,6,8)$ brings us face to face with the formulation " Iti Ganita", means the reach of Ganita/Mathematics.
2. The formulation brings us face to face with ( It of Gana ) as the end reach
3. The formulation "Gan " brings us face to face with the transcendental code value 11 with organization $3+1+7$, which is the expression of the values triple $(7,3,1)$ being parallel to the Divya Ganga flow through the first component ( Bindu Sarovar of Om formulation).
4. "It" means to remove .
5. As such " Gun" "It" would mean to remove the binding thread of Gun, which is parallel to values triple " $7,3,1$ ".
6. One may have a pause here and take note that one space in the role of dimension structures 3 space of 7 geometries range.
7. To remove this as binding structural thread would mean to reach at " Mathematics" of Ganita Sutras.
8. One may have a pause here and take note that scriptures enlighten us as that our Triloki ( 3 space existence phenomenon) is lively with in Jyoti.
9. One may have a pause here and take note that transcendental code value of formulation Jyoti is 18 which is parallel to four fold manifestation layer set up $(3,4,5,6)$ of summation value 18 of hyper cube 5 format with 3 space in the role of dimension, 4 space in the role of boundary, 5 space in the role of domain and 6 space in the role of origin.
10. One may further have a pause here and take note that values triple $(4,5,6)$ with summation value $4+5+6=15$ is parallel to transcendental code value of formulation Sutra and same is also parallel to the solid dimensional order frame of 5 space.
11. One may further have a pause here and take note that values triple ( $4,5,6$ ) is parallel to ( 4 space, 5 space, 6 space), which is parallel to the values of hyper cube 4 , hyper cube 5, hyper cube 6 which are the idols formats of Lord Brahma, Lord Shiv and Lord Vishnu, together designated as Trimurti.
12. With it the mathematical domain of Ganita Sutras comes to be the domain of creation of solid order, a creation of Triloki sustained by Trimurti.
13. This further brings us face to face with the Ganita/mathematics being of the features of Gun It/removal of the binding structural thread will bring us face to face with the mathematics of Ganita Sutras being the mathematics of unmanifesting the manifested creation along the transcendental format ( 5 space format/hyper cube 5 format) of our Solar Universe.
14. With it the students of Vedic Mathematics would be the students of Mathematics, Science and Technology of our Solar Universe.
15. One may have a pause here and take note that this shall be bringing us face to face with the roles of 6 space as origin fold as well as as dimension fold.
16. One may have a pause here and take note that the synthesis value of pair of self referral dimension ( 6 space in the role of dimension) is 8 which is parallel to the value of 8 space, of the formats and features of Ashtprakarti ( 8 fold nature)
17. One may further have a pause here and take note that $8=$ $2 \times 2 \times 2$
18. This way it would be a mathematics of 8 as a working unit.
19. One may have a pause here and take note that transcendental code value of formulation Ek is 8 .
20. Further as that the transcendental code value of formulation Iti ( the end reach) as well is 8 .
21. One shall sit comfortably and permit the transcending mind to glimpse the values of mathematical domain of Ganita Sutras as the value of $3,4,5,6$ and 8 spaces

Folder Name: 13, Teacher Sequence
File 13 Teaching Sequence 3 Step3

## TEACHING SEQUENCE 3 STEP 3 UPSUTRA 13

1. To glimpse the mathematical domain of Ganita Sutras, one is to begin with the formulation Ganita and to sequentially reach starting from Ganita Sutra 1 and to reach uptil Ganita Upsutra 13.
2. With it the reach would be from the formulation Gana to the formulation Guna.
3. The formulation Ganita brings us face to face with removal of the structural bonds of the Gana.
4. However, the formulation Guna brings us face to face with the features removal.
5. Ganita Sutra 13 is of a composite text of a pair of formulation "Samuchya Gunita and Gunita Samuchya".
6. Both the words formulations of this text are the composite formulations availing set ups of formulations Samuchya and Gunita.,
7. However, one may have a pause here and take note that both the formulations of the text of Ganita Upsutra 13 avail the same set of pair of formulations but in opposite orientation setting, as much as that the first setting is as of Samuchya and Gunita and second setting is of Gunita and Samuchya.
8. It is like setting of features of Di-monades say of black and white colour set up and of vital black colour set up .
9. To have proper comprehension and appreciation of the constituent formulations namely Samuchya and Gunita, these deserve to be firstly chased separately and thereafter to be chased simultaneously, in settings of both orientations.
10. The formulation Samuchya is of sub formulations namely Sum, which means equal, and Uchaya which means as of choosen height reach.
11. One may have a pause here and take note that it would mean that there is going to be a compilation of choosen features of equal heights .
12. The formulation Gunita leads to "Removal of features".
13. As such the formulation Gunita Samuchaya would mean that the removed features are to be recompiled as per of choosen features of equal heights ( measure/values) .
14. The opposite orientation formulation "Samuchaya Gunita" will lead us to the compiled equal heights features set up to be made a set of removed features set up.
15. One may have a pause here and take note that the composite text of Ganita Sutra as such shall be taking us a long way of a start with a set up of choosen equal values being removed of the features and then at the next step the process is reversed to have a reach back at the start with position.
16. One may have a pause here and permit the transcending mind to glimpse all these features reach uptil Ganita Sutra 13 and to have proper in sight and enlightenment about the mathematical domain of Ganita Sutras.
17. It shall be bringing us face to face with the whole process of manifestation and demanifestation processes range of our solar universe.
18. One may have a pause here and take note that, with it, the students of Vedic Mathematics shall be acquiring insight of the Vedic Mathematics, Science and Technology of existence phenomenon of our Solar Universe with in frames and without frames.
19. It would be a blissful exercise to sit comfortably and visit and revisit the existence phenomenon with in human frames.
20. It would further be a very blissful exercise to glimpse the existence phenomenon beyond human frame.
21. This shall be bringing us face to face with the existence format of Ashtprakarti, eight fold nature.

Folder Name: 13, Teacher Sequence File 14 Teaching Sequence 3 Step4

## TEACHING SEQUENCE 3 STEP 4 ASCENDING AND DECENDING ORDER

1. The formulations "Arohi Kram and Avrohi Kram" are of the pair of orientations formats .
2. Arohi Kram (Ascending order) is inherently reflected in the quadruple numbers set up ( $3,4,5,6$ ).
3. The quadruple numbers $(3,4,5,6)$ are of ascending arrangements of reach from 3 to 4,4 to 5 and 5 to 6 .
4. One may have a pause here and take note that the quadruple values ( $3,4,5,6$ ) are parallel to values of four fold manifestation layer ( $3,4,5,6$ ) of hyper cube 5 with self referral ( 6 space origin).
5. The origin being the fourth fold, as such, it shall be of order of one degree higher than that of the dimensional order domain of the concerned hyper cube.
6. With it the ascending order in progress shall be taking us additional value attainment equal to the value of the origin fold namely " 6 ".
7. With it this reach of the ascending order shall be taking us to the total value $(3+4+5+6),(6)=24$.
8. One may have a pause here and take note that the transcendental code value of formulation Arohi is 24.
9. One may have a pause here and take note that value 24 permits reorganization as $24=4 \times 6$ which shall be leading us to the formate of $4 \times 6 \mathrm{grid} /$ matrix whose diagonal would be of affine value 5 .
10. One may have a pause here and take note that the transcendental code value of formulation Avrohi is 3.
11. Further as that $32=2^{5}$.
12. Further as that the decending sequence starting with value 32 and having a jump over value 7 as jump value $2 \times 7=14$ shall be attaining value $32-14=18$ which is equal to the value $3+4+5+6$ itself.
13. One may further have a pause here and take note that the total arrangements of summation values as 6 for the choices from the numbers values range ( $1,2,3,4,5,6$ ), comes to be 32.
14. One may have a pause here and permit the transcending mind to glimpse these features of the mathematical domain of Ganita Sutras availing numbers values ( $3,4,5,6$ ) and (8) as a reach of Arohi ( ascending) and Avrohi decending) reach from ( $3,4,5,6$ ) and ( 8) in its both orientations.
15. One may further have a pause here and take note that the formulation "Indra Dhanush" brings us face to face with transcendental code values 18 and 26 respectively for the pair of formulations Indra and Dhanush.
16. It would be blissful to glimpse further the transcendental code values of the formulation ( Prana Vayu) as a composition of pair of formulations namely Prana and Vayu of respective transcendental code value 16 and 13 parallel to the range of 16 Ganita Sutras and 13 Ganita Upsutras.
17. One may have a pause here and permit the transcending mind to glimpse these features of the organization of the text of Ganita Sutras and Upsutras and the emerging mathematical domain permitting chase along the number values range ( $3,4,5,6,8$ ).
18. One may further have a pause here and take note that
i) $3+4+5+6=18$
ii) $3+4+5+6+8=26$
iii) $(6,6)=8$ along the format $(\mathrm{N}, \mathrm{N})=\mathrm{N}+2$ rule of dimensional synthesis of a pair of dimensions of equal order.
iv) $(3,4,5,6)$ and $(3,4,5,6)$ leads to $(5,6,7,8)$ with summation value $5+6+7+8=26$.
19. One may have a pause here and take note that the number value $8=2+2+2+2$, as Ashtaprakarti is of the features of transforming each of the four fold of the manifestation layer into their respective domain with addition of value 2 as illustrated in the above case the emerging value being $3+2$, $4+2,5+2$ and $6+2$.
20. One may have a pause here and take note that transcendental code value of formulation " Iti" is 8 .
21. Further as that the transcendental code value of formulation Ank as well is 8 .
22. Still further the transcendental code value of formulation Chit as well is 8 .
23. This way, one can glimpse the features of the formulations of transcendental code value 8 and of its pure and applied values along the format of eightfold nature.
24. It also would be a blissful exercise to comprehend and appreciate the 8 components organization for interval, square, cube, hyper cube 4 , hyper cube 5 , hyper cube 6 , hyper cube 7 , hyper cube 8 , hyper cube 9 and so on by chasing the parallel values formats $(1,8),(2,8),(3,8),(4,8)$, $(5,8), 6,8),(7,8),(8,8),(8,9),(8,10),(8,11),(8,12),(8,13)$, $(8,14),(8,15)$

Folder Name: 13, Teacher Sequence
File 15 Teaching Sequence 3 Step 5

## TEACHING SEQUENCE 3 STEP 5 NUMBER VALUE 26

1. Number value 26 is of very rich structural format .
2. $26=2 \times 13$, which brings us face to face with the spatial format for the thirteenth edge of 12 edged cube with in 4 space.
3. The biggest prime of the range of numbers 26 is 23 and it is followed by 3 composite numbers namely $24,25 \& 26$.
4. One may have a pause here and take note that the biggest prime uptil numbers value 1 to 10 is 7 which is followed by 3 composite numbers namely $8,9,10$.
5. The primes of numbers range 1 to 10 is of 4 prime range namely ( $2,3,5,7$ ).
6. The primes range of primes uptil 1 to 26 is of 9 primes namely ( $2,3,5,7,11,13,17,19,23$ ).
7. One may have a pause here and take note that numbers value 4 and 9 are the consecutive square namely $2^{2}$ and $3^{2}$.
8. Further as that $9=2 \times 4+1=4+5$, which is parallel to the organization of 9 geometries range of 4 space and same is further parallel to the organization range of 9 versions of hyper cube 4.
9. The summation value of values range 1 to 26 is $13 \times 27=$ 351.
10. One may have a pause here and take note that the number value 351 a triple digits number avails digits triple ( $1,3,5$ ) which is parallel to the transcendence triple of the format of 1 space as dimension of 3 space and 3 space being the dimension of 5 space.
11. Still further One may have a pause here and take note that the organization format of number value $13 \times 27$ is parallel to the organization of coordination of $13^{\text {th }}$ edge of cube with
in 4 space with the transcendental origin of solid dimensional order splitting it into a pair of half dimensions, of which only one half of the solid dimension is expressing itself with in 4 space.
12. Further it would be a blissful exercise to chase numbers range 1 to 26 in terms of the factors of numbers 1 to 26 , which shall be constituting a sequence of factors being ( 1,1,1, 2,1,2,1,3,2,2,1,3,1,2,2,4,1,3,1,3,2,2,1,4,2,2).
13. It would be a blissful exercise to chase this factors sequence range of summation value 50 which is parallel to the organization of 50 letters of Devnagri alphabets namely 9 vowels, 25 Verga consonants, 4 Antsatha letters, 4 Ushmana letters and 8 Yama letters.
14. It also would be a blissful exercise to take note that the biggest factor is the value 23 , which occurs only once.
15. Like that the factor of values 19 and 17 as well occur only once.
16. The factor value 13 occurs twice.
17. Likewise the factor value 11 as well occurs only twice.
18. However, the factor value 7 occurs thrice.
19. The factor value 5 occurs six times.
20. The factor value 3 occurs 12 times.
21. The factor value 2 is of the biggest occurrence frequency of 23 times.
22. The number value 1 is a class in itself and is marking its presence only once, and also as 26 times as one is the inherent factor of all the numbers.
23. One may have a pause here and take note that number of arrangements of summation value 26 of the choices of the values from the range 1 to 26 is $2^{25}$
24. It would be blissful to take note the value $2^{25}$ sequentially takes us to values range ( $2,4,8,16,32,64,128,256,512,1024$, 2048, 4096, 8192, ---)
25. It would be blissful to take note that the value $2^{25}$ is of very big value, in terms of which there are potentialities to chase the Solar Universe itself.
