

List of VM Consolidated documents of Dr. S. K. Kapoor

List 1 Different aspects of Vedic Mathematics

Aspect 13 Artifices Pair

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(Supplied by Ganita Sutra-1)
 7. First Letter : Sixth vowel
 8. Second Letter : First Consonant
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Aspect 13 Artifices Pair

Step – 01 Artifices Pair (16, 13)

1. To reach at the organization format of Ganita Sutras and Upsutras, the first step may be to chase features of artifices pair (16, 13) as there are 16 Sutras and 13 Upsutras.
2. Factors of numbers range '1 to 16' is '29' which is the summation value of the artifices pair (16, 13), as much as that $29 = 16 + 13$.
3. As numbers range 1 to 16 leads to 29 factors, this as such brings to focus a specific features as to interlinking of artifices pair (16, 13).
4. Here it also would be relevant to note that 13 is the biggest prime uptill 16.
5. Further it also would be relevant to note that the factors contribution of numbers range 1 to 16 is '29' and factors contribution of numbers range 1 to 13 is 21 and there combined summation value is $29 + 21 = 50$ which is equal to the factors contribution of numbers range 1 to 26.
6. Here it would be also relevant to note that the letters range of Devnagri alphabet is of 9 vowels, 33 consonants and 8 yama letters making the alphabet as to be of 50 letters range.
7. Further it also would be also relevant to note that the artifices pair (16, 13) admits re-organization as $(5+6+5)$, $(4+5+4)$ parallel to the setup of hyper cube 5 accepting 6-space as origin fold and its boundary hyper cube 4 accepting 5-space as origin fold thereof.
8. Artifices 29 is of very wide potentialities availed by different Vedic scriptures. Chapter – 5 of Shrimad Bhagwad Geeta is of 29 versus range likewise chapter – 13 of Shrimad Durga Saptasati as well is of 29 versus range including of uvachas of the chapter. Both Shrimad Bhagwad Geeta and Shrimad Durga Saptasati are scriptures of 700 versus each.
9. Samved Samhita is a scripture of 29 Archiks. Lord Krishana, the incarnation of Lord Vishnu, in his His Divine song 'Shrimad Bhagwad Geeta' enlightens that amongst Vedas, He 'Lord Krishna' is Samaveda.
10. The first letter of the text of Ganita Sutras is the sixth vowel parallel to which is the format and features of 6-

space / hyper cube 6 / artifice 6 / Sun / Pursha / Lord Vishnu.

11. Let us organize numbers 01 to 99 along the 9 x 9 matrix format as under

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	99

9 x 11 matrix format

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	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

12. This 9 x 11 format shall be splitting into upper part and lower part set up as under:

Upper part of 9 x 11 matrix format

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
								90

Lower part of 9 x 11 matrix format

19								
28	29							
37	38	39						
46	47	48	49					
55	56	57	58	59				

13. The above upper part of 9 x 11 matrix is the set up of 29 reflection pairs of numbers as follows

Column number 1

- i. (01, 10)

Column number 2

- ii. (02, 20, iii. 11, 11),

Column number 3

- iv. (03, 30, v. 12, 21),

Column number 4

- vi. (04, 40, vii. 13, 31, viii. 22, 22),

Column number 5

- ix. (05, 50), x. 14, 41, xi. 23, 32),

Column number 6

- xii. (06, 60) xiii. 15, 51),

- xiv. 24, 42 xv. (33, 33)

Column number 7

- xvi. (07, 70, xvii. 16, 61

- xviii. 25, 52 xix. 34, 43,

Column number 8

- xx (08, 80) xxi. 17, 71

- xxii. 26, 62 xxiii. 35, 53,

- xxiv. 44, 44

Column number 9

- xxv. (09, 90, xxvi. 18, 81

- xxvii. 27, 72 xxviii. 36, 63

- xxix. 45, 54,

14. The column wise appearance of above 29 reflection pairs comes to be as 1, 2, 2, 3, 3, 4, 4, 5, 5.

15. The reflection pair of column no. 1, being the single pair as such it may be expressed as 2^0 .

16. As such the arrangement for the reflection pairs of above 9 columns may be accepted as of two parts, first being

- 2^0 , 2, 2, 4, 4 and the second part being 3, 3, 5, 5.
17. It would be blissful to note that this split is of summation values $1+2+2+4+4=13$ and $3+3+5+5=16$.
18. One shall sit comfortably and permit the transcending mind to think, meditate, transcend, glimpse and be blissfully face to face with above emerging with the virtues, values and features of artifices pair (16, 13) and in terms thereof to comprehend and to imbibe the virtues, values and features of the organization format of Ganita Sutras and Ganita Upsutras.



Step – 02 :
(16, 16-3), (16, 16-3-3)

1. Step 01: (16, 13, pair of artifices) is parallel to the organization feature of text of Ganita Sutras and Upsutras being of range of 16 Sutras and 13 Upsutras.
2. The artifices pair (16, 13) admits reorganization as (16, 16-3).
3. This as first step (16, 16-3), shall be taking us ahead to the pair of artifices (16, 16-3-3).
4. The artifices pair (16, 16-3-3) is reorganization step of pair of artifices (16, 10).
5. The artifices pair (16, 10) is parallel to the text feature of Ganita Sutra-1 and Ganita Upsutra-1, as much as that the text of Ganita Sutra-1 avails 16 letters while text of Ganita Upsutra-1 avails ten letters.
6. The pair of steps (16, 16-3) and (16, 16-3-3) would help us work out sequential steps (16, 16-3), (16, 16-3-3), (16, 16-3-3-3) and so on.
7. This sequential feature shall be taking us to a sequential range of steps (16-13), (16-10), (16-7, 16-4, 16-1).
8. This six steps long sequential range for the artifice 16 would lead us to many features of the organization.
9. Amongst others features, one of the focus point would be upon six steps range (16, 13, 10, 7, 4, 1).
10. This range of values of 6 steps would help us have an insight of their structural format. This structural format feature is of characteristics value of dimensional synthesis mathematics.
11. One way to chase this structural feature would be to be of following steps.
 - i. (-1) space accepts (-3) space as its dimension.
 - ii. (-1) space itself plays the role of dimension of 1 space.
 - iii. The artifices triple (1, -1, -3) is parallel to 1 space as domain, -1 space as dimension and -3 space as dimension of dimension.
 - iv. Synthesis value of pair of dimensions (-1, -1) comes to be equal to the value of first dimension plus of second dimension minus value of dimension of dimension that is $(-1) + (-1) - (-3) = 1$.
 - v. The synthesis value of triple dimensions (-1, -1, -1) come to be equal to the synthesis value of first pair of dimensions plus value of third dimension minus double the value of dimension of dimension that is $1-1-2(-3)=6$.

12. One may have a pause here and permit the transcending mind to have a fresh look at the above sequential steps range (16, 13, 10, 7, 4, 1).
13. It would be blissful to comprehend that here the working rule of Ganita Sutra-1 (one more than before) together with the working rule of Ganita Upsutra-1 'proportionately / rule of symmetry' are simultaneously at work and at every step '-3' as '1' is being applied.
14. Further it also would be blissful to comprehend that in case of synthesis of dimensions of order of '-1' space, the synthesis glue would be supplied by '-3' space as dimension of dimension and that this dimensional synthesis glue unit value '-3' would be supplied as single, double, triple and further sequential number of units values.
15. One may further have a pause here and permit the transcending mind to comprehend simultaneous existence of +1 space and -1 space as pair of orientations of a line.
16. Here it also would be relevant to note that + 1 space plays the role of dimension of 3 space. As such the dimensional synthesis values for linear dimensional order would be of following steps.
 - i. The dimensional value of single dimension is equal to 1.
 - ii. Synthesis value of pair of dimensions is equal to $1 + 1 - (-1) = 3$.
 - iii. The synthesis value of three dimensions is equal to $3 + 1 - 2(-1) = 6$.
17. Let us have a pause here and have a fresh look at the artifices triple (1, 3, 6).
18. In reverse orientation it would be (6, 3, 1).
19. This triple (6, 3, 1) permit re-organization as (3+2+1), (2+1, 1).
20. This triple (1, 3, 6) would help work out the sequence of values of sum of the natural numbers in sequential order being (1, 1+2, 1+2+3, 1+2+3+4), --).
21. One may again have a pause here and take note that the triple (6, 3, 1) provides a format for the last three letters of the text of Ganita Uputra-1.
22. Further applications of the above features of artifices pair (16, 10), which are abundantly many, would be worked out afterwards.
23. However, here, feature of one of the re-organization steps for the artifices pair (16, 10) which would be prominently availed is being focused.
24. The artifices pair (16, 10), permit re-organization as (10+6), 10.
25. The artifices 10 and 6 further permit re-organization in terms of quadruple of artifices as $10 = 1+2+3+4$ and $6 = 0+1+2+3$.
26. The artifice $16 = 10+6 = (1+2+3+4) + (0+1+2+3)$ shall be permitting quarter wise chase as follows
 - i. $10 = 1 + 2 + 3+4$, a set up of 4 quarters of quadruple artifices values (1, 2, 3, 4)
 - ii. Likewise artifice 6 shall be permitting quarter wise chase in terms of artifices quadruple (0, 1, 2, 3).
 - iii. The pair of artifices (10, 6) shall be permitting quarter wise synthesis as of quadruple value (0+1), (1+2), (2+3), (3+4).

- iv. The synthesis values quadruple (1, 3, 5, 7) shall be leading us to a large number of features values. ■
 - v. The first three quarters triple (1, 3, 5) is of summation value $1 + 3 + 5 = 9$, while the fourth quarter is of value 7.
 - vi. Here it would be relevant to note that the text of Ganita Sutra-1 which is of 16 letters range split itself into a pair of sub ranges parallel to the ranges of letters availed by first word composition and second word composition of the text of Ganita Sutra-1.
27. Further the artifices pair (16, 10) permits re-organization as $(5+6+5)$, $(3+4+3)$.
 28. One may have a pause here and have a fresh look at the above re-organization for 16 as $5+6+5$ and for 10 as $3+4+3$.
 29. Here it would be relevant to note that 3-space plays the role of dimension of 5-space and 4-space plays the role of dimension of 6-space.
 30. It would further be blissful to take note that 6-space plays the role of origin fold of 5-space while 4-space plays the role of origin fold of 3-space.
 31. Still further it would be very blissful to take note that a three dimensional frame permits a split into a pair of three dimensional frames of half dimensions of half dimensions within spatial order 4-space.
 32. One may have a pause here and permit the transcending mind to have a comprehensive view of above features which may help comprehend that why cube does not permit duplication but a three dimensional frame does permit a split into a pair of three dimensional frame of half dimensions.

Step – 03 :
Quadruple (29, 28, 27, 26)

1. Step 01: (16, 13, pair of artifices) is parallel to the organization feature of text of Ganita Sutras and Upsutras being of range of 16 Sutras and 13 Upsutras respectively.
2. Step 02: [(16, 13), (16, 10)], a pair of pairs of artifices, are the pair of sequential steps.
3. The first sequential step is the pair (16, 13) with summation value $(16+13 = 29)$.
4. The second sequential step is the pair (16, 10) with summation value $(16+10 = 26)$.
5. This pair of values 29 and 26, as such are the end values of the quadruple of artifices (29, 28, 27, 26).
Here it may be relevant to note that this pair of values 16 and 10 are parallel to the values of ranges of number of letters being availed by the texts of Ganita Sutra-1 and Ganita Upsutra-1 respectively.
6. One feature of this quadruple is that its outer and inner pairs are of equal summation value, i.e. $55 = 29 + 26 = 28 + 27$.
7. Such quadruples of four consecutive whole numbers $[(n+3), (n+2), (n+1), n]$ for all whole numbers values of n are designated as manifestation layers

- quadruples or simply manifestation values quadruples and in short quadruples when otherwise the context is obvious.
8. First six quadruples of values $n=1$ to 6 are (1, 2, 3, 4), (2, 3, 4, 5), (3, 4, 5, 6), (4, 5, 6, 7), (5, 6, 7, 8), with quadruples artifices summation values 10, 14, 18, 22, 26 and 30 are of basic interest as geometric set up of cube is of 30 components namely 8 corner points, 12 edges, 6 surfaces, 1 volume and 3 dimensions.
 9. Vedic systems accept two fold established processing processes namely Sankhiya Nishtha and Yoga Nishtha.
 10. Sankhiya Nishtha, on its ultimate analysis avails artifices of numbers presuming the existence of geometric formats while Yoga Nishtha ultimately avails geometric formats of dimensional set ups presuming the existence of artifices of numbers.
 11. For the present, it be taken as definition as that artifices of numbers and dimensional spaces set ups features run parallel to each other.
 12. With it artifices of n and n space would run parallel to each other.
 13. The quadruple ($n+3$, $n+2$, $n+1$, n) and quadruple of dimensional spaces ($n+3$) space, ($n+2$) space, ($n+1$) space, (n) space, would interchangeably run parallel to each other for features of their set ups.
 14. Further, for the present it also be taken by way of definition as that quadruple of artifices and parallel quadruple of dimensional spaces are four folds manifesting together.
 15. The artifice ($n+3$) and parallel ($n+3$) space to be designated as origin fold.
 16. The artifice ($n+2$) and parallel ($n+2$) space to be designated as domain fold.
 17. The artifice ($n+1$) and parallel ($n+1$) space to be designated as boundary fold.
 18. The artifice (n) and parallel (n) space to be designated as dimension fold.
 19. Illustratively for $n = 3$, 3-space shall be playing the role of dimension fold, 4-space shall be playing the role of boundary fold, 5-space shall be playing the role of domain fold and 6-space shall be playing the role of origin fold.
 20. For $n = 1$, the quadruple (1, 2, 3, 4) / (1-space, 2-space, 3-space, 4-space) with 1-space as dimension fold, 2-space as boundary fold, 3-space as domain fold and 4-space as origin fold shall be manifesting together as 'cube', the representative regular body of 3-space.
 21. In the context, for the present, it also be taken by way of definition as that 'cube' is hyper cube 3 and it is a four-fold manifestation layer of linear dimensional order, spatial boundary, solid domain and hyper solid – 4 origin.
- Here it would be relevant to mention that domain fold of hyper cube 3 manifests the features of 3-space content.
22. In general n space content manifests domain fold of hyper cube – n .
 23. One may have a pause and permit the transcending mind to have a fresh look at the features of sequence of hyper cubes (hyper cube 1, hyper cube 2, hyper cube 3, ----).
 24. Hyper cube n would be the representative regular body of n space as

- n space content shall be manifesting as domain fold of hyper cube n.
25. Here hyper cube 1 would be of the features of the set up of 'interval', our well known geometric body of 1-space.
 26. Hyper cube 2 would be of the features of the set up of 'square', our well known geometric body of 2-space.
 27. Hyper cube 3 would be of the features of the set up of 'cube', our well known geometric body of 3-space.
 28. Hyper cube 4 would be of the features of the set up of representative regular body of 4-space.
 29. Hyper cube 5 and 6 shall be the representative regular bodies of 5-space and 6-space respectively.
 30. The manifestation layer 28 / hyper cube 28 accepts 26 space in role of dimension.
 31. Here it would be relevant to note that artifice 26 admits re-organization as $5 + 6 + 7 + 8$.
 32. This re-organization of $26 = 5 + 6 + 7 + 8$ would lead to quadruple (5, 6, 7, 8) / hyper cube 7.
 33. One may have a pause here and permit the transcending mind to be face to face with the features of the set ups where each of the four folds of the manifestation layer is of the feature of the manifestation layer itself.
 34. It shall be leading to 4 x 4 matrix format.

n-2	n-1	n	n+1
n-1	n	n+1	n+2
n	n+1	n+2	n+3
n+1	n+2	n+3	n+4
 35. It would be relevant to note that each row and each column of above format is of the features of manifestation layer quadruple.
 36. As such it would amount to having transition and transformation from linear format of a manifestation layer quadruple (n-2, n-1, n, n+1) into a spatial set up of the format of 4 x 4 grid.
 37. In particular, n = 28 shall be leading us to the following set up

26	27	28	29
27	28	29	30
28	29	30	31
29	30	31	32

One may have a pause here and permit the transcending mind to be face to face of the feature of this set up which accepts a pair of roles for the manifestation layer (26, 27, 28, 29) for the pair of axes of spatial order format.
 38. It would be relevant to note that this transition and transformation is from a set up of a single axis to a set up of a pair of axes.
 39. It would amount to a shift from a line to a plane.
 40. It would a shift from a line to a bended line permissible within plane.
 41. It also would amount to a shift from a linear unit to a pair of linear units.
 42. It also would be a shift from an interval of a single unit to the synthetics set up of an interval of a pair of units.
 43. That way, it would amount to a shift from 1 as 1 to 2 as 1.
 44. The reverse orientation chase would amount to a shift from 2 as 1 to 1 as 1.
 45. In a way it shall be bringing into play '1/2 unit'.
 46. This, this way shall be providing a shift from artifice 3 / 3 dimensional frame to a pair of three dimensional frame of half dimensions.

47. It in a way shall be providing a transition and transformation from artifice 3 to artifice 3/2.
48. With it, parallel to the sequential steps (16, 16-3), (16, 16-3-3) would follow the sequential steps (16, 16-3/2), (16, 16-3-3/2).
49. The shift from artifice 3 to artifice 3/2 shall be bringing into play features which would help workout the split for continuity into a set of discrete.
50. The organization of $16 = 4 + 4 + 4 + 4 = (4 - 3/2) + (4 - 1/2) + (4 + 1/2) + (4 + 3/2)$ would lead to re-organization of the quadruple (4, 4, 4, 4) into quadruple (4 - 3/2, 4 - 1/2, 4 + 1/2, 4 + 3/2).
51. One may have a pause here and permit the transcending mind to chase the features of above transition and transformation of the quadruple (4, 4, 4, 4) into quadruple (4 - 3/2, 4 - 1/2, 4 + 1/2, 4 + 3/2) as a transition and transformation from the split of domain as of four quarters into a manifestation layer of four folds (4 - 3/2, 4 - 1/2, 4 + 1/2, 4 + 3/2).
52. With this feature of the system chasing domain as a manifestation layer is one of the basic features of the organization format of Ganita Sutras.
53. Ganita Sutras being the complete Vedic scripture, it inherently avails sole syllable Om as source reservoir and inherently acquires the processing feature of manifestation layer format for dimensional domains.
54. Ganita Sutras inherently acquire above feature of chase of domain as manifestation layer of hyper cube format. ■

Step – 04 : **Source formulation**

1. Sole syllable Om is the source formulation of Vedic systems and as such it is available for Ganita Sutras as well.
2. Om (as formulation) is of four components.
3. Vedic system approach organization of knowledge being parallel to the knowledge itself.
4. This way, knowledge and organization of knowledge run parallel to each other.
5. It would help comprehend as that the settlement of the form of Om formulation as (ॐ) is precisely mathematical, and to be specific as of geometric format.
6. The quadruple of components of Om formulation are designated and are known as
 - i. Bindu Sarovar (point reservoir)
 - ii. Ardh matra (half measure) / unit
 - iii. Tripundam (Tri monad splitting as a pair of monads)
 - iv. Swastik Pada (quarter of swastik / spatial dimension of 4-space).
7. Firstly, four quarters range are sole syllable Om accepts quarter of artifices (1, 2, 3, 4).
8. Further it accepts another quadruple of artifices (9, 7, 3, 1). It is parallel to

- transcendental flow (in transcending and ascending order from both ends) to fulfill the transcendental middle.
9. Here it would be relevant to note that the pair of artifices (9, 7) coordinate 9 – space as domain fold and 7 - space as dimension fold.
 10. Further the artifices pair (1, 3) coordinate 1-space as dimension fold and 3-space as domain fold.
 11. This two way flow fulfills the transcendental middle / 5-space / artifice 5 value at the middle.
 12. The processing from the fourth quarter (Swastik pada) / quarter of the square (as first step processing along the diagonal), as such shall be of the values set up 4×1 .
 13. This shall be providing ascendance flow to $4 \times 1 \frac{1}{2} = 6$.
 14. Ahead $6 \times 1 \frac{1}{2} = 9$ shall be taking us back to Bindu Sarovar (first component).
 15. The quadruple (9, 7, 3, 1) is accepted as a Divya Ganga flow, a designation which may be taken as, as per the definition for two fold flow from either side into the middle.
 16. First component, namely Bindu Sarovar being a structured point and a source reservoir, the same, naturally shall be the source of whole range of structures with it applied values as a point of a line, point of a surface, point of a solid and a point of a hyper solid domain of any order.
 17. The second component namely ‘Ardh Matra’ / half unit is a very valuable working unit, as much as that 4-space is of spatial dimensional order (2-space in the role of dimension and to work out 2 as 1 would require 1 as $\frac{1}{2}$ to be worked with.
 18. Third component namely Tripundum / Trimonad splitting as a pair of monads is a very valuable applied value of dimensional synthesis mathematics as that a pair of linear dimensions synthesis 3-space set up.
 19. Fourth component namely Swastik Pada is applied value of attaining quarter of a square, as of its own, with the availability of 3 quarters of a square.
 20. In a way, the emerging feature is that with the help of only 3 quarters of a square, the fourth can be attained inherently manifesting itself with synthesis of available three quarters of a square.
 21. One applied value of this feature being that when three quarters of a square / spatial order stand worked out, the fourth quarter as well would get worked out of its own.
 22. This feature would further bring to focus as that the fourth quarter of a square / spatial order may remain unmanifest and same can be manifested with the manifesting of another three quarters of a square.
 23. The split of a tri-monad into a pair of monads and manifesting of fourth quarter of a square with manifesting of other three quarter of a square, are the sequential steps of structural organization mathematics.
 24. Working with a structured point with $\frac{1}{2}$ unit and the split of tri-monad into a pair of monads and manifesting of whole square in terms of its three quarters are the features which deserves to be

- comprehended and to be imbibed to reach at the organization format of Ganita Sutras with sole syllable Om as being its source formulations.
25. The Divya Ganga flow along quadruple of artifices (9, 7, 3, 1) with summation value $(9+7+3+1) = 20 = 10 + 10 = (1 + 2 + 3 + 4) + (1 + 2 + 3 + 4) =$ a pair of quadruples / manifestation layers / pair of hyper cubes 3 is the structural flow phenomenon which deserves to be comprehended well and to be imbibed fully to reach at pure and applied values of the systems of Ganita Sutras.
 26. The feature of Om formulation as that it within its fourth quarter as a quarter of four dimensional frame of 4-space, accepting diagonal as a processing line and parallel to it having $1 \frac{1}{2} = \frac{3}{2}$ as a working unit is the feature which as well deserves to be fully comprehended and to be imbibed well to have an insight of the working with and within spatial order (2-space in the role of dimension of 4-space).
 27. The sequential steps $(4 \times \frac{3}{2})$, $(4 \times \frac{3}{2} \times \frac{3}{2})$ of working with $\frac{3}{2}$ as a unit along diagonal as a processing line of spatial dimensional order of 4-space, as well deserve to be fully comprehended and to be completed imbibed to have an insight about 4-space being accepted by Vedic systems as a creator's space.
 28. Vedic processing systems with sole syllable Om as source reservoir and as a starting point takes up till 'Parnava' and the same as such, for the present, by way of definition, be taken as the end processing fruit value of Ganita Sutras.
 29. Ganita Sutras organization format is ultimately the manifested expression of sole syllable Om whose pure values enlightenment is of the order of 'Om Iti Ek Akshar Braham' / 'end reach of sole syllable Om is BRAHAM', the self sustaining and self unfolding ULTIMATE.
 30. The steps 5 onwards of this course, which aim to chase features of organization format of (Ganita Sutras and Upsutras) are to exploit the sequence and order of the text, which would mean to follow the text Sutra wise and each Sutra as per the sequence and order of letters availed by the text of each Sutra / Upsutra.
 31. The original text being in Devnagri script (Sanskrit), well acquaintance with the script form of alphabet letters, as such would be of great help in these chase steps.
 32. The acquaintance with script form of alphabet letters of the text would go a long way to appreciate many features of the system as these forms are precisely of geometric formats and parallel to it are the artifices of numbers, which infact are nothing but the dimensional frames of the numbers being values of dimensional domains.
 33. However, at the initial stages the acquaintance with the individual letters script is not going to be a pre – requisite as every attempt is being made to approach them in terms of their parallel artifices and dimensional values. ■

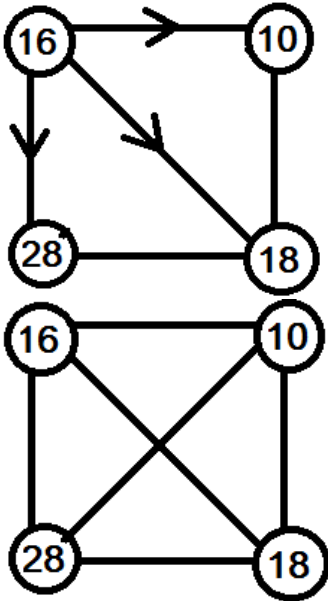
Step – 05
Introductory :
Sequential chase features
(Supplied by Ganita Sutra-1)

1. The sequential chase features of organization format of the Text of Ganita Sutras is to begin with Text of Ganita Sutra-1 and that too as per the sequential order of its working rule ‘one more than before’ as supplemented by the rule: ‘proportionally’ / ‘symmetry’ of Ganita Upsutra-1.
2. Immediate features of sequential order of one more than before as supplemented by the rule: ‘proportionally’ / ‘symmetry’, shall be the basic applied values rule of ‘counting’ (1, 2, 3, ---), ‘reverse counting’ (--- 3, 2, 1), ‘counting with one jump’ (1, 3, 5, ----) / (0, 2, 4, ---), ‘reverse counting with one jump’ (---, 5, 3, 1) / (--- 4, 2, 0), ‘counting with double jump’ (1, 4, 7, ---) / (0, 3, 6, 9, ---) and ahead counting and reverse counting with multiple jumps.
3. Counting and reverse counting with and without jumps features of sequential ordering have great promise of applied values applications, well known illustrative demonstration of which are:
 - i. A^0, A^1, A^2, \dots
 - ii. ----- $A^{-3}, A^{-2}, A^{-1},$
 - iii. 1, 1 x 1, 1 x 1 x 1, -----
 - iv. 1/1, 1/2, 1/3, -----
 - v. 1 x 1, 2 x 2, 3 x 3, -----
 - vi. 1 x 2, 1 x 2 x 3, 1 x 2 x 3 x 4, -----
 - vii. First, Second, Third, -----
 - viii. Firstly, Secondly, Thirdly, -----
 - ix. Single, Double, Triple, -----
 - x. Triangle, Square, Pentagon, -----
 - xi. Line, Square, Cube, -----
 - xii. Hyper cube-1, Hyper cube-2, Hyper cube-3,-----
 - xiii. Circle, Sphere, Hyper Sphere 4, -----
 - xiv. First degree equation, Second degree equation, third degree equation, -----
 - xv. Single variable, double variables, triple variables, -----
 - xvi. Domain, Dimension, Dimension of Dimension, ----
 - xvii. Dimension fold, Boundary fold, Domain fold, -----
 - xviii. 1 x 2, 2 x 2, 3 x 2, -----
 - xix. 1 x 3, 2 x 3, 3 x 3, -----
 - xx. One dimension frame of 1-space, Two dimensions frame of 2-space, Three dimensions frame of 3-space, -----
 - xxi. (1, 1) = 1+2, (2, 2) = 2 + 2, (3, 3) = 3+2, ---
 - xxii. (1, 3, 5), (2, 4, 6), (3, 5, 7), -----
 - xxiii. 1, 1 x 3, 1x 3 x 5, ---
 - xxiv. 2, 2 x 4, 2 x 4 x 6, ----
4. One may have a pause here and permit the transcending mind to chase the sequential order of above features which would help reach from the Ganita Sutra-1 to the other organization steps of Ganita Sutras and Ganita Upsutras in following different ways.

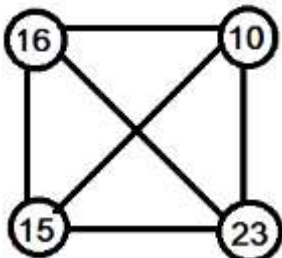
Sr.	First Step	Second Step	Letters
1	Ganita Sutra-1	Ganita Sutra-1	16
2	Ganita Sutra-1	Ganita Upsutra-1	10
3	Ganita Sutra-1	Ganita Sutra-2	28
4	Ganita	Ganita	18

	Sutra-1	Upsutra-2	
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5. This three fold approach may be depicted parallel to coordination of the corner points of a square



- 6. The Summation value of quadruple (16, 10, 28, 18) is $16 + 10 + 28 + 18 = 72$.
- 7. The three fold pair of steps of summation values triple (26, 44, 34) i.e. $16 + 10 = 26$, $16 + 28 = 44$ and $16 + 18 = 34$, together with the quadruple value 72 would lead to many features of the organization format.
- 8. Further chase steps (i) Sutra 1 to Upsutra 1 (ii) Sutra 1 to Sutra 3 (iii) Sutra 1 to Upsutra 3 as well shall be providing us many further features of the organization format:



- 9. The Summation value of quadruple (16, 10, 15, 23) is $16 + 10 + 15 + 23 = 64$.
- 10. The three fold pair of steps of summation values triple (26, 31, 39) i.e. $16 + 10 = 26$, $16 + 15 = 31$ and $16 + 23 = 39$, together with the quadruple value 64 would lead to many features of the organization format.
- 11. Here it may be relevant to note that Vedic systems accept 26 meters parallel to 26 elements of Vishnu lok (6-space). This provides mathematical tool of artifices range 1 to 26. This range elements as 26 letters alphabet as is the English alphabet shall be providing number values formats (in short NVF) for letters A to Z as 1 to 26 in that sequence and order. With it every word availing letters of this alphabet shall be carrying values as per the values of individual letters and number value format for the word would be the summation of the individual values of the letters.
 Illustratively $NVF (FIRST) = 6 + 9 + 18 + 19 + 20 = 72 = NVF (ORIGIN)$
 $NVF (SECOND) = NVF (FOUR) = NVF (SECOND)$
 $NVF (THIRD) = NVF (SOLID)$
- 12. One may have a pause here and permit the transcending mind to comprehend, the first three fold approach from Ganita Sutra-1 as of quadruple value 72, and the second three fold approach from Ganita Sutra-1 being of quadruple value $64 = 4 \times 4 \times 4 = 4^3$
- 13. Like that, further values chase as well would be very blissful. Here below, for convenient reference is tabulated the

letters ranges of the text of Ganita Sutras 1 to 16 and Upsutras 1 to 13.

Table of Sutra wise letters ranges

Sr.	Sutra	Letters	Total
I	1	16	16
Ii	2	28	44
Iii	3	15	59
Iv	4	17	76
V	5	20	96
Vi	6	19	115
Vii	7	24	139
Viii	8	16	155
Ix	9	16	171
X	10	9	180
Xi	11	14	194
Xii	12	20	214
Xiii	13	20	234
Xiv	14	17	251
Xv	15	16	267
Xvi	16	16	283

Table of Upsutra wise letters ranges

Upsutra	Letters	Total	
1	10	10	
2	18	28	
3	23	51	
4	21	72	
5	8	80	
6	8	88	
7	37	125	
8	16	141	
9	12	153	
10	16	169	
11	17	186	
12	8	194	
13	32	236	

14. One may have a pause here and permit the transcending mind to have a fresh look at the set up of the cube accepting three dimensional frames of half dimensions embedded in each corner of the cube.

15. It would be a blissful exercise to sequentially chase the set up of the cube reaching at first step at its origin, and at second step reaching at structural set up of 4-space at the seat of the origin of cube and ahead at third step to be face to face the solid order of the origin of 4-space, then at fourth step it shall be taking to the volumme of the solid dimensional order and ahead at fifth step would be the lively phenomenon of axes and parallel number value formats are.

16. NVF (FIRST) = 72 = NVF (ORIGIN)
17. NVF (SECOND) = 60 = NVF (FOUR)
18. NVF (THIRD) = 59 = NVF (SOLID)
19. NVF (FOURTH) = 88 = NVF (VOLUMME)
20. NVF (FIFTH) = 49 = NVF (AXIS)
21. NVF (SIXTH) = 80 = NVF (CREATOR)



Step – 07 : First Letter : Sixth vowel

1. First letter of Ganita Sutras text is the sixth vowel (ऎ)
2. It is the first vowel of Ganita Sutra-1 itself.
3. 'ऎ' is the sixth vowel of the range of 9 vowels of Devnagri alphabet.
4. 'ऎ' is the first letter of Ganita Sutra-1.
5. A being a vowel and also being the first letter of the Ganita Sutras, Sutra-1, as such it becomes the first vowel of this range of Text of sixteen letters.
6. 'ऎ' being the sixth vowel and also because of its first placement in the text, it also acquires features of 'first vowel'.
7. With it the sixth and the first vowels get interlinked.

8. Shrimad Bhagwad Geeta preserves the enlightenment of Lord Krishna, the incarnation of Lord Vishnu, as overlord of 6-space as that :
'amongst syllables, He is the Akara (आ), the first vowel'.
9. One shall have a pause and permit the transcending mind to transcend through the coordination of (ए, आ) / (6th vowel, 1st vowel) / (6/4) / (6-space, 4-space) / (Lord Krishana, Lord Vishnu) / (Sun / Creator) / (6-space as domain, 4-space as dimension) / (domain fold, dimension fold of hyper cube 6) / (quadruple 4, 5, 6, 7) / (Lord of measuring rod, lord of the measure of the measuring rod).
10. Let us further have a pause and permit the transcending mind to transcend through the NVF equation :
NVF (Perfect) = NVF (Number) = NVF (Format) = 73.
11. One shall further have a pause and permit the transcending mind to transcend through the formulation (*Trishpta त्रिशप्तता*) / coordination of 3 and 7 as much as that 3-space accepts 7 geometries and further as that NVF (Seal) = 37 and NVF (Format) = 73, NVF (Perfection) = 110 = 37 + 73 = 55 + 55 = NVF (Sky) + NVF (Sky) = NVF (Sun) + NVF (Light) = 54 + 56 = NVF (Meditation) = 110.
12. NVF (Perfect number format) = Triple (73, 73, 73).
13. Triple (N, N, N) as a set of three dimensions of order N shall always be synthesizing '6' as order.
14. 6 is the first perfect number.
15. $6 = 1 + 2 + 3 = 1 \times 2 \times 3 = 2 + 2 + 2 = 3 + 3 = 2 + 4 = 1 + 5$.
16. $6 = 2 \times 3, 5 = 2 + 3$.
17. (8, 6, 4, 2, 0) is the five fold transcendence range.
18. (9, 7, 5, 3, 1) is also a five fold transcendence range.
19. $2^3 = 8, 3^2 = 9$ leads to a base / index reflection pair ($2^3, 3^2$).
20. (5, 6, 7, 8) and (6, 7, 8, 9) as well constitute a pair of manifestation layers of origin folds constituting a reflection pair.
21. It is this reflection pairing of origin folds which shall be responsible for two fold transcendence as of ascendance order and of decendance order.
22. One may have a pause and permit the transcending mind to chase simultaneously 2 / 2-space / square and 3 / 3-space / cube.
23. NVF (Square) + NVF (Cube) = 81 + 31 = 112 = NVF (Mathematics) = 56 + 56 = NVF (Light) + NVF (Light) = NVF (three domain).
24. Scriptures enlighten us about parallel features of (i) 6, (ii) 6-space, (iii) Sun (iv) Pursha (v) Soul (vi) Vishnu
25. $6 = 2 + 2 + 2 / (2, 2, 2)$ as triple dimensions of same order always synthesize 6 as value.
26. $6 = 3 + 3 / (3, 3) /$ monad, monad = Trimonad as NVF (Monad) + NVF (Monad) = NVF (Tri monad)
27. $6 = 2 \times 3 = (-2) \times (-3)$
 $6 = 1 \times 2 \times 3; (-6) = (-1) \times (-2) \times (-3)$
 $6 = (-1) \times (-2) \times 3$
 $= (-1) \times 2 \times (-3)$
 $= 1 \times (-2) \times (-3)$
28. $6 = 2 + 2 + 2 \setminus$
 $8 = 2 \times 2 \times 2 = 2 + 6$
 $16 = 2^2^2 = 2 \times 8$
 $= 4^2$
 $= 2^4$
29. ($4^2, 2^4$) constitutes a base index reflection pair
30. $16 = 2^0 + 4 + 6 + 4 + 2^0$
 $=$ Sum of terms of binomial $(1+1)^4$
31. The range ($2^0, 4, 6, 4, 2^0$) is parallel to (1, 4, 6, 4, 1).
Let us revisit the range (0, 4, 6, 6, 4, 0).

32. This is parallel to dimensional synthesise values range of steps 0 to 5 for dimensional order 4, as that for 0 number of dimensions, value would be 0 for 1 dimension value would be 4.
33. For pair of dimensions value would be $4 + 4 - 2 = 6$,
34. For three dimensions value would be $6 + 4 - 2 \times -2 = 6$ for 4 dimensions, value would be $6 + 4 - 2 \times 3 = 6$
35. For five dimensions value would be $4 + 4 - 2 \times 4 = 0$
36. It would be a blissful exercise to chase the sequence of synthesise values of 4 dimensions of order $N = 4$ onwards.
37. The synthesise values of 4 dimensions of order $N = 6 + N - 3(n-2) = 2n$.
38. As such the above sequential values are (-2, -4, -6, -8, ---).
39. One shall have a pause and permit the transcending mind to chase through the following NVF equation:
NVF (16) = NVF (Six space) = NVF (knowledge).



Step – 08 : Second Letter : First Consonant

1. The First letter of Ganita Sutra-1 Text is a vowel (ए).
2. The second letter of the text of Ganita Sutra-1 is a consonant (क)
3. Consonant (क) is the first letter of the first row of 5×5 *varga* (square) consonants.
4. Here one may have a pause and permit the transcending mind to be face to face with a poser as that how one is to chase to have a transition from first letter to the second letter?
5. For an answer for this poser, we have to reach at the meanings and values of letters (ए) and (क).
6. Scriptures preserve the values and meanings of letter 'क' as Brahma as well as Shiv.
7. Scriptures further preserve that Lord Vishnu is the presiding deity of 6-space while Lord Brahma is the presiding deity of 4-space.
8. Still further Scriptures preserve that Lord Vishnu is the presiding deity of measuring rod while Lord Brahma is the presiding deity of measure of the measuring rod.
9. Accordingly Lord Vishnu and Lord Brahma associate themselves with the measuring rod and its measure. This association of the association with 6-space as domain fold and 4-space as dimensional fold.
10. As such the pairing of Lord Vishnu and Lord Brahma is parallel to the pairing of 6-space with 4-space.
11. Further it is parallel to pairing of artifice 6 with artifice 4.
12. As a result the pairing of first two letters of the text, namely of (ए, क) is parallel to the pairing of (Lord Vishnu, Lord Brahma) / (6-space, 4-space), (6, 4) (measuring rod, measure of the measuring rod), (dimensional domain, dimensional order of the dimensional domain).
13. As such the answer to the above poser as to what are the features of transition from first letter of the text to second letter of the text comes to be that these are the features of the transcendence from 6-space as domain fold to 4-space as its dimension fold
14. Here it would be relevant to note that 5-space plays the role of origin of 4-space.
15. Further as that 5-space plays the role of boundary of 6-space

16. Still further as that 5-space also plays the role of dimension of 7-space.
17. These features of 5-space, as such fulfill the gap to complete the consecutiveness of 6-space, 5-space and 4-space. And that at dimensional level is going to be the consecutiveness of 4-space, 3-space and 2-space respectively being dimension folds of 6-space, 5-space and 4-space, in that sequence and order.
18. One may have a pause here and permit the transcending mind to be face to face with the spatial order of 4-space.
19. The features of artifice $4 = 2 + 2 = 2 \times 2 = (-2) \times (-2)$ shall be bring us face to face the phenomenon of transcendence on either side of 6-space / artifice 6, making it a trio phenomenon of values range (4, 6, 4)
20. Here it would be relevant to note that Ganita Sutras Text being part of Vedic scriptures, as such the transcendental source reservoir (soul syllable Om) shall be available for Ganita Sutras scripture when it is to be approached as a self sustained scripture.
21. With it the text of Ganita Sutras shall be availing soul syllable Om , as the start with transcendental source reservoir of the text and with it the text would read ‘Om Ekadhiken Purvena (ॐ एकाधिकेन पूर्वेण)’.
22. With it the source reservoir formulation / creator space (4-space) with 5-space as its origin shall be available and accordingly the startwith and as such the parallel artifices triple (4, 6, 4) / (4-space, 6-space, 4-space), would be available.
23. Here it would be relevant to note that spatial order features because of role

of 2-space as dimension fold shall be accepting binary expression set up for 4-space expression as of the format $(1+1)^4 = 1+4+6+4+1=16$.

With it the expression chase at the middle shall be of the values format of triple (4 + 6 +4).

□

