ORGANIZATION FORMAT OF GANITA SUTRAS

Step – 51 : Geometric format

- 1. Sankhiya Niststha and Yoga Niststha are two established processing process of Vedic systems.
- 2. Sankhiya Niststha presumes the existence of geometric formats of dimensional spaces and avails artifices of numbers.
- 3. Yoga Niststha presumes the existence of artifices of numbers and avails geometric formats of dimensional spaces.
- 4. Yoga nishtha and Sankhiya Niststha process parallel to each other.
- 5. Sankhiya Niststha and Yoga Niststha are complementary and supplementary of each other.
- 6. With it, the chase of geometric formats shall be in the background of existence of artifices of numbers.
- 7. The existence of artifices of numbers, as such also presumes the existence of place value system as organization format of numbers.
- 8. Of these, different place value systems, focus is upon ten place value system.
- 9. Ten place value system accepts 9 numerals range.
- 10. These 9 numerals accept single digit expression format as a linear sequential arrangement for them of values 1 to 9 coordinated interse with a rule of 'one more than before'.
- 11. '0' as placement value of ten place value system, supplements 9 numerals range '1, 2, 3, 4, 5, 6, 7, 8, 9' and this set of '10' values '0 to 9' is of potentialities of organizing whole range of numbers.

- 12. First feature of this organization is that it transforms expression for all the ten values '0 to 9', from single digit expression to double and higher digits expressions.
- 13.The double digit expression for ten values '0 to 9', comes to be '00, 01, 02, 03, 04, 05, 06, 07, 08, 09'.
- 14. With it the whole range of double digit numbers get organized as along 9 x 11 matrix / gird format as 9 columns and 11 rows for the range of 99 double digit numbers, '01, 02, --- 99'.
- 15. The value '00' as such goes out of this arrangement. That way value '100' as well remains non inclusive within this arrangement. Infact 'value '100' is a three digit number value.
- 16. These and other features of numbers and their artifices, as such need 'parallel to them' the existence of a sequence of representative regular bodies for the sequence of dimensional spaces.
- 17.Of these, dimensional spaces '1-space to 9-space' emerge parallel to 9 numerals range.
- 18. '0-space, emerges parallel to place value '0'.
- 19. Further as 1 + 2 + 3 + 4 = 10, as such the dimensional spaces 'infact' the dimensional content of 1-space to 4-space get coordinated as a four fold manifestation layer.
- 20.As manifestation layers are of four folds, as such four sequential expressions would emerge which shall be parallel to the four folds of the manifestation format.
- 21. The manifestation format of four fold manifestation layer is of features of 'dimension, 'boundary, domain' and 'origin'.
- 22. With it the first sequential expression would be of the dimension folds.
- 23. The second sequential expression would be of boundary fold, third sequential expression would be of domain folds and fourth sequential expression would be of origin folds.

- 24. This way the single manifestation layers sequence shall be leading to four sequential fold wise expressions.
- 25.Here it would be relevant to note that 1-space content expresses itself as a domain fold of hyper cube 1 which as such is a member of sequential domain folds expression.
- 26.Further here it would be relevant to note that 1-space content, as such shall be playing role of dimension fold for hyper cube 3 as manifestation layer (1, 2, 3, 4).
- 27.Likewise 1-space content as boundary fold of hyper cube 2 shall be a boundary fold of manifestation layer (0, 1, 2, 3).
- 28.Still further 1-space content as origin fold of hyper cube zero shall be the origin fold of the manifestation layer (-2, -1, 0, 1).
- 29.Likewise n-space content as well shall be playing four distinct roles as dimension fold of hyper cube n + 2 of manifestation layer (n, n+1, n+2, n+3). And, as boundary fold of hyper cube n + 1 of manifestation layer (n-1, n, n+1, n+2), as domain fold of hyper cube n of manifestation layer (n-2, n-1, n, n+1) and as origin fold of hyper cube (n-1) of manifestation layer (n-3, n-2, n-1, n).
- 30. With it, interval, square and cube as well shall be hyper cubes 1, 2, 3 of manifestation layers (-1, 0, 1, 2), (0, 1, 2, 3) and (1, 2, 3, 4) respectively.
- 31. The hyper cubes sequence (of hyper cube 1, hyper cube 2, hyper cube 3, hyper cube 4, ----)shall be of prime importance for the chase of geometric formats of dimensional spaces which are availed by Vedic systems for organization of Existence phenomenon and knowledge of existence phenomenon.
- 32.As such, each member of this hyper cubes sequence, namely each of the hyper cube, as such, would deserve to be chased for its features.
- 33.One of the prominent feature of hyper cubes is that their domains are enveloped within boundary folds.

- 34.Illustratively hyper cube 3 / cube is enveloped within six surface plates, one may have a pause here and have a fresh look at this set up of hyper cube 3 as its domain being enveloped by surface (s) six in number.
- 35. The domain boundary formulation A^n : 2n B^{n-1} for all values of n, deserves to be comprehended and to be imbibed for its features.
- 36.Here it would be relevant to note that B^{n-1} as domain fold of hyper cube n-1 shall as per the domain boundary formulation shall be leading to the boundary of boundary of hyper cube n.
- 37.It is this feature of reaching at boundary of boundary of hyper cube deserves to be chased.
- 38.It would be a blissful exercise that boundary of boundary of boundary of hyper cube 6 shall be yielding $12 \times 10 \times 8 = 960$ cubes.
- 39.One may have a pause here and take note that 960 cube shall be required to envelope hyper cube 6 in terms of components of its boundary of boundary.
- 40. The other prominent feature of hyper cubes is that their (dimension, domain) pairing is parallel to artifices (n, n+2).
- 41.It further shall be leading to a triple (n-2, n, n+2) parallel to the reach of dimension of dimension for hyper cube n.
- 42.It would be a blissful exercise to work out such triples for all values of n.
- 43.For n = 6, the triple shall be (2, 4, 6) of values parallel to 2-space as dimension, 4-space as dimension and 6-space as domain.
- 44.Still further basic feature of hyper cubes comes to be their pairing feature of (domain, origin) parallel to artifices pair (n, n+1).
- 45.The artifices pair (n, n+1) shall be parallel to the pairing of (n-space, n+1 space.
- 46.One may have a pause here and take note that such pairing of values (n, n+1) shall be equally applicable for the pairing of (i) dimension fold,

boundary fold, (ii) boundary fold, domain fold and (iii) domain fold, origin fold

- 47.Likewise the artifices values pairing as (n, n+2) shall be equally available for (i) dimension fold, domain fold and (ii) Boundary fold, origin fold.
- 48. These features deserve to be chased in reference to every hyper cube, and in particular in reference to hyper cube 1 to 9, and of these as well, especially, in reference to hyper cube 1 to 6.
- 49. The feature of transcendence from one manifestation layer to the next manifestation layer is there because of 'n+1' space playing the role of origin fold of hyper cube n.
- 50. This as such, shall be focusing upon the space contents coordination, namely of n-space content as domain fold and n+1 space content as origin fold.
- 51.One may have a pause here and take note that within n+1 space, n space bodies have a degree of freedom of motion..
- 52. Therefore, the transcendence, in a way amounts to transiting from a static state to a dynamic state.
- 53. The transcendence at the origin fold takes to the base of origin fold.
- 54.Reaching base of origin fold amounts to reaching fifth fold state for the four fold manifestation layer.
- 55.Such transition and transformation from four fold manifestation layer to five fold transcendence range deserves to be chased for comprehension and imbibing of the features and values of this five fold range over and above the features and values of four fold manifestation layer format.
- 56.One may have a pause here and take note that the five folds transcendence range shall be leading to a pair of four fold manifestation layers corresponding to first four folds as the first manifestation layer and second to fifth fold as the second manifestation layer

- 57.One may have a pause here and permit the transcending mind to be face to face with the formats of manifestation layers as well as of transcendence ranges.
- 58. The format of manifestation layers is of four folds as expressions of space contents of four consecutive dimensional spaces.
- 59. This feature of manifestation format, as such leads to a measuring rod of 4-space synthesized by hyper cubes 1 to 4.
- 60.Likewise the transcendence format of five folds shall be leading to a measuring rod of 5-space synthesized by hyper cubes 1 to 5.
- 61.It would be a blissful exercise to have transition from five fold transcendence ranges to six fold self referral domains.
- 62. Ahead transition can be chased from six fold domains to seven fold unity states.
- 63.Still ahead is vibrant 8 fold nature and 9 fold Brahman state, while ten fold state transcends even beyond as 'Par Braham'.
- 64.Corresponding to these features of hyper cubes sequence would manifest geometric formats of corresponding dimensional spaces which would deserves to be chased for pure and applied values of Vedic systems.

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