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

List 2 Different aspects of Vedic Mathematics

Article 55
Conceptual formats of Vedic Mathematics

1. Distinct processing systems

Vedic Mathematics of Ganita Sutras has its own distinctive processing systems of creator's space which is of a spatial order. The existence phenomenon chase is as of manifested creations formats.

The processing system is of two components, Sankhiya Nishtha and Yoga Nishtha. Both are complementary and supplementary of each other. Sankhiya Nishtha presumes the existence of geometric formats and avails artifices of numbers parallel with dimensional frames. On the other hand Yoga Nishtha presumes the existence of artifices of numbers and avails geometric formats taking dimensional frames parallel with artifices of numbers.

This unified feature of processing system results into a parallel sequencing of numbers and dimensional bodies.

Dimensional bodies and manifested creations of creator's space format. The manifested creations are of four folds : dimension fold, boundary fold, domain fold and origin fold. The origin fold permits transcendence. The transcendence itself is of two folds, as upward transcendence and as downward transcendence. The upward transcendence results into super imposition of order of the origin fold upon the order of the domain fold. The downward transcendence results into transition and transformation for the four fold format of creator's space (4-space) into five fold format of Transcendental domain (5-space).

The spatial order (2-space as dimension) of creator's space (4-space) gives rise to a a pair of distinct generic units : '2 as 1' and '1 as 2', together bringing in '1' and ' ½' as working units. Parallel to it are a sequence of full unit Hyper cube and a sequence of half unit hyper cube. Domains as manifested space content and the manifested bodies, result into a parallel set up for the numbers values sequence as under:-

Parallel set up of numbers and dimensional bodies

Number	Space content domain / Dimensional body

1	h ½	/	(- ½ , 0, ½, 1)	/ 1
2	H1	/	(-1, 0, 1, 2)	/ 2
3	h 1	/	(0, ½, 1, 1 ½)	/ 3
4	D3	/	(3, 1, 1, -1)	/ 4
5	h 1 ½	/	(½, 1, 1 ½, 2)	/ 5
6	H2	/	(0, 1, 2, 3)	/ 6
7	h 2	/	(1, 1 ½, 2, 2 ½)	/ 7
8	D4	/	(4, 2, 2, 0)	/ 8
9	h 2 ½	/	(1 ½, 2, 2 ½, 3)	/ 9
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Here under the conceptual formats of the processing set up of Ganita Sutras, as a unified system of Sankhiya Nishtha and Yoga Nishtha are being tabulated :-

Conceptual formats tabulations

SN	of manifestation fold	Processing format	Features
1	Dimension	Synthesis of dimensions of same order	Infinite infinities points of surface provide synthesis format for any number of dimensions of same order.
2	Boundary	Take off boundary component	Boundary component as dimension structures out the outer space. With take off of a boundary component, their opens a cosmic window and through it the outer space structures flow in and reach through domain into origin.
3	Domain	1. Transcendence through domain. 2. Transcendence of origin from domain and split of domain 3. Super imposition of higher order of origin upon order of domain	1. Transcendence through domain takes place along its dimensions and is of reach of dimension of dimension. 2. Origin (n+1) transcends from the domain (n) and domain itself splits as a pair of domains, and as a result becomes a origin transcendence format (n, n+1, n). 3. The upward transcendence from the origin results into super imposition of higher order (n-1) of origin (n+1)

			upon the order (n-2) of the domain (n).
		4. Transition from sealed state to unsealed state of the domain.	4. The origin at the center of the domain causes seal for the domain. However, with transcendence, the seal stands melted and as a result their happens a cavity at the seat of origin of domain.
		5. Inward transcendence through origin results into transition for the four fold format into five fold format	5. The inward transcendence takes place through the Transcendental cavity at the seat of the origin of the domain and as a result manifests base fold as the fifth fold.
4	Origin	1.Origin fold is of a higher dimensional order than that of the domain fold	1. There happens a two fold transcendence at the origin seat. The upward transcendence results into super imposition of higher order upon the order of domain. The downward transcendence happens through the Transcendental cavity and the same results into manifestation of a base fold.
		2. Split spectrum of domain with creation of Transcendental cavity at the origin seat	2. With creation of Transcendental cavity at the seat of origin, there happens an inward transcendence through the cavity. The domain splits with transcendence of the origin. As a result, the domain splits into a pair of domains, and the Transcendental joint of the domain melts and their happens a flow through dimension and manifests as a dimension of dimension of placement within Transcendental cavity. This split phenomenon is of sequential phases.

3. Integrated format of Ganita Sutras and Upsutras

The mathematical domain of Ganita Sutras and its processing system takes us to the integrated format of Ganita Sutras and Upsutras. The gaps between the mathematical domains of consecutive Sutras are bridged by the mathematical domains and processing steps of Ganita Sutras.

Here below is tabulated integrated format of Ganita Sutras and Upsutrs.

SN	Sutra / Upsutra
1	Ganita Sutra 1
2	Upsutra 1
3	Ganita Sutra 2
4	Upsutra 2
5	Ganita Sutra 3
6	Upsutra 3
7	Ganita Sutra 4
8	Upsutra 4
9	Ganita Sutra 5
10	Upsutra 5
11	Ganita Sutra 6
12	Upsutra 6
13	Ganita Sutra 7
14	Upsutra 7
15	Ganita Sutra 8
16	Ganita Sutra 9
17	Upsutra 8
18	Ganita Sutra 10
19	Upsutra 9
20	Ganita Sutra 11
21	Upsutra 10
22	Ganita Sutra 12
23	Upsutra 11
24	Ganita Sutra 13
25	Upsutra 12
26	Ganita Sutra 14
27	Upsutra 13
28	Ganita Sutra 15
29	Ganita Sutra 16

4. Organization of text of Geeta and of Ganita Sutras

For pure as well as of applied values of Ganita Sutras, we have to visit the organization of the text of Geeta. Here below is being tabulated the parallel organization of Geeta and of Ganita Sutras.

Interrelationship table of Geeta chapters Yogas and Ganita Sutras

Sh = Shalokas Lt = Letters

Geeta chapter with Yoga name and its TCV value	Sh	Ganita Sutra with TCV value	Lt
1 अर्जुनविषादयोग **(**TCV 55) ArjunVishad Yoga	47	10 **यावदूनम्** **(**TCV 41) Yavadunam	9
2 साँख्ययोग **(**TCV 32) Sankhya Yoga	42	11 व्यष्टिसमष्टिः **(**TCV 58) Vyastisamastih	14
3 कर्मयोग **(**TCV 26) Karam Yoga	43	1 एकाधिकेन पूर्वेण **(**TCV 75) Ekadhikena Purvena (also a orollary)	16
4 ज्ञानकर्मसंन्यासयोग **(**TCV 75) Gyankaramsanyas Yoga	42	13 सोपान्त्यद्वयमन्त्यम् **(**TCV 80) Sopantyadvayamantyam	20
5 कर्मसंन्यासयोग **(**TCV 54) Karamsanyas Yoga	29	2 निखिलं नवतश्चरमं दशतः **(**TCV 107) Nikhilam Navatascaramam	28
6 आत्मसंयमयोग **(**TCV 53) Atamsayam Yoga	47	15 गुणितसमुच्चयः **(**TCV 56) Gunitasamuccayah	16
7 ज्ञानविज्ञानयोग **(**TCV 63) GyanVighyan Yoga	30	3 ऊर्ध्वतिर्यग्भ्यायम् **(**TCV 56) Urdhva-tiryagbhyam	15
8 अक्षरब्रह्मयोग**(**TCV 53) Aksharbraham Yoga	28	**Vedic mathematics Base values**	---
9 राजविद्याराजगुह्ययोग **(**TCV 67) Rajvidyarajguhya Yoga	34	4 परावर्त्य योजयेत् **(**TCV 52) Paravartya Yojayet	17
10 विभूतियोग **(**TCV 41) Vibhuti Yoga	42	**Spiritual base values**	---
11 विश्वरूपदर्शनयोग **(**TCV 67) VishwarupaDarshan Yoga	55	5 शून्यं साम्यसमुच्चये **(**TCV 71) Sunyam Samyasamuccaye	20
12 भक्तियोग **(**TCV 28) Bhakti Yoga	20	12 शेषाण्यङ्.केन चरमेण **(**TCV 75) Sesanyankena Caramena	20
13 क्षेत्रक्षेत्रज्ञविभागयोग **(**TCV 84) KshetraKshetragyavibhag Yoga	34	6 (आनुरूप्ये) शून्यमन्यत् **(**TCV 76) (Anurupye) Sunyamanyat	19
14 गुणत्रयविभागयोग **(**TCV 57) Guntriyavibhag Yoga	27	14 एकन्युनेन पूर्वेण **(**TCV 84) Ekanyunena Purvena	17
15 पुरुषोत्तमयोग**(**TCV 61) Purshotamm Yoga	20	7 संकलनव्यवकलनाभ्याम् **(**TCV 85) Sankalana-vyavakalanabhyam	24
16 देवासुरसंपद्विभगयोग **(**TCV 90) Devasur Sampadibhag Yoga	24	16 गुणकसमुच्चयः **(**TCV 55) Gunakasamuccayah	16
17 श्रद्धात्रयविभागयोग **(**TCV 62) Shardatriya Vibhag Yoga	28	8 पूरणापूरणाभ्याम् **(**TCV 68) Puranapuranabhyam	16
18 मोक्षसंन्यासयोग **(**TCV 64) Moksha Sanyas Yoga	78	9 चलनकलनाभ्याम् **(**TCV 56) Calana-kalanabhyam	16

5. Geeta formulation and folds of TCV of formulation Geeta

To be parallel with the features, values, knowledge and enlightenment of formulation Geeta 'गीता', one shall be parallel with ten folds of TCV of formulation 'Geeta' as under :-

Geeta **'गीता'**

L	ग्	ई	त्	आ
T	3	4	4	2
F	8	12	12	16
H	10	14	14	06

SN	Fold	Value	Total value
1	W	1	1
2	S	2	3
3	L	4	7
4	T	13	20
5	TT	20	40
6	FF	93	133
7	F	48	181
8	H	44	225
9	R	105	330
10	SR	223	553

It will be blissful to take note that values pair 553, 555 is of the format (dimension, domain). Folds value formulation 'Geeta' is 553 while Braham Sutra (Vedanta) is a scripture of 555 sutras. Geeta is Vedantatri/ essence of Braham Sutra while Braham Sutra is essence of Upnishads and Upnishads are the essence of the Vedas.

6. Blissful exercise

It will be a blissful exercise to revisit the placements for Ganita Sutras and Ganita Upsutrs in the integrated format and of Ganita Sutras and chapters of Geeta in their comparative format, in respect of Ganita Sutras 14, 15 and 16.

Sutra / Upsutra		Geeta chapter
Sutra 14 14 एकन्युनेन पूर्वेण (TCV 84) Ekanyunena Purvena		Chapter 14 14 **गुणत्रयविभागयोग** (TCV 57) Guntriyavibhag Yoga
Upsutra 13		

13 गुणितसमुच्चयः समुच्चयगुणितः (TCV = 112) Gunitasamuccayah Samuccayagunitah		
Sutra 15 15 गुणितसमुच्चयः **(**TCV 56) Gunitasamuccayah		Chapter 7 7 ज्ञानविज्ञानयोग **(**TCV 63) GyanVighyan Yoga
Sutra 16 16 गुणकसमुच्चयः **(**TCV 55) Gunakasamuccayah		Chapter 16 16 देवासुरसंपद्विभगयोग **(**TCV 90) Devasur Sampadibhag Yoga

And to imbibe the organization feature of the working rule of Ganita Sutra 14 'one more than before' and the transition ahead in respect of the placements of respective Sutras and Upsutras in integrated format and also of comparative placement of chapters of Geeta and of Ganita Sutras. ■