

Phase 11

Vedic Ganita Sutras & Upsutras

(Sankhya Nishta – Yoga Nishtha – Samya Samuchayya Aadhar Vavastha Ganit)

सौख्य निष्ठा योग निष्ठा साम्य समुच्चय आधार व्यवस्था गणित
 20 22 12 22 16 23 15 27 18

11.5.1

Ganita Sutra 1 and Ganita Upsutra 1**Abstract**

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Ganita Sutra 1 and Ganita Upsutra 1**Abstract**

Simple rendering of text of Ganita Sutra 1 (एकाधिकेन पूर्वेण) is ‘one more than before’. A close reading of the text brings to focus that the first word formulation (एकाधिकेन), raises a question (केन) as that ‘one is more than what?’ and the second word of formulation is the answer to the question that (more than) previously (purva) ordained (as number value, zero). The simple reading of text of Ganita Upsutra 1 (आनुरूप्येण) is follow (आनु) the forum (रूप) as it is framed (एण). Natural query follows as to whether ‘one is a number value and whether it is to be applied only once’. Ganita Sutra 1 along with Ganita Upsutra 1, as such by the rule of symmetry of Ganita Upsutra 1, on its application, does not remain restricted for one as number value. It is equally ‘a one step more than the previous steps’. This reach of one step more than the previous step as the previous steps will under Ganita Sutra 1 take to one step more than this previous value.

Scholars who remain within the bounds of simple rendering naturally have a query as to what mathematics this working rule as such may reach at. In the domain of arithmetic particularly, Swami Ji in his book has given many illustration of applications of Sutra 1. Further the scholars have a further query as to how Ganita Sutra 2 follow Ganita Sutra 1 and Ganita Upsutra 2 follows Ganita Upsutra 1. Here in this paper attempt has been made to about the way text word formulations unfold themselves.

Ganita Sutra 1 and Ganita Sutra 1 words formulation values are tabulated. Likewise it is an exercise for sadkhas fulfilled with intensity to urge to be face with vedic mathematics of Ganita Sutras and Upsutras, they shall sequentially undertake, likewise the integrated format sequence from serial number 3 uptill serial number 29. It is going to be very blissful and wonderfully rewarding exercise. Here at the end the table has been drawn of four folds of text of all sixteen Sutras. It is going to be great help for the sadkhas.

Ganita Sutra 1 manifests 10 place value system of 9 numerals while Ganita Sutra 2 manifests 20 place value system with 19 numerals. D19 spectra is of summation value

68 parallel with TCV (पच महाभूतः / Panch Mahabhut / five basic element). Ganita Upsutra 1 text is of TCV value 42 parallel with TCV (उपादान कारण / content supplier). It is also parallel with TCV (पुर्नजन्म / Rebirth). Like that every feature of text of Ganita Sutra 1 and Ganita Sutra 2 leads to transition from Ganita Sutra 1 to Ganita Sutra 2.

1

Integrated format placement of Ganita Sutras 1 to 3 and Upsutras 1 to 3

Table 1

Ganita Sutra 1	एकाधिकेन पूर्वेण ।
Ganita Upsutra 1	आनुरूप्येण ।
Ganita Sutra 2	निखिलं नवतश्चरमं दशतः
Ganita Upsutra 2	शिष्यते शेषसंज्ञः ।
Ganita Sutra 3	ऊर्ध्वतिर्यग्भ्याम्
Ganita Upsutra 3	आद्यमाद्येनान्त्यमन्त्येन

Table 2

Text	Words	Syllables	Letters	TCV	VCV
एकाधिकेन पूर्वेण ।	2	5+3 =8	9+7=16	75	23
आनुरूप्येण ।	1	5	10	42	9
निखिलं नवतश्चरमं दशतः	3	3+6+3 =12	7+14+7=28	107	52
शिष्यते शेषसंज्ञः ।	2	3+4=7	7+11= 18	74	44
ऊर्ध्वतिर्यग्भ्याम्	1	5	15	58	36
आद्यमाद्येनान्त्यमन्त्येन	1	9	23	96	40

Table 3

	W	S	L	TCV	Total
एकाधिकेन पूर्वेण ।	2	8	16	68	94
आनुरूप्येण ।	1	5	10	42	58

Table 4

	W	S	L	TCV	
एकाधिकेन पूर्वेण ।	2	8	16	68	
आनुरूप्येण ।	1	5	10	42	
Difference	1	3	6	26	

Total 36**Table 5**

	W	S	L	TCV	
एकाधिकेन पूर्वेण ।	2	8	16	68	
आनुरूप्येण ।	1	5	10	42	
Total	3	13	26	110	

Total 152

2

Syllables split of text of Ganita Sutra 1 and Ganita Upsutra 1

Vedic Ganita Sutra 1								Vedic Ganita Upsutra 1				
एकाधिकेन पूर्वेण ।								आनुरूप्येण ।				
1	2	3	4	5	6	7	8	1	2	3	4	5
ए	का	धि	के	न	पूर्	वे	ण।	आ	नु	रु	प्ये	ण।

3

letters split of text of Ganita Sutra 1 and Ganita Upsutra 1

Vedic Ganita Sutra 1 Sixteen letters	Vedic Ganita Upsutra 1 Ten letters
1 2 3 4 5 6 7 8 9 ए क् आ ष् इ क् ए न् अ 10 11 12 13 14 15 16 प् ऊ र् व् ए ण् अ। Note :- Letter wise placement of letter Raif (र) has placement change in Composed word	1 2 3 4 5 आ न् उ र् ऊ 6 7 8 9 10 प् य् ए ण् अ।

4

**Syllables split of text of Ganita Sutra 1 and
Ganita Upsutra 1 in reverse order**

Letters of Reverse orientation of text of Ganita Sutra 1	Letters of Reverse orientation of text of Ganita Upsutra 1
अण् एवर् ऊप् अन् एक् इध् आक् ए	अण् एय्प् ऊर् उन् आ

5

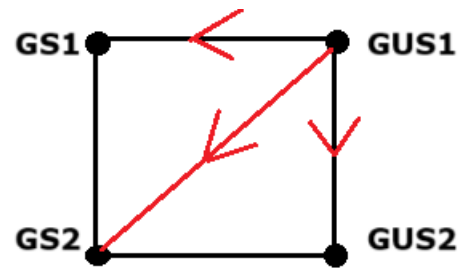
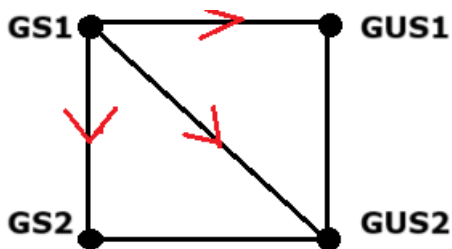
**Letters split of text of Ganita Sutra 1 and
Ganita Upsutra 1 in reverse order**

Letters of Reverse orientation of text of Ganita Sutra 1	Letters of Reverse orientation of text of Ganita Upsutra 1
अ ण् ए व् र् ऊ प् अ न् ए क् इ ध् आ क् ए	अ ण् ए य् प् ऊ र् उ न् आ

6

Integrated format placement of Ganita Sutra 1 and Upsutra 1

Coordination format





7

Ganita Sutra 1 Ganita Upsutra 2 Ganita Sutra 2

	W	S	L	TCV
एकाधिकेन पूर्वेण ।	2	8	16	68
आनुरूप्येण ।	1	5	10	42
	3	13	26	110
निखिलं नवतश्चरमं दशतः	3	12	28	107
	0	1	2	3

Note :- (0, 1, 2, 3) = Four folds of Hyper cube 2. The transition from Ganita Sutra 1 to Ganita Sutra 2 is of format of Hyper cube 2.

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Ganita Upsutra 1 Ganita Sutra 2 Ganita Upsutra 2

		W	S	L	TCV
Ganita Upsutra 1	आनुरूप्येण ।	1	5	10	42
Ganita Upsutra 2	शिष्यते शेषसंज्ञः ।	2	7	18	74
Total		3	12	28	116
Ganita Sutra 2	निखिलं नवतश्चरमं दशतः	3	12	28	107
		0	0	0	9

Note :- Center of cube is 9th point. Gap filing here is in reverse order.

9

Ten folds of TCV of first word formulation of Ganita Sutra 1

‘एकाधिकेन

W = (Word), **S**=(Syllables), **L**=(Letters), **T**=(TCV value), **TT**=(Transcendence value), **FF**=(Pronouncing frequency value), **F**=(Formulation value) **H**=(Sathapatya value), **R**=(Transcendental range value), **SR**=(Synthesis of a pair of transcendental ranges value)

Fold			
1	W (Word)	1	1
2	S (Syllables)	5	6
3	L (Letters)	9	15
4	T (TCV value)	34	49
5	TT (Transcendence value)	120	169
6	FF (Pronouncing frequency)	214	383
7	F (Formulation)	93	476
8	H (Sathapatya)	108	584
9	R (Transcendental range)	260	844
10	SR (Synthesis of a pair of transcendental ranges)	554	1398

Letter wise ten folds of second word of Ganita Sutra 1 ‘पूर्वेण,

Fold			
1	W (Word)	1	1
2	S (Syllables)	3	4
3	L (Letters)	7	11
4	T (TCV value)	34	45
5	TT (Transcendence value)	703	748
6	FF (Pronouncing frequency)	174	922
7	F (Formulation)	87	1009
8	H (Sathapatya)	122	1131
9	R (Transcendental range)	240	1371
10	SR (Synthesis of a pair of transcendental ranges)	514	1885

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Ten folds of TCV of first word formulation of Ganita Upsutra

‘आनुरूप्येण

Fold			
1	W (Word)	1	1
2	S (Syllables)	5	6
3	L (Letters)	10	16
4	T (TCV value)	42	58
5	TT (Transcendence value)	453	511
6	FF (Pronouncing frequency)	174	685
7	F (Formulation)	92	777
8	H (Sathapatya)	182	959
9	R (Transcendental range)	280	1239
10	SR (Synthesis of a pair of transcendental ranges)	602	1841

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Cyclic phases of syllable wise composition

of first word formulation of Ganita Sutra 1

Syllables split

SN	i	ii	iii	iv	v
L	ए	का	धि	के	न
	6	3	9	7	9

1		6	3	9	7	9		34	34
2		3	6	2	2	3		16	50
3		3	4	0	1	0		8	58
4		1	4	1	1	3		10	68
5		3	3	0	2	2		10	78
6		0	3	2	0	1		6	84
7		3	1	2	1	1		8	92
8		2	1	1	0	2		6	98
9		1	0	1	2	0		4	102
10		1	1	1	2	1		6	108

11		0	0	1	1	0		2	110
12		0	1	0	1	0		2	112
13		1	1	1	1	0		4	116
14		0	0	0	1	1		2	118
15		0	0	1	0	1		2	120
16		0	1	1	1	1		4	124
17		1	0	0	0	1		2	126
18		1	0	0	1	0		2	128
19		1	0	1	1	1		4	132
20		1	1	0	0	0		2	134
21		0	1	0	0	1		2	136
22		1	1	0	1	1		4	140
23		0	1	1	0	0		2	142
24		1	0	1	0	0		2	144
25		1	1	1	0	1		4	148
26		0	0	1	1	0		2	150

Note – The base phases are 11 of total summation value is 110. While frequency phases are 15 of total summation value 40.

Cyclic phases of letters of words of Ganita Sutra 1

First word

Letters split

SN	i	ii	iii	iv	v	vi	vii	viii	ix
L	ए	क्	आ	ध्	इ	क्	ए	न्	अ
TCV	6	1	2	7	2	1	6	8	1

1	6	1	2	7	2	1	6	8	1	34	34
2	5	1	5	5	1	5	2	7	5	36	70
3	4	4	0	4	4	3	5	2	0	26	96
4	0	4	4	0	1	2	3	2	4	20	116
5	4	0	4	1	1	1	1	2	4	18	134
6	4	4	3	0	0	0	1	2	0	14	148
7	0	1	3	0	0	1	1	2	4	12	160
8	1	2	3	0	1	0	1	2	4	14	174

9	1	1	3	1	1	1	1	2	3	14	188
10	0	2	2	0	0	0	1	1	2	8	196
11	2	0	2	0	0	1	0	1	2	8	204
12	2	2	2	0	1	1	1	1	0	10	214
13	0	0	2	1	0	0	0	1	2	6	220
14	0	2	1	1	0	0	1	1	2	8	228
15	2	1	0	1	0	1	0	1	2	8	236
16	1	1	1	1	1	1	1	1	0	8	244
17	0	0	0	0	0	0	0	1	1	2	246
18	0	0	0	0	0	0	1	0	1	2	248
19	0	0	0	0	0	1	1	1	1	4	252
20	0	0	0	0	1	0	0	0	1	2	254
21	0	0	0	1	1	0	0	1	1	4	258
22	0	0	1	0	1	0	1	0	1	4	262
23	0	1	1	1	1	1	1	1	1	8	270
24	1	0	0	0	0	0	0	0	1	2	272
25	1	0	0	0	0	0	0	1	0	2	274
26	1	0	0	0	0	0	1	1	1	4	278
27	1	0	0	0	0	1	0	0	0	2	280
28	1	0	0	0	1	1	0	1	1	5	285
29	1	0	0	1	0	1	1	0	0	4	289
30	1	0	1	1	1	0	1	0	1	6	295
31	1	1	0	0	1	1	1	1	0	6	301
32	0	1	0	1	0	1	0	1	1	5	306
33	1	1	1	1	1	1	1	0	1	8	314
34	1	0	0	0	0	0	1	1	0	3	317
35	1	0	0	0	0	1	1	1	1	5	322
36	1	0	0	0	1	1	0	0	0	3	325
37	1	0	0	1	1	1	0	0	1	5	330
38	1	0	1	0	0	1	0	1	0	4	334
39	1	1	1	0	1	1	1	1	1	8	342
40	0	0	1	1	0	0	0	0	0	2	344
41	0	1	0	1	0	0	0	0	0	2	346
42	1	1	1	1	0	0	0	0	0	4	350
43	0	0	0	1	0	0	0	0	1	2	352
44	0	0	1	1	0	0	0	1	1	4	356
45	0	1	0	1	0	0	1	0	1	4	360

46	1	1	1	1	0	1	1	1	1	8	368
47	0	0	0	1	1	0	0	0	0	2	370
48	0	0	1	0	1	0	0	0	0	2	372
49	0	1	1	1	1	0	0	0	0	4	376
50	1	0	0	0	1	0	0	0	0	2	378
51	1	0	0	1	1	0	0	0	1	4	382
52	1	0	1	0	1	0	0	1	0	4	386
53	1	1	1	1	1	0	1	1	1	8	394
54	0	0	0	0	1	1	0	0	1	3	397
55	0	0	0	1	0	1	0	1	1	4	401
56	0	0	1	1	1	1	1	0	1	6	407
57	0	1	0	0	0	0	1	1	1	4	411
58	1	1	0	0	0	1	0	0	1	4	415
59	0	1	0	0	1	1	0	1	0	4	419
60	1	1	0	1	0	1	1	1	0	6	425
61	0	1	1	1	1	0	0	1	1	6	431
62	1	0	0	0	1	0	1	0	1	4	435
63	1	0	0	1	1	1	1	1	0	6	441
64	1	0	1	0	0	0	0	1	1	4	445
65	1	1	1	0	0	0	1	0	0	4	449
66	0	0	1	0	0	1	1	0	1	4	453
67	0	1	1	0	1	0	1	1	1	6	459
68	1	0	1	1	1	1	0	0	1	6	465
69	1	1	0	0	0	1	0	1	0	4	469
70	0	1	0	0	1	1	1	1	1	6	475
71	1	1	0	1	0	0	0	0	1	4	479
72	0	1	1	1	0	0	0	1	0	4	483
73	1	0	0	1	0	0	1	1	0	4	487
74	1	0	1	1	0	1	0	1	0	5	492
75	1	1	0	1	1	1	1	1	1	8	500
76	0	1	1	0	0	0	0	0	0	2	502
77	1	0	1	0	0	0	0	0	0	2	504
78	1	1	1	0	0	0	0	0	1	4	508
79	0	0	1	0	0	0	0	1	0	2	510
80	0	1	1	0	0	0	1	1	0	4	514
81	1	0	1	0	0	1	0	1	0	4	518
82	1	1	1	0	1	1	1	1	1	8	526

83	0	0	1	1	0	0	0	0	0	2	528
84	0	1	0	1	0	0	0	0	0	2	530
85	1	1	1	1	0	0	0	0	0	4	534

Note :- Base phases are 42. The summation values of these phases is 350. The frequency phases are 43. The summation value of these 43 frequency phases is 184. Value 42 is parallel with TCV (पुर्नजन्म Punarjanam / Rebirth). Value 43 is parallel with TCV (ब्रह्माण्ड Brahmand / Universe).

12

Cyclic phases of syllable wise composition of second word formulation of Ganita Sutra 1

SN	i	ii	iii
L	पू	वै	ण
TCV	11	15	8

1		11	15	8		34	34
2		4	7	3		14	48
3		3	4	1		8	56
4		1	3	2		6	62
5		2	1	1		4	66
6		1	0	1		2	68
7		1	1	0		2	70
8		0	1	1		2	72
9		1	0	1		2	74

Note – Base phases are 6 of summation value 68 while frequency phases are 3 of summation value 6.

Second word

Letters split

SN	i	ii	iii	iv	v	vi	vii
L	पू	ऊ	रू	वू	ए	णू	अ
TCV	5	6	3	7	6	7	1

1	5	6	3	7	6	7	1	35	35
2	1	3	4	1	1	6	4	20	55
3	2	1	3	0	5	2	3	16	71
4	1	2	3	5	3	1	1	16	87
5	1	1	2	2	2	0	0	8	95
6	0	1	0	0	2	0	1	4	99
7	1	1	0	2	2	1	1	8	107
8	0	1	2	0	1	0	0	4	111
9	1	1	2	1	1	0	0	6	117
10	0	1	1	0	1	0	1	4	121
11	1	0	1	1	1	1	1	6	127
12	1	1	0	0	0	0	0	2	129
13	0	1	0	0	0	0	1	2	131
14	1	1	0	0	0	1	1	4	135
15	0	1	0	0	1	0	0	2	137
16	1	1	0	1	1	0	0	4	141
17	0	1	1	0	1	0	1	4	145
18	1	0	1	1	1	1	1	6	151
19	1	1	0	0	0	0	0	2	153
20	0	1	0	0	0	0	1	2	155
21	1	1	0	0	0	1	1	4	159

Note :- Base phases are 14 of summation value 135 while frequency phases are 7 of summation value 24.

13

**Cyclic phases of syllable wise composition of word formulation
of Ganita Upsutra 1**

SN	i	ii	iii	iv	v
L	आ	नु	रु	प्ये	ण।
TCV	2	11	9	12	8

1		2	11	9	12	8		42	42
2		9	2	3	4	6		24	66
3		7	1	1	2	3		14	80
4		6	0	1	1	4		12	92
5		6	1	0	3	2		12	104
6		5	1	3	1	4		14	118
7		4	2	2	3	1		12	130
8		2	0	1	2	3		8	138
9		2	1	1	1	1		6	144
10		1	0	0	0	1		2	146
11		1	0	0	1	0		2	148
12		1	0	1	1	1		4	152
13		1	1	0	0	0		2	154
14		0	1	0	0	1		2	156
15		1	1	0	1	1		4	160
16		0	1	1	0	0		2	162
17		1	0	1	0	0		2	164
18		1	1	1	0	1		4	168
19		0	0	1	1	0		2	170
20		0	1	0	1	0		2	172
21		1	1	1	1	0		4	176
22		0	0	0	1	1		2	178
23		0	0	1	0	1		2	180
24		0	1	1	1	1		4	184
25		1	0	0	0	1		2	186

Note :- Base phases are 10 of summation value 146 while frequency phases are 15 of summation value 40.

14

Cyclic phases of letters of words of Ganita Upsutra 1

Letters split

SN	i	ii	iii	iv	v	vi	vii	viii	ix	x
L	आ	न्	उ	रू	ऊ	प्	य्	ए	ण्	अ।
TCV	2	8	3	3	6	5	1	6	7	1

1		2	8	3	3	6	5	1	6	7	1	42	42
2		6	5	0	3	1	4	5	1	6	1	32	74
3		1	5	3	2	3	1	4	5	5	5	34	108
4		4	2	1	1	2	3	1	0	0	4	18	126
5		2	1	0	1	1	2	1	0	4	0	12	138
6		1	1	1	0	1	1	1	4	4	2	16	154
7		0	0	1	1	0	0	3	0	2	1	8	162
8		0	1	0	1	0	3	3	2	1	1	12	174
9		1	1	1	1	3	0	1	1	0	1	10	184
10		0	0	0	2	3	1	0	1	1	0	8	192
11		0	0	2	1	2	1	1	0	1	0	8	200
12		0	2	1	1	1	0	1	1	1	0	8	208
13		2	1	0	0	1	1	0	0	1	0	6	214
14		1	1	0	1	0	1	0	1	1	2	8	222
15		0	1	1	1	1	1	1	0	1	1	8	230
16		1	0	0	0	0	0	1	1	0	1	4	234
17		1	0	0	0	0	1	0	1	1	0	4	238
18		1	0	0	0	1	1	1	0	1	1	6	244
19		1	0	0	1	0	0	1	1	0	0	4	248
20		1	0	1	1	0	1	0	1	0	1	6	254
21		1	1	0	1	1	1	1	1	1	0	8	262
22		0	1	1	0	0	0	0	0	1	1	4	266

23	1	0	1	0	0	0	0	1	0	1	4	270
24	1	1	1	0	0	0	1	1	1	0	6	276
25	0	0	1	0	0	1	0	0	1	1	4	280
26	0	1	1	0	1	1	0	1	0	1	6	286
27	1	0	1	1	0	1	1	1	1	1	8	294
28	1	1	0	1	1	0	0	0	0	0	4	298
29	0	1	1	0	1	0	0	0	0	1	4	302
30	1	0	1	1	1	0	0	0	1	1	6	308
31	1	1	0	0	1	0	0	1	0	0	4	312
32	0	1	0	1	1	0	1	1	1	1	7	319
33	1	1	1	0	1	1	0	0	0	1	6	325
34	0	0	1	1	0	1	0	0	1	0	4	329
35	0	1	0	1	1	1	0	1	1	0	6	335
36	1	1	1	1	1	1	1	1	1	1	10	345
37	0	0	0	0	0	0	0	0	0	0	0	345

Note :- At 37st phase it attains zero value. The summation value of 16 phases is 345.

15

Ten folds table of formulation पृथिवि (Prithvi / Earth / first element)

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	3	4
3.	L	6	10
4.	T	25	35
5.	T T	0	35
6.	F F	145	180
7.	F	88	268
8.	H	88	356
9.	R	185	541
10.	SR	395	936

16

Ten folds table of formulation **आप** (*Aap / Water / second element*)

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	2	3
3.	L	3	6
4.	T	8	14
5.	T T	20	34
6.	F F	68	102
7.	F	39	141
8.	H	26	167
9.	R	70	237
10.	SR	148	385

17

Ten folds table of formulation **अग्नि** (*Agni / Fire / Third element*)

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	2	3
3.	L	4	7
4.	T	14	21
5.	T T	3	24
6.	F F	94	118
7.	F	43	161
8.	H	48	209
9.	R	110	319
10.	SR	234	553

18

Ten folds table of formulation वायु (*Vayu / Air / Fourth element*)

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	2	3
3.	L	4	7
4.	T	13	20
5.	T T	32	52
6.	F F	93	145
7.	F	46	191
8.	H	44	235
9.	R	105	340
10.	SR	223	563

19

Ten folds table of formulation आकाश (*Akash / Space / Fifth element*)

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	3	4
3.	L	5	9
4.	T	8	17
5.	T T	16	33
6.	F F	108	141
7.	F	64	205
8.	H	22	227
9.	R	90	317
10.	SR	188	505

20

Ten folds table of formulation सूर्य (*Surya / at whose origin is Pole Star, 7-space of TCV (ध्रुव) = 19 and D19 spectra is of value 68 parallel with five basic elements. As such the content supplier (उपादान कारण) and creation with content (निमित्त कारण) of manifestations of existence phenomenon of solar universe follows and is lively with the cyclic phases of motions of Pole Star and consequently of Sun and planets.*

Word formulation **सूर्य**

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	2	3
3.	L	5	8
4.	T	13	21
5.	T T	153	174
6.	F F	113	287
7.	F	42	329
8.	H	50	379
9.	R	115	494
10.	SR	243	737

21

Ten folds table of formulation ध्रुव / Dhurav / Pole star

TCV (ध्रुव) is $19 = 18 + 1$; TCV (शून्य) and 19 is one step ahead of 18. This is one of the applications of Ganita Sutra 1 leading us from Ganita Sutra 1 to Ganita Sutra 2, 'all from 9 and last from 10'; $9 + 10 = 19$.

Word formulation **ध्रुव**

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	2	3
3.	L	5	8

4.	T	19	27
5.	T T	-2	25
6.	F F	119	144
7.	F	60	204
8.	H	64	268
9.	R	145	413
10.	SR	309	722

22

Integrated Table of the text of 16 Ganita Sutras and 13 Upsutras

	Sutra	Words	Syllables	Letters	TCV
Ganita Sutra 1	एकाधिकेन पूर्वेण ।	2	8	16	68
Ganita Upsutra 1	आनुरूप्येण ।	1	5	10	42
Ganita Sutra 2	निखिलं नवतश्वरमं दशतः	3	12	28	107
Ganita Upsutra 2	शिष्यते शेषसंज्ञः ।	2	7	18	74
Ganita Sutra 3	ऊर्ध्वतिर्यग्भ्याम्	1	5	15	56
Ganita Upsutra 3	आद्यमाद्येनान्त्यमन्त्येन	1	9	23	96
Ganita Sutra 4	परावर्त्यं योजयेत् ।	2	7	17	51
Ganita Upsutra 4	केवलैः सप्तकं गुण्यात् ।	3	8	21	86
Ganita Sutra 5	शून्यं साम्यसमुच्चये	2	8	20	71
Ganita Upsutra 5	वेष्टनम् ।	1	3	08	41

Ganita Sutra 6	(आनुरूप्ये) शून्यमन्यत् ।	2	8	19	76
Ganita Upsutra 6	यावदूनं तावदूनम् ।	2	8	18	85
Ganita Sutra 7	संकलनव्यवकलनाभ्याम् ।	1	10	24	85
Ganita Upsutra 7	यावदूनं तावदूनीकृत्य वर्गं च योजयेत् ।	5	16	37	140
Ganita Sutra 8	पूरणापूरणाभ्याम् ।	1	6	16	68
Ganita Sutra 9	चलनकलनाभ्याम् ।	1	7	16	56
Ganita Upsutra 8	अन्त्ययोर्दशकेऽपि ।	1	7	16 (17)	50 (51)
Ganita Sutra 10	यावदूनम् ।	1	4	9	41
Ganita Upsutra 9	अन्त्ययोरेव ।	1	5	11	40
Ganita Sutra 11	व्यष्टिसमष्टिः ।	1	5	14	58
Ganita Upsutra 10	समुच्चयगुणितः ।	1	7	16	56
Ganita Sutra 12	शेषाप्यङ्केन चरमेण ।	2	8	20	76
Ganita Upsutra 11	लोपनस्थपनाभ्याम् ।	1	7	17	73
Ganita Sutra 13	सोपान्त्यद्वयमन्त्यम्	1	7	20	80
Ganita Upsutra 12	विलोकनम् ।	1	4	09	41
Ganita Sutra 14	एकन्यूनेन पूर्वेण ।	2	8	17	80

Ganita Upsutra 13	गुणितसमुच्चयः समुच्चयगुणितः ।	2	14	32	112
Ganita Sutra 15	गुणितसमुच्चयः	1	7	16	56
Ganita Sutra 16	गुणकसमुच्चयः ।	1	7	16	52

Consolidated table of integrated format

Integrated format of Ganita Sutras and Upsutras and their four folds of TCV

W= Word, Tw =Total word, S = Syllable, Ts= Total syllable, L = Letter,
TL = Total letter, TCV = TCV, TTCV = Total TCV, GT = Grand total of
all the above four, GGT = grand total of grand totals of all

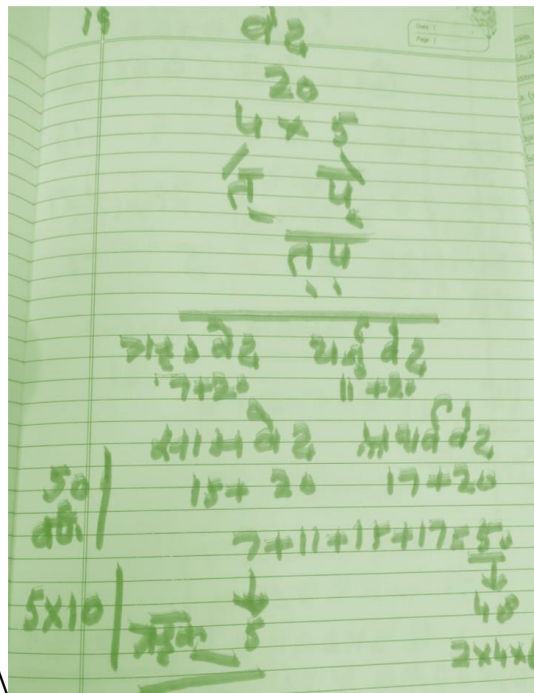
	W	Tw	S	Ts	L	TL	TCV	TTCV	GT	GGT
Ganita Sutra 1	2	2	8	8	16	16	68	68	94	94
Ganita Upsutra 1	1	3	5	13	10	26	42	110	58	152
Ganita Sutra 2	3	6	12	25	28	54	107	217	150	302
Ganita Upsutra 2	2	8	7	32	18	72	74	291	101	403
Ganita Sutra 3	1	9	5	37	15	87	56	347	77	480
Ganita Upsutra 3	1	10	9	46	23	110	96	443	129	609
Ganita Sutra 4	2	12	7	53	17	127	51	494	77	686
Ganita Upsutra 4	3	15	8	61	21	148	86	580	118	804
Ganita Sutra 5	2	17	8	69	20	168	71	651	101	905
Ganita Upsutra 5	1	18	3	72	8	176	41	692	53	958

Ganita Sutra 6	2	20	8	80	19	195	76	768	105	1063
Ganita Upsutra 6	2	22	8	88	18	213	85	853	113	1176
Ganita Sutra 7	1	23	10	98	24	237	85	938	120	1296
Ganita Upsutra 7	5	28	16	114	37	274	140	1078	198	1494
Ganita Sutra 8	1	29	6	120	16	290	68	1146	91	1585
Ganita Sutra 9	1	30	7	127	16	306	56	1202	80	1665
Ganita Upsutra 8	1	31	7	134	16	322	50	1252	74	1739
Ganita Sutra 10	1	32	4	138	9	331	41	1293	55	1794
Ganita Upsutra 9	1	33	5	143	11	342	40	1333	57	1851
Ganita Sutra 11	1	34	5	148	14	356	58	1391	78	1929
Ganita Upsutra 10	1	35	7	155	16	372	56	1447	80	2009
Ganita Sutra 12	2	37	8	163	20	392	76	1523	106	2115
Ganita Upsutra 11	1	38	7	170	17	409	73	1596	98	2213
Ganita Sutra 13	1	39	7	177	20	429	80	1676	108	2321
Ganita Upsutra 12	1	40	4	181	9	438	41	1717	55	2376
Ganita Sutra 14	2	42	8	189	17	455	80	1797	107	2483
Ganita Upsutra 13	2	44	14	203	32	487	112	1909	160	2643
Ganita Sutra 15	1	45	7	210	16	503	56	1965	80	2723
Ganita Sutra 16	1	46	7	217	16	519	52	2017	76	2799

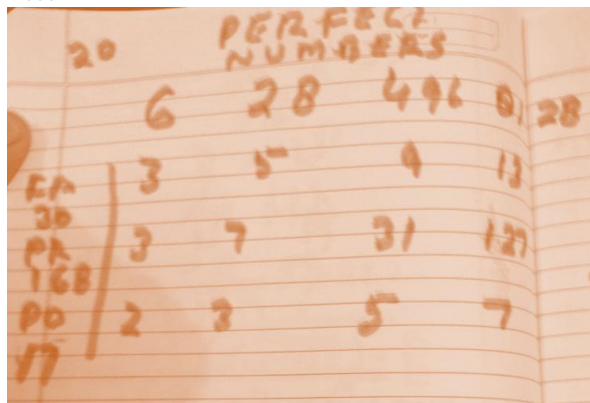
Photocopies of my note sheets

Here below are reproduced photocopies of my note sheets which may provide insight and be of help while entering upon exercises of chase of mathematical domains of Ganita Sutra 2 and Upsutra 2 onwards. There are about 90 sheets note book. Here for the present only 22 are being reproduced for the present. Remaining will follow in the following PDF documents 11.5.2 onwards.

Sheet 1



///



21

SUM UP

VEDIC GANIT

15
शुद्धा

SUTRAS

BASE

3 4 5 6 8 | 26

2001 H7

शुद्धा

NAYAS

15

0 1 2 7 9 10 29

75/DOMAIN

शुद्धा H7

TRANSCENDENTAL

ORDER - IS

9 10 | 11

REACHED ;

UNITY ORDER IS

REACHES

STEP

4 CREATIVE ORDER

TO

5 TRANSCENDENTAL ORDER

5 space order

3 space in of in

3 3 space H₃

H₃ 10 11/2

H₄ 14 11/1

4 space in of in

6 space

Self referred order

REACHED

23
43

10

14

प्रादि पूरत

वर्षा 105

19 मद्य

44 परमोपान

10 11 14

15 12 14

60

10 + 50

↓

पुनरो विंशति

19

10 + 9

1 = 10

1 = 9

अद्य 1 = 9

1

पुनः पुनः
 129 14
 31 14
 35
 3 २ १ १ १ १
 5 7 6
 31 7 6
 7 पुनः
 35 36
 171

Creative Order
 पुनः पुनः
 पुनः पुनः
 24
 5 7 5 2
 24 25
 49
 6 7 7 2
 0
 Unity State Order
 BRAHM

Unity State Ord
 Brahman
 ॐ
 २४
 ५×७
 ७ ८ ९ १० ११
 ५ ६ ७ ८ ९
 ३ ४ ५ ६ ७
 १ २ ३ ४ ५

 १६ २० २४ २८ ३२

ॐ	१६				
ॐ	२०				
ॐ	२४				
ॐ	२८				
ॐ	३२	४×५	२/५	१६	
क	ख	ग	घ	ङ	१५
ट	ठ	ड	ढ	ण	२५
प	फ	ब	भ	म	३५

$\begin{array}{r} 4 \\ 9 \\ -9 \\ \hline \end{array}$
 $\begin{array}{r} 2 \\ 8 \\ -8 \\ \hline \end{array}$
 $\begin{array}{r} 0 \\ 7 \\ -7 \\ \hline \end{array}$
 $\begin{array}{r} 4 \\ 6 \\ -6 \\ \hline \end{array}$
 $\begin{array}{r} 4 \\ 5 \\ -5 \\ \hline \end{array}$

$\begin{array}{r} H_9 \\ \hline \end{array} \quad || \quad \begin{array}{r} H_9 \\ \hline \end{array}$

$\begin{array}{r} H_8 \\ \hline \end{array} \quad || \quad \begin{array}{r} H_8 \\ \hline \end{array}$

$\begin{array}{r} 6 \\ 7 \\ -7 \\ \hline \end{array}$
 $\begin{array}{r} 2 \\ 6 \\ -6 \\ \hline \end{array}$
 $\begin{array}{r} 5 \\ 5 \\ -5 \\ \hline \end{array}$
 $\begin{array}{r} 2 \\ 4 \\ -4 \\ \hline \end{array}$
 $\begin{array}{r} 5 \\ 3 \\ -3 \\ \hline \end{array}$

$\begin{array}{r} H_7 \\ \hline \end{array} \quad || \quad \begin{array}{r} H_7 \\ \hline \end{array}$

$\begin{array}{r} H_6 \\ \hline \end{array} \quad || \quad \begin{array}{r} H_6 \\ \hline \end{array}$

5, 4, 3, 2, 1

5 4 3 2 1

-3 -4 -3 -2, -1

H₂ || H₃

H₂ || H₁

Reverse Oriental

Unity Brahm

ज्ञानः कवण
 41

 मन 69
 मध
 दधान
 धुवे
 सजुनि / कवण
 → | ←

वृत्ति 25
 ममि
 विष्णु
 25 | 52
 6 | 115
 1 = 15
 1 = 25

चिन्ता
 13

 सदाश
 13 | 31
 44

 परम ध्याय

सदाशः
 23 + 13
 36 अनुबन्ध
 प्रणवः
 प्रणवः | सर्व वदेयु
 36 | 14 29
 43
 43
 41
 ज्ञानः कवण

1
2
3
4
5
6
7
8



1
2
3
4
5
6
7
8

Handwritten musical notation and a table on lined paper.

Notes and numbers written above the staves:

- Staff 1: 1
- Staff 2: 1
- Staff 3: 8, 12, 5, 7, 9
- Staff 4: 8
- Staff 5: 8

4	5	6	7
2	8	16	68
1	5	10	42
1	3	6	26

Below the table, there are several horizontal lines with brackets, likely representing musical notation or a sequence of notes.

[51.

51]

सूत्र 1

X

सूत्र 2

35

93

58

148

39

14

51

47

सूत्र 1

उपसूत्र 1

सूत्र 2

उपसूत्र 2

68

107

56

—

उपसूत्र 1

X

उपसूत्र 2

42

32

2

20

42

74

76

0 2 2 1 5 9 15
 1 3 7 14

का. वि. प्र. वि.

68	6	3	9	7	9	11	15	8
28	3	6	2	2	2	4	7	2
18	3	4	0	0	2	3	5	1
16	1	4	0	2	1	2	4	2
16	3	4	2	1	1	2	2	1
16	1	2	1	0	1	0	1	2
8	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1

162	8
81	4
81	4
34	

68 28 18 D₁

3	3
3	3

D₁₉ D₉ (15) D₆ D₄

42-24 अर्थात् 21: 68 |

34-21 अर्थात् 13: 42 |

युक्ति	100
जाति	15
जाति	21
जाति	20
जाति	16

5x35

5x5x7

175



75 |
50 | 175 |
50 |

D_{11}	H_{11}	$\sum_{i=1}^{19}$			
		(30×11)	6×9		
1	8	16	36	59	
2	5	10	34	50	
3	3	6	6		
4	12	28	107	150	
5	9	18	74	102	
6	0	0	108		

प्रथम
 प्रथम
 प्रथम पुनः
 21 24
 प्रथम
 प्रथम पुनः
 प्रथम पुनः

7
 6 \rightarrow 5 \leftarrow 28
 6 \times 4 24
 5
 3 \times 4 20
 4
 4 \times 4 16

18-05-2025
 Dr. S. K. Kapoor