Phase 11 Vedic Ganita Sutras & Upsutras

(Sankhiya Nishta – Yoga Nishtha – Samya Samuchayya Aadhar Vavastha Ganit) सॉख्य निष्ठा योग निष्ठा साम्य समुच्चय आधार व्यवस्था गणित 20 22 12 22 16 23 15 27 18

11.5.9

Vedic Ganita Sutras Mathematics

is of sequentially phased reach steps

1. Integrated format of Sutras and Upsutras phase

2. Dimensional Synthesis values formats

Table 1:

Table of dimensional synthesis value of Axes 1 to 31 of first, second and third orders

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Table 2: Chakra (च्रक), Table 3: Ustish (उषित्स)

4. Formulation Yoga (योग)

Table 4 : Yoga (योग) Table 5 : Brahamastra (ब्रह्माशस्त्र)

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Phase 11

Vedic Ganita Sutras & Upsutras

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Vedic Ganita Sutras Mathematics

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I Integrated format of Sutras and Upsutras phase

One illustration below of simultaneous application of Ganita Sutra 1 and Ganita Upsutra 2.

Ganita Sutra 1 is of value that sequentially one step be taken ahead of the previous steps. Ganita Upsutra 1 is of the value that one shall follow the forms as those are framed. As such Ganita Sutra 1 is a rule of sequential steps and Ganita Upsutra 1 is a rule of symmetry.

Reach at $(A+B)^2 (A+B)^3 (A+B)^4$ and so on, by actual multiplication is as

$$(A + B)^{1} = A + B$$

$$(A + B)^{2} = A^{2} + 2AB + B^{2}$$

$$(A + B)^{3} = A^{3} + 3A^{2}B + 3AB^{2} + B^{3}$$

$$(A + B)^{4} = A^{4} + 4A^{3}B + 6A^{2}B^{2} + + 4AB^{3} + B^{4}$$

See

power 1 terms 2 multipliers of terms are 1 and 1 power 2 terms 3 multipliers of terms are 1, 2 and 1 power 3 terms 4 multipliers of terms are 1, 3, 3 and 1 power 4 terms 5 multipliers of terms are 1, 4, 6, 4 and 1

see

the multipliers of power 1 are 1 and 1, being equal.

The multipliers of power 2 are (1, 2, 1), a symmetrical reach from both orientations from 1 to 2 and 1 to 2 being of opposite orientation;

The multipliers of power 3 are (1, 3, 3, 1), of a symmetrical reach (1, 3 and 1, 3) being of opposite orientation of 3 and 1.

The multipliers of power 4 are (1, 4, 6, 4, 1) of symmetrical reach (1, 4, 6) and (1, 4, 6) being of opposite orientation (6, 4, 1).

The sequential steps patterns (symmetry) of reach from power 2 to power 3 are of phased steps

(i) 1 2 1 (ii) 1 2 1 (iii) 1 3 3 1

The sequential steps patterns (symmetry) of reach from power 3 to power 4 are of phased steps

(iv) 1 3 3 1 (v) 1 3 3 1 (vi) 1 4 6 4 1

Now if we have to reach ahead from $(A + B)^4$ to $(A+B)^5$ then Only required steps would be

(i) 1 4 6 4 1 (ii) 1 4 6 4 1 (iii) 1 5 10 10 5 1

The power is 5

Terms are 6

Powers of A will be sequentially decreasing as 5, 4, 3, 2, 1, 0 Powers of B will be sequentially increasing as (0, 1, 2, 3, 4, 5)

With above multipliers full expression of
$$(A+B)^5$$
 will be $1 A^5 B^0 + 5 A^4 B^1 + 10 A^3 B^2 + 10 A^2 B^3 + 5 A^1 B^4 + 1 A^0 B^5$

Likewise reach from $(A+B)^5$ to $(A+B)^6$ will be for its 7 terms multipliers will be

And full expression of
$$(A+B)^6$$
 will be $1 A^6 B^0 + 6 A^5 B^1 + 15 A^4 B^2 + 20 A^3 B^3 + 15 A^2 B^4 + 6 A^1 B^5 + 1 A^0 B^6$

One can sequentially reach at uptill any (N) power (A+B)^N

2 Dimensional Synthesis values formats

The Dimensional synthesis values summation of axes 1, 2, 3 and 4 is 20 for dimensions of all orders 1, 2, 3, 4, ---- N.

For fifth axes, consecutive sequentially decrease is 5 i.e. for first order 15, for second order 10, for third order 5 and for fourth order 0.

For sixth axes, consecutive sequential decrease is 5 i.e. for first order 21, for second order 12, for third order 3 and for fourth order '-6'

Dimensional synthesis values of consecutive orders, from fifth axes onwards sequentially decrease by values 5, 9, 14, 20, 27, 35, 44, 54, 65, 77, 90, 104, 119, 135, 152, 170, 189, 209, 230, 252, 275, 299, 324, 350, 377, 405, 434 etc etc.

Axes 7 to 31 of order 3, each is of value '0'.

Table 1 Table of dimensional synthesis value of Axes 1 to 31 of first, second and third orders

R1 = Axes 1 to 4, R2 = Axes 5 & 6, R3 = Axex 7 to 13, R4 = Axes 14 to 20, R5 = Axes 21 to 31, FO = First Order, SO = Second order, TO = Third order

| R1 | i ii iii iv |
|----|---|
| FO | 1, 3, 6, 10 |
| SO | 2 4 6 8 |
| TO | 3 5 6 6 |
| | |
| R2 | v vi |
| FO | 15 21 |
| SO | 10 12 |
| TO | 5 3 |
| R3 | vii viii ix x xi xii xiii |
| FO | 28, 36, 45, 55, 66, 78, 91, |
| SO | 14 16 18 20 22 24 26 |
| TO | |
| R4 | xiv xv xvi xvii xviii xix xx |
| FO | 105, 120, 136 153 171 190 210 |
| SO | 28 30 32 34 36 38 40 |
| TO | -1 -1 -1 -1 -1 -1 |
| R5 | Xxi xxii xxiii xxiv xxv xxvi xxvii |
| FO | 231 253 276 300 325 351 377 |
| SO | 42 44 46 48 50 52 54 |
| TO | |
| R6 | v vi vii viii ix x xi xii xiii xiv xv xvi xvi |
| FO | 5 9 14 20 27 35 44 54 65 77 90 104 119 135 152 170 |
| SO | 15 21 28, 36, 45, 55, 66, 78, 91, 105, 120, 136 153 171 190 210 |
| TO | 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 |
| | |
| | 5 3 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| | V.:: V: V: |
| | Xxi xxii xxiii xxiv xxv xxvi xxvii Xxviii xxix xxx xxxi |
| | 189 209 230 252 275 299 324 350 377 405 434 |
| | 231 253 276 300 325 351 378 406 435 465 496 |
| | 42 44 46 48 50 52 54 56 58 60 62 |
| | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 $ |

3 Cyclic phases

Chakra (च्रक) is sun of Ustish (उपत्स)

Chakra (च्रक) 2 1 1 1

TCV Chakra (च्रक) = 5

Cyclic phases are 5 and 5th phase is of value '0'

First 4 phases values are (5, 2, 2, 4) of summation value 13

Value 13 accepts organization 5 + 3 + 5; a format of split of 5-space domain into a pair of 5-space domains of half dimensions.

The value 5+3=8 is parallel to TCV (आकाश / Akash / Space). (5+3) and (3+5) are reflection pairs, 5+3=8 and 3+5=8 together 16. Values range 1 to 16 is of factors 1 to 29=16+13. Value 16 is the 6-space spectra (6,4,4,2) and $13=\mathbf{G}_{13}^{6}$.

Hereunder is table 2 of cyclic phases of formulation Chakra.

Table 2 Chakra (च्रक) $0 \mid 0$ 0 1

Ustish (उष्त्स) 3 6 1 4 3 2

TCV Ustish (उष्ति)= 19

Cyclic phases are 3 + 6; first 3 phases are the base phases and subsequent 6 phases are the cyclic phases. The manifestation over the base is of 6 phases blocks.

Base phases are of values (19, 14, 8) and cyclic manifestation block phases are of values (4, 8, 4, 8, 4, 8). This manifestation as well of triple inner cycles of pair phases of value (4, 8).

Hereunder is table 3 of cyclic phases of formulation **Ustish**.

Table 3 Ustish (उपत्स)

| 1 | 3 | 6 | 1 | 4 | 3 | 2 | | | 19 | 19 |
|---|---|---|---|---|---|---|--|--|----|----|
| 2 | 3 | 5 | 3 | 1 | 1 | 1 | | | 14 | 33 |
| 3 | 2 | 2 | 2 | 0 | 0 | 2 | | | 8 | 41 |
| 4 | 0 | 0 | 2 | 0 | 2 | 0 | | | 4 | 45 |
| 5 | 0 | 2 | 2 | 2 | 2 | 0 | | | 8 | 53 |

| 6 | 2 | 0 | 0 | 0 | 2 | 0 | | | 4 | 57 |
|---|---|---|---|---|---|---|--|--|---|----|
| 7 | 2 | 0 | 0 | 2 | 2 | 2 | | | 8 | 65 |
| 8 | 2 | 0 | 2 | 0 | 0 | 0 | | | 4 | 69 |
| 9 | 2 | 2 | 2 | 0 | 0 | 2 | | | 8 | 77 |

Formulation Yoga (योग)

'Yog' means 'to join the operation steps'. The formulation Yoga (योग) is of 7 cyclic phases of values (12, 12, 12, 8, 8, 16, 0) = 68. It is at seventh phase that '0' value stands attained. Impliedly the operations (like multiplication / powers as is the Vedic Ganit Subsutra (केवलै: सप्तकं गुणात्), it is to be only uptill seventh power.

TCV (पच्चमहाभूतः / Panch Mahabhut) = 68. Five basic elements are पृथिवि Prithavi/ Earth, आप Aapa / Water, अग्नि Agni / Fire, वायु / Vayu / Air and आकाश Akash / Space.

TCV (पृथिवि) = 25, TCV (आप) = 8, TCV (अग्नि) = 14 TCV (वायु) = 13 TCV (आकाश) = 8
$$25 + 8 + 14 + 13 + 8 = 68$$

Hereunder is table 4 of cyclic phases of formulation Yoga (योग).

Table 4 Yoga (योग)

Brahamastra (ब्रह्माशस्त्र) Unified format 46 46 44 6 Braham (ब्रह्म) Astra (अशस्त्र) is of 7 cyclic phases of values (142, 80, 80, 144, 8, 16, 0). At 7th cycle '0' value is attained.

Hereunder is table 5 of cyclic phases of formulation Brahamastra (ब्रह्माशस्त्र).

Table 5 Brahamastra (ब्रह्माशस्त्र)

| | ======================================= | | | | | | | | | | | |
|---|---|----|----|----|----|--|--|-----|-----|--|--|--|
| 1 | | 46 | 46 | 44 | 6 | | | 142 | 142 | | | |
| 2 | | 0 | 2 | 38 | 40 | | | 80 | 222 | | | |
| 3 | | 2 | 36 | 2 | 40 | | | 80 | 302 | | | |
| 4 | | 34 | 34 | 38 | 38 | | | 144 | 446 | | | |
| 5 | | 0 | 4 | 0 | 4 | | | 8 | 454 | | | |
| 6 | | 4 | 4 | 4 | 4 | | | 16 | 470 | | | |
| 7 | | 0 | 0 | 0 | 0 | | | 0 | 470 | | | |

Even Brahamastra (ब्रह्माशस्त्र) in the modern times, a atomic weapon / bomb is not of infinite cycles at 7th cycle it also attains value '0'.

In Treta yuga, Laxmana (लक्ष्मण) and Meghnath (मेघनाथ), both were equipped with Brahamastra (ब्रह्माशस्त्र) but they restrained themselves of its use accepting as that once initiated into action, the same have no way ineffective.

In Dwapar yuga, Ashwathama (अश्वत्थधामा) and Arjun (अर्जुन), both were equipped with Brahamastra (ब्रह्माशस्त्र) and use of Brahamastra (ब्रह्माशस्त्र) by Ashwathama (अश्वत्थधामा) was made in effective by Brahamastra (ब्रह्माशस्त्र) put into counter action by Arjuna (अर्जुन).

Modern day periodic table is of about 108 elements while Vedic Periodic table is of 120 elements. It is parallel with 120 Creative (4-space) components enveloping all the 12 transcendental (5-space) component, each of it being enveloped by 10 creative components.

The domain boundary ratio of 6-space is A^6 :12 B^5 . The transcendental boundary of 12 components is coordinated by 6-space dimensional frame into 6 x 12 = 72 coordinates. 6-space is a set up of 13 geometries. 6 x 13 = 78 coordinates coordinated and 12 x 6 = 72 coordinates coordinated

elements have their limitations of enrichments. Even the enrichment of these elements for manufacturing atomic weapons are of limitations.

5 Manifested and Transcendental Srishti (सृष्टि)

Whole of manifested and transcendental Srishti above Earth and below Earth is within Akash (आकाश / space). The vedic conclusion is of reach (particular reference Chandgiyoupnishad and Brihadarnik Upnishad) is that Akash (आकाश / space) is within Akshar(अक्षर) / Om(ॐ),TCV(ॐ)=16.

1 x 8 is of Sathapatya format 3 x 8

TCV (व्योम्/ Viyom) =
$$24 = 3 \times 8$$
.

Vedic Dictionary Amarkosh gives 24 synonums / meanings of Viyom.

Formulations Akash and Viyom cyclic phases

TCV Akash (आकाश) = 8

Cyclic phases are 4 and 4th phase is of value '0'

First 3 phases values are (8, 2, 3) of summation value 13.

At fourth phase is attained '0' value.

Hereunder is table 6 of cyclic phases of formulation Akash (आकाश)

Table 6 Akash (आकाश)

| 1 | 2 | 3 | 3 | | 8 | 8 |
|---|---|---|---|--|---|----|
| 2 | 1 | 0 | 1 | | 2 | 10 |
| 3 | 1 | 1 | 1 | | 3 | 13 |
| 4 | 0 | 0 | 0 | | 0 | 13 |

TCV Viyom (व्योम्) = 24 Cyclic phases are 5 and 5^{th} phase is of value '0' First 4 phases values are (24, 16, 8, 16, 0) of summation value 64. At fifth phase is attained '0' value.

While formulation Akash (आकाश) had attained 0 value at fourth cylic phase.

4-space Srishti (manifested creation) is enveloped by Akash.5-space Srishti (transcendental creation) is enveloped by Viyom.

64 as dimension of 66 as domain.

66 = 24 + 42

TCV (पुरूष / Purush / Man) = 24

TCV (पूर्नजन्म / Punarjanam / Rebirth) = 42.

TCV (पुरूष पुर्नजन्म / Man Rebirth) = 66

Hereunder is table 7 of cyclic phases of formulation (व्योम्/ Viyom)

Table 7 (व्योम्/ Viyom)

| | | (-41 | <u>'</u> ' | 1 | U | | <u>, </u> | |
|---|---|------|------------|----------|---|---------|--|----|
| 1 | 7 | 1 | 7 | 9 | | | 24 | 24 |
| 2 | 6 | 6 | 2 | 2 | | | 16 | 40 |
| 3 | 0 | 4 | 0 | 4 | | | 8 | 48 |
| 4 | 4 | 4 | 4 | 4 | | | 16 | 64 |
| 5 | 0 | 0 | 0 | 0 | | | 0 | 0 |

Param Viyom (परम् व्योम्) Syllables format

Rigved (ऋग्वेद) enlightens that within Akshras (अक्षर) of Richas (रिचा), is lively Paramvihom (परम् ब्योम्) (रिचो अक्षरे परमब्योमन....)

TCV Param Viyom (परम् व्योम्) = 44

Cyclic phases are 7 and 7th phase is of value '0'

First 7 phases values are (44, 40, 32, 32, 16, 32, 0) of summation value 196.

At seventh phase is attained '0' value.

While formulation Akash (आकाश) had attained 0 value at fourth cylic phase.

4-space Srishti (manifested creation) is enveloped by Akash.

5-space Srishti (transcendental creation) is enveloped by Viyom.

Both manifested and transcendental creations are enveloped by Param Vihom.

Akash attains 0 value in its 4th cycle,

Vihom attains 0 value in its 5th cycle.

Param Vihom attains it 0 value in its 7th cycle.

Hereunder is table 8 of cyclic phases of formulation Akash (आकाश)

Table 8 Param Viyom (परम् व्योम्)

| 1 | 6 | 4 | 10 | 24 | | 44 | 44 |
|---|---|---|----|----|--|----|-----|
| 2 | 2 | 6 | 14 | 18 | | 40 | 84 |
| 3 | 4 | 8 | 4 | 16 | | 32 | 116 |
| 4 | 4 | 4 | 12 | 12 | | 32 | 148 |
| 5 | 0 | 8 | 0 | 8 | | 16 | 164 |
| 6 | 8 | 8 | 8 | 8 | | 32 | 196 |
| 7 | 0 | 0 | 0 | 0 | | 0 | 196 |

6 Organization of text of Srimad Bhagwad Geeta

Text of Srimad Bhagwad Geeta of 700 shalokas is organized in 18 chapters. At its middle, in between chapter 9 and chapter 10 is lively Param Viyom (परम् व्योम्).

Chapters 1 to 9 are of 350 + 22 = 372 shalokas. Chapters 10 to 19 are of 350 - 22 = 328 shalokas

TCV (Param Vihom (परम् व्योम्)) = 44 = 22 + 0 + 22. It is the format of (22, 0, -22).

The Vedic Ganita Rule of Sutra 4 (परावर्त्य योज्येत), the second half is taken in its reverse orientation and it makes 22 + 0 and 22 + 0. The spatial format of this bend (of 0 order) and of pair of 0 order axes / dimensional frame and the value after reversal of orientation and unified superimposition takes us to value 44 from the bend (middle).

700 shalokas are of organization 350 + 350. And the Param Vihoman split and transformed format is of organization 350 + 22 = 372 shalokas of chapter 1 to 9 and 350 - 22 = 328 shaokas chapters 10 to 18. It is relevant to note that TCV (शून्य / suyna / zero) = 18

Sum Up

With this 11.5.9 write up, the chase of basic values of Ganita Sutras is complete. In the following phase 12, with the help of phases 1 to 11, the knowledge and enlightenment of Vedic knowledge scriptures will be comprehended and in the light of vedic knowledge scriptures, the text of Ganita Sutras and Upsutras, which is visibly, applied as individual Sutra and Upsutra, will be located with references and specific applications thereof.

21-06-2025, Dr. S. K. Kapoor