# Vedic Mathematics, Science \& Technology Teacher Course 

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## VARGA FORMULATION

This day the course focus is upon 'Varga formulation'. It four folds aspects being taken up are as follows:
117. Pair of faces of a surface
118. Varga formulation
119. Hyper cube 2 format
120. Spatial dimensional format

The values being covered are to be taught as lessons numbers 117 to 120 to the students of 4 -space Vedic Mathematics, Science \& Technology.

## LESSON-117

## PAIR OF FACES OF A SURFACE

1. Within, 3-space, surface has a pair of faces.
2. Parallel to it are the pairs of orientations.
3. Symmetry of organization format for the pair of orientations makes it mathematical possible to reach at the value of one orientation in terms of the values available for the other orientations.
4. Continuum to be worked out with simultaneous availability of counts and there gaps-counts as is the www.vedicganita.org/vmcourses
attainment of spatial order in terms of values flow streams pair of values steps $(1,3 / 2,2,5 / 2,3,7 / 2,4$, 9/2, $5 \ldots$...

## LESSON-118 VARGA FORMULATION

5. Ganita Sutras and upsutras avail Varga formulation.
6. Term Vargas' is part of the text of Ganita Upsutra 7.
7. Term Varga literally means 'square'.
8. Conceptually Varga is a representative regular body of 2 -space.
9. Format wise representative regular body of 2 -space is of feature and values of 'hyper cube 2'.
10. But for this geometric format of a dimensional body, no other term / formulation regarding any other dimensional space body is availed in the text of Ganita Sutras and upsutras.
11. With it, the format of hyper cube 2 / square / Varga, and such conceptually becomes of a central focus in the processing formats of mathematical system of Ganita Sutras and upsutras.

## LESSON-119

 HYPER CUBE 2 FORMAT12. Hyper cube 2 format is a four folds manifestation layer ( 0 space as dimensional, 1 -space as boundary 2 -sppce domain, 3 -space origin).
13. This manifestation layer accepts 4 -space as base.
14. One may have a pause here and to take note that 4 folds manifestation layer ( $0,1,2,3$ ), on transcendence there from, takes to a 5 folds transcendence range ( $0,1,2,3$, 4).
15. It would be blissful to take note that the summation value of four fold manifestation layer $(0,1,2,3)$ is 6 which is Surya Ank / sun number value.
16. Further as that, the summation value of 5 fold transcendence range $(0,1,2,3,4)$ is 10 and same is parallel to the summation value 4 folds manifestation layer ( $1,2,3,4$ ) of hyper cube 3 .
17. One may have a pause here and to take note that it is this feature which deserves to be comprehended well as that the transcendence from the format of hyper cube 2 takes us to the format of hyper cube 3 .
18. Still further as that the synthesis value of a pair of zero order transcendence ranges $(0,1,2,3,4)$ and $(0,1,2,3$, 4) takes to value 20 as the dimensional glue in case of zero order is zero.
19. One may further have a pause here and to take note that number value 20 is parallel to transcendental code value 20 and the prominent formulation accepting transcendental code value 20 are dev and Ved.
20. One may further have a pause here and to take note that amongst the different role of 2 -space, its role as of a spatial dimensional order is of prominent significance as that spatial order create creative domain (4-space) and the same become the creative manifestation format.

## LESSON-120 SPATIAL DIMENSIONAL FORMAT

21. Let us revisit the set up of a square has a surface framed within a linear boundary of 4 components stitched by four corner points.
22. The surface area $n^{2}$ is enveloped within boundary $4 n+4 n^{1}+4 n^{0}$.
23. It would be a blissful to take note that entire structure is of the value $n^{2}+4 n^{1}+4 n^{0}=\left(n^{1}+2 n^{0}\right)^{2}$.
24. It would be blissful to take note that n as dimension creates ( $\mathrm{n}+2$ ) domain.
25. Nxn will take us to value $(\mathrm{n}+2) \mathrm{x}(\mathrm{n}+2)$.
26. One may have a pause here and to take note that surface area has a domain is of dimensional order ' 0 '.
27. And the resultant value of reach $n^{2}$ for its frame takes us to $(\mathrm{n}+2)^{2}$, a unique manifestation of the linear boundary set up.
28. It would be a blissful to take note that linear boundary of 4 components accepts re-organization as $4=1+3$, and the take up off 3 components of the boundary shall be dimensioning outer space has a 3-space within a dimensional frame of 3 linear dimensions.
29. Further here it would also be relevant to take note that if 3 quarter squares are taken together they inherently bring in $4^{\text {th }}$ quarter in its un-manifests state.
30. One shall sit comfortably and permit the transcending mind to continuously remain in trans and to glimpse and imbibe the above organization format features and to further revisit the internal structural set up of cube
which simultaneously accepts a 3 dimensional frame of 3 linear dimensions and also accepts a 3 dimensional frame of 3 spatial dimensions.
31. One shall further revisit the surface within 3 -space has a de-voided-void within a pair of faces of a surface of opposite orientation and in the process the curvature and other restriction of spatial order getting dissolved of their own.
32. It would be a blissful to visit and revisit above phenomenon and to evaluate has to why Vedic mathematics is successful to tame and to jump over curvature, orientation and de-voided-void.
