# VEDIC MATHEMATICS, SCIENCE \& TECHNOLOGY TEACHER COURSE 

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## 3-SPACE MATHEMATICS AND FIGURES

This day the course focus is upon ' 3 -space mathematics and figures'. It four folds aspects being taken up are as follows:
49. Outward expansion
50. Inward expansion
51. Dictionary of 3-space mathematics
52. 3-space figures

The values being covered are to be taught as lessons numbers 49 to 52 to the students of 3 -space Vedic Mathematics, Science \& Technology.

## LESSON-49

## OUTWARD EXPANSION

1. Outward space, that is, the space outside cube, is a dimensional space of dimensional order higher than that of the linear order of 3 -space.
2. 3-space is a linear order space, while 4 -space is spatial order space.
3. Take off of a surface plate from the spatial boundary of cube, structures out the outward space as a spatial order four space.
4. With a takeoff of a surface plate from the spatial boundary of a cube, their happen to be a spatial window for the 4 -space.
5. Through the spatial window, the linear order of 3 -space domain flows out into the outer spatial order 4 -space.
6. This phenomenon, as it is, amounts to outward expansion from phase and stage of a linear order 3-space to spatial order 4 -space.
7. Teacher shall very gently expose the students to this phenomenon of outward expansion. Student shall very gently comprehend and imbibe of values and features of this phenomenon of outward expansion.
8. The concepts of (i) Linear order 3-space, (ii) Spatial order 4 -space (iii) Strip off of surface plate from the spatial boundary of cube (iv) The structuring of outward space as a spatial order 4-space (v) Construction of a spatial window at the boundary of cube shall be fully comprehend and there values and features completely imbibed by the student.

## LESSON-50

## INWARD EXPANSION

1. Teacher shall very gently expose the student to the dual status of the centre of the cube, as a point of linear order 3 -space, and also a seat of spatial order 4 -space as a origin of 3 -space.
2. Centre of the cube is the seat of origin of 3 -space with placement of origin of three dimensional frame at the centre of cube, the domain of cube (volume) gets sealed.
3. Teacher shall specifically expose the student to this phenomenon of sealed domain happening because of super imposition of the origin of three dimensional frame at the centre of the cube.
4. Parallel to the concept of a sealed domain is the concept of domain of unsealed origin.
5. The unsealed domain is of the values and features of spatial order being lively at the seat of the origin.
6. With it, the linear order of 3 -space domain happens to transcend through the spatial order 4 -space seat at the centre of the cube.
7. With this transcendence of the linear order through the spatial order centre amounts to expansion of linear order 3 -space into spatial order 4 -space.
8. Teacher shall very gently expose the student about the parallel outward and inward expansion permissible in the set up of the cube.
9. Student shall sit very comfortably and to permit their mind to fully comprehend and to completely imbibe this phenomenon of parallel outward and inward expansion permissible for the set up of the cube.

## LESSON-51

## DICTIONARY OF 3-SPACE MATHEMATICS

1. Teacher shall help the students to edit their own 3 -space mathematics dictionary.
2. Each student shall reach at one's own dictionary of 3space mathematics.
3. Concepts, technical terms, values, features and formulations and formulae of 3-space mathematics be tabulated with specific entries in each case.
4. One shall add their own comprehension notes about basic concept.
5. One shall regularly update one's dictionary of understanding, comprehension of imbibing of values of 3-space mathematics.
6. One shall attempt to reach at virtues of values of 3-space mathematics.
7. One shall also have one section of their dictionary to be exclusively devoted to the experiments which one could have for validation of their 3-space mathematics values and features.
8. Let one's dictionary be one's index of, understanding, comprehension and imbibing the values and features of 3-space mathematics.
9. Let it be the solemn duty of the teacher to have proper evaluation of the dictionaries of the students.
10. Let the success of teaching be ultimately indexed in terms of the values of dictionaries of the students.
11. Let the dictionary reach by the student be the real certification of the course under taken by the student.

## LESSON-52

## 3-SPACE FIGURES

1. 3-space figures provide us one definite way to understand, comprehends and imbibes the values of 3space mathematics.
2. Here below are being tabulated one set of figures depicting different features of the cube and one shall audit detailed note of values and feature of 3 -space mathematics being preserved and conveyed be each of figures:


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