CHAPTER-1

INTRODUCTION

1.1 Pyramid

At the beginning pyramid were built by a king pharaoh in Egypt, to care of his spirit after death (Korovkin, 1985). Egypt is a synonymous with pyramids, there are also other countries such as China, Mexico, Spain, France, Siberia, Central America, Greece, Cambodia. The Egyptian pyramids are 4000 years back (Schul, 1975). Construction of pyramid in Egypt is an ancient $V\bar{a}stu\ S\bar{a}stra$ and architecture that is why pyramid is seventh wonder of the world (Dwivedi, 2003).

Literal meaning of pyramid is 'A pole of stone' (Dwivedi, 2003). According to Greek word 'PYRO' means fire, light and mid means center. Fire was defined as the universal energy, the vitality permeating all of life (Schul, 1975). According to English dictionary 'PYRE' means fire of sorrow. Pyramid is in conical triangular pillar which is directly connected with the energy. Energy gained by two methods. First energy gained from the conical triangle and second energy gained from underground. Pyramid energy determined by the height of the pyramid above the ground area and depth of the pyramid underground area (Dwivedi, 2003).

There is similarity between temple and pyramid powers (Dwivedi, 2003).

1.2 Temple

Hindu temple is a supernatural house of worship and seat of divinity. From its walls in the four directions and their corner in the intermediate direction, the $Pras\bar{a}da$ raises bodily upwards the high point. In form of architecture, the square and cube of the walls of the Garbhagrah, encompassed the center, then they rise the highest point by way of pyramid, or similar shapes which effect the transition from the square of extensiveness, the $V\bar{a}stu$, and form its enclosing walls to the point. The pyramid is the superstructure of the walls of Garbhagrah, it means by which the purpose of the temple is shown to those who come to see and to attain release. Cube and the pyramid in term of volume there is combination of contraction and expansion. $Pras\bar{a}da$ is

symbol of manifestation on its vertical walls and together with them of its gradual reduction to the point above the sloping sides of the structure. *Prasāda* is a proper super structure which leads to highest point (Kramrisch, 1945).

1.3 Lunar Days

A lunar day is the length of the time where the moon takes one complete rotation on its axis. The moon is tidally locked with respect to the earth therefore it always faces towards the earth as it goes around the planet. Moon and earth takes a year for the complete revolve around the sun. Each time the moon goes around the earth, it needs to go a little further to get the sun back into the same position (Cain, 2015).

There are four specific quarters phase in each month of moon

- 1. The new phase starts when the moon appears dark.
- 2. The first phase starts when the moon is half illuminate.
- 3. The full phase starts when the moon is completely illuminated.
- 4. The last phase starts when the moon is half illuminated (Dwyer, 2008).

1.3.1 Significance of Phālguna Māsa

It is the 12th month according to the Hindu lunar calendar and in English calendar coming in February to March. This season is called as *Śiśira Rtu* when cool and pleasant climate, give the change in color of the leaves as they start dry up. When the season ends the temperature slowly gets warmer. *Śiśira* is one of the thousands of names of Lord Sri *Mahā Viṣṇu* that we find in *Śloka* number 97 of *Śrī Viṣṇu Sahasranāma Stotram. Śiśira* word in *Saṁskṛta* meaning is cool. Lord *Viṣṇu* is very cool in his nature and who is giving a solution to those who are suffering from worldly burning passions. *Phālgu* is the name of a holy bank of river on the *Gayā Kṣetra* which is located in Bihar. The water in the river acts as healers that drive away and cure all illness. Full moon day in *Phālguna Māsa* is famous as *Holī* festival, that day is for worshiping Goddess *Śrī Mahā Lakṣmī*. *Holī* is also known as color festival which is celebrated with great fanfare by Hindus as well as sprinkling colors and color water on each other (Bhagavan, 2011).

1.3.2 Significance of *Caitra Māsa*

It is also known as *Madhu Māsa* marks the beginning of spring season known as *Vasanta Rtu* first among the Hindu seasons. *Madhu* means honey and *Caitra Māsa* is as sweet as honey. *Caitra* is a *Sainskṛta* word which means a temple or a memorial. It is the first month as per Hindu calendar. Lord *Brahmā* has created the universe on this day which is celebrated as *Ugādī* or *Guḍhī Pāḍavā*. It is also a sacred month for beginning for Vedic learning. It is one of the auspicious and sacred months for performing *Upanayana* that marks the formal eligibility to begin the study of *Vedās* and *Upaniṣat*. In this month, each day of the month is dedicated to a different god, in the fifteen days in *Śukla Pakṣaḥ* are dedicated to fifteen deities. Celebration in *Caitra Māsa is Guḍhī Pāḍavā*, *Caitra Navarātri*, *Śrī Rāma Navamī*, *Hanumān Jayanti*, and *Ugādī* (Bhagavan, 2012).

In this chapter, the concept of pyramid, pyramid energy and present of pyramid in temple are discussed in sections 1.1 and 1.2. In section 1.3 the concept of lunar days are discussed. In the next chapter the review of the ancient and scientific research is discussed.

CHAPTER-2

REVIEW OF LITERATURE

2.1 Review of Ancient Literature

मानं धाम्रस्तु सम्पूर्ण जगसम्पूर्णता भवेत्॥

Mānam dhāmrastu sampūrņa jagasampūrņatā bhavet 📙

If measurment of the temple is in every way perfect, there will be perfection in the universe as well (Kramrisch, 1945).

2.1.1 Śikhara in Temple

The design of temples and other spritual buildings are similar to pyramid. A temple is the seat of divinity and is also a blessed institution that aims at giving mental and pysical comfort to the devotee. The *Garbhagraḥ* or sanctum sanctorum encompasses the center or the *Nābhi* of the superstructure. From the square shape of the *Garbhagraḥ* to the final is the *Śikhara*. This curved is identified in modren times as the pyramid. The *Śikhara* can be square, circular, haxagonal (6 sides) octagonal (8 sides). The surrounding walls around the *Garbhagraḥ*, which have gateways is called *Gopuram*, it have pyramid shaped roofs. The immediate enclosure around the *Garbhagraḥ*, known as the *Prasāda* towers above it like a pyramid. The top of the *Śikhara* points to a final and is known as the *Kalaśa* or *Stupika* (Babu, 2006).

2.1.1.1 According to Samurtarcanadhikarana

विमानानं च सर्वेंसां समन्यां इदम् उच्यते

अधीस्थानं पदवर्गह प्रस्तरग्रिवकदु उपि

शिखरं स्तुपिक चेति सद्वर्गह परिकिर्तितः॥

Vimānānam ca sarvesām samanyām idam ucyate Adhīsthānam padavargaha prastaragrivakad upi

Śikharam stupika ceti sadvargaha parikirtitah||

The word *Vimāna* is applied to mean *Śikhara* above portion of the temple by some scholars. However, it is evident from the above that it refers to the structure from bottom to top in *Ṣaḍvargaḥ* stuctures (Gopinath, 2003).

2.1.2 There are Six Qualities to the Temple.

- 1. $R\bar{a}jagopura$ (tower) It is in pyramid like structure which shooting up the landscape directs the skyline. On top of it belong to the $\acute{S}ikhara$ (peak). It marks the location of the temple room and rises directly above it.
- 2. $L\bar{a}ncana$ (copper flag) The $L\bar{a}ncana$ is in scripted with the deity of the temple and is a symbol of the structures spirituality. On the human body, the $L\bar{a}ncana$ represents the loins.
- 3. *Prakrama* (walkway) Temples have a walkway around the walls of the inner chamber for circumbulation for devotees around the God in the temple. The field enclosures and pavilions through which he must pass to reach the sanctum are symbolic. They represent the phases of progress in a man's journey towards divinity. The *Prakrama* represents the hands.
- 4. *Maṇḍapa* (temple hall) In temples have a hall meant for the devotees to sit. This is also called the *nāṭya Mandira* (hall for temple dancing). Devotees use the hall to sit, meditate, pray, chant or watch the priests perform rituals. The hall is decorated with paintings of deities. On the human body, the *Mandapa* represent the abdomen.
- 5. Antarāla (the front porch) This area of the temple usually has a big iron bell that hangs from the ceiling. When devotees are entering and leaving the porch ring this bell to declare their coming and leaving.

6. Garbhagraḥ – Always in the north-east is the Garbhagraḥ (sanctum sanctorum) where in the Murti or deity exist in, it is representing the head in the human body. There are no pillars, windows or ventilators. It is the inner and most sacred area of worship in the temple. Finally the temple, devoid of any ornamentation, and with its simply decorated arrival, leads the devotee more to the highest achievable state of consciousness of tranquility (Turiya), where all boundaries disappear and the universe stands forth in its ancient glory. This completely quiet, peaceful and blissful state is the ultimate aim of all spiritual activity. The devotee is fully-absorbed in the beauty and serenity of the icon. He or she is in the inner square of Brahmā in the Vāstu- Maṇḍala, and in direct communion with the chief source of power in the temple (Srinivasa, 2011).

2.1.3 Application of Pyramid

2.1.3.1 Therapy Application

Due to their high structure, inimitable and matchless construction, and their divine power of curability of diseases, so the pyramids are store houses of energy which has lost even modern science also. Psych and nervous patients can be cured within a few minutes with the help of waves following there. If water kept in pyramid, is capable to cure the many digestive disorders. Patients, suffering from tonsillitis, physical injuries, abrasions and gout also get cured when they walk into the pyramid (Dwivedi, 2003).

2.1.3.2 Agriculture Application

Tomatoes were growing inside the pyramid for two weeks before planting outside. These particular tomatoes far out produced an equal number of control plants. One plant had more than 100 tomatoes on it at one time. Water and other liquids have been treated in pyramids. This result was shown purification of water and increase plants growth (Schul, 1975).

2.1.3.3 General Application

Milk kept in pyramid for about 20 minutes acts as the best tonic for children. Also it gives more energy, strength and vitality. Placing any precious jewelry under the pyramid after its first use and continue possessions will remain shiny for longer time. Treat the food with pyramid energy

before freezing it. It will retain the fresh taste for longer and high edibility. Honey, spices, herbs, sugar, eggs and dairy products have effective energizing in the pyramids, they become more flavored (Schul, 1975). Vegetables and other food stuffs could be preserved for a longer period under pyramidal structure. Razor blades retain their sharpness under pyramids for a considerable time. In temples, under the shape of a pyramid the *Prasādam*, fruits and other oblations could be preserved for a longer period (Reddy, 1992).

2.1.4 Pyramid Energy

Pyramid is the ability to concentrate and focus on aetheric forces. Its energy effects can be generate with barest of outlines of the pyramid shape itself.

2.1.4.1 Electrostatic Energy at the Great Pyramid

Pyramid is a converter of aetheric energy directly into electrical energy. Electrostatic energy is due to a electric effect, whereby the air moving up the side of the pyramid collects ions due to wind friction on the pyramid sides.

2.1.4.2 Intersecting Lines of Pyramid

The four corners of the base and the apex are formed by the intersecting lines of the triangular sides. These corners are where the aether flows concentrate from the triangular sides and form aetheric energy flows at these central point.

2.1.4.3 Concentrated Forces of Pyramid

The triangular faces form a three dimentional force field on each of the faces of the pyramid. The vertices at the corners are three dimentional, are pulling energy from all directions and concentrating it into the corners.

2.1.4.4 Magnetic Orientation of Pyramid

In a compass north/south orientation there would be an aether flow across the pyramid in three direction. The magnetic field is a vertical aether flow from south to north. The earth is rotating on its axis so there is a slight aether drift from west to east. When these two flows meet at the

pyramid, it would cause the aether to flow around the pyramid with an upword due to the sloping pyramid. The third flow is a pressure of the aether from above down into the earth.

2.1.4.5 Magnetic Generation of Pyramid

A pyramid or set of intersecting lines will generate a magnetic field because the aetheric vortex flows at the intrsecting of the lines are in megnetic fields (Davidson, 1997).

2.1.5 Lunar Days

Lunar days also called *tithī* in *Saṃskṛta*. Which compraises 30 days, out of which first 15 days is called as *Śukla Pakṣa* and another 15 days is called as *Kṛṣṇa Pakṣa*. Which are differentiate by 15th day.

2.1.5.1 Śukla Pakṣa

End of 15th day of Śukla Pakṣa the moon is completely full, which is called Pūrṇimā. Pūrṇimā means full (Wilhelm, 2008).

Waxing Cycle

1st waxing (*Śukla Pratipat*) ruled by *Kubera*, God of wealth and *Brahmā*, the creator God. This day is good for planning and developing strategies for projects. It is not good for any auspicious ceremonies or journeys.

2nd waxing ($Sukla\ Dvit\overline{\imath}y\overline{a}$) ruled by Lord Vivadeva. It is auspicious for marriage, viewing moon, buying wedding ring, installation of deities. It is not auspicious for harsh activities such as disputes or conflicts.

3rd waxing ($\acute{S}ukla\ Trt\bar{\imath}y\bar{a}$) ruled by $\acute{S}iva$ and his wife $Gaur\bar{\imath}$. It is auspicious tithi for house warming, building a house, artistic endeavors. It is not auspicious for conflicts and litigations.

4th waxing ($Sukla\ Caturth\bar{\imath}$) ruled by Ganeśa. It is good for strategic planning against competitors and it is not good for any auspicious ceremonies.

5th waxing (Śukla Pañcamī) ruled by Lalita Tripurā Sundarī. It is auspicious for all ceremonies.

6th waxing (Śukla Ṣaṣṭhi) ruled by Muruga. Good for buying real estate and jewelry.

7th waxing ($\hat{S}ukla\ Saptam\bar{\iota}$) ruled by $S\bar{u}rya$, the Sun God. It is auspicious for ceremonies such as weddings.

8th waxing ($Sukla\ Astam\bar{\imath}$) ruled by $Durg\bar{a}$. It is not auspicious for most activities, except for ancestor worship.

9th waxing (Śukla Navamī) ruled by Goddess Sarasvatī. It is good for activities against enemies and rivals. It is not auspicious for ceremonies and journeys.

10th waxing ($\hat{S}ukla\ Da\acute{s}am\bar{\imath}$) ruled by $V\bar{\imath}rabhadra$, the general of $\hat{S}iva's$ army, and the God of *Dharma*. It is auspicious for all events, including ceremonies and inaugurations of buildings.

11th waxing ($\hat{S}ukla\ Ek\bar{a}das\bar{\imath}$) ruled by Visnu, and it is auspicious for wedding ceremonies and for fasting. This time-window allows us to tune into the energy the wealth-giving archetypes, Visnu

12th waxing ($\hat{S}ukla\ Dv\bar{a}das\bar{\imath}$) ruled by Visnu. It is good for planning and developing strategies, donating money and fasting.

13th waxing (Śukla Trayodaśī) ruled by Śiva and Kāmadeva. It is good for writing new books, for Karma removal rituals and dancing.

14th waxing (Śukla Caturadaśī) ruled by Rudra, an ancient and fierce form of Śiva. This aggressive energy is best used for worship to this God.

15th waxing ($P\bar{u}rnim\bar{a}$ or full moon) it is auspicious for worshipping $Laksm\bar{\imath}$, $Sarasvat\bar{\imath}$ and $P\bar{a}rvat\bar{\imath}$ asking for manifestation of wishes, and also auspicious day for ceremonies and spiritual practices (Devi, 2014).

2.1.5.2 Kṛṣṇa Pakṣa

End of 15th day of *Kṛṣṇa Pakṣa* is called *Amāvasyā*, means dwelling together, union of the sun and moon (Wilhelm, 2008)

Waning Cycle

1st waning ($Krsna\ Pratipat$) ruled by $Durg\bar{a}$ and positive discrimination planning for projects and medical procedures, but not good for any auspicious events.

2nd waning (Krsna $Dvit\bar{\imath}y\bar{a}$) ruled by $V\bar{a}yu$, God of the wind. It is good for construction of buildings and pilgrimage.

3rd waning (Krsna $Trt\bar{t}y\bar{a}$) ruled by Agni, God of fire. It is good for construction and artistic activities.

4th waning (*Kṛṣṇa Caturthī*) ruled by *Gaṇeśa*. It is good for removing obstacles. Not auspicious for sacred ceremonies.

5th waning ($Krsna\ Pañcam\bar{\imath}$) ruled by the Serpent deities, $N\bar{a}ga$. It is good for spiritual practices and pilgrimage.

6th waning (*Kṛṣṇa Ṣaṣṭhi*) ruled by Mars. It is good for taking medication and real estate transactions.

7th waning (Krsna Saptamī) ruled by the sages and Indra. It is not good for ceremonies. It is good for planning for overcoming obstacles.

8th waning (Krsna $Astam\bar{\imath}$) ruled by a form of Siva, $K\bar{a}la$ Bhairava, the God of time. It is not good for any auspicious ceremonies and activities, negotiations or medical treatments.

9th waning (Krsna Navamī) ruled by Yama and $Durg\bar{a}$. This is possibly the least auspicious of all phases of best activities and overcoming obstacles from enemies and competitors.

10th waning (Krsna Daśamī) ruled by Jupiter and the God of Dharma. It is positive for all ceremonies and events and meeting with dignitaries.

11th waning (*Kṛṣṇa Ekādaśī*) it is good for buying gold and jewelry and fasting to lord *Viṣṇu*.

12th waning (*Kṛṣṇa Dvādaśī*) ruled by Venus. Good for planning donations of food and money.

13th waning (Krsna Trayodasī) ruled by Nandī, Siva's bull. It is good for Karma removal rituals, Yoga and meditation.

14th waning (*Kṛṣṇa Caturadaśī*) ruled by *Rudra*. It is good for spiritual practice, *Śiva* worship and planning for overcoming problems. Not good for marriage or auspicious ceremonies.

15th waning ($Am\bar{a}vasy\bar{a}$ or new moon) also called the "no moon day" as it is the darkest phase. This day is ruled by $K\bar{a}l\bar{\imath}$. It is good for meditation, feeding people and animals, and ancestral

rituals. It is not good for marriage ceremonies or starting a new activity, but rather waits until the first waxing moon for launching for new projects (Devi, 2014).

2.1.6 Moon and Earth – the Relation

The moon orbit around earth which is affected by the rising and falling tides, gravitational pull of the sun and the moon affects the earth. Gravitational pull of the moon is affects the rainfall (water content of the earth) and also affects the air current on the surface of the earth. The utmost rainfall happens just after the full and new moon. This Influence the growth of plants, because plants are very sensitive to subtle energy fluctuation (Crawford, 2005).

2.1.6.1 Effect of Moon Phases

Photoperiodic perception occurs in the leaves. In the leguminous plants soybean, peanut, and clover, "sleep movements" change the site of the leaves from horizontal to vertical, horizontal occurs at day and vertical at night time. This activity reduces the intensity of light falling on the leaf surface from an artificial moon. In some nyctinastic plants such as *albizzia*, *sainanea*, and *cassia* are change their axis by folding of leaf in that period with the vertical changes. This plants upper surface is more sensitive to light than the lower surface. There are some long-night plants flower which grown more in low intensity of light rather than full darkness at night. In these plants, moonlight increases the number of flowers produced by a short-day (Plantguy, 2009).

In spite of some strong facts by Maw in 1967 on the influence of lunar phase on certain biological activities as germination, by Brown & Chow in 1973 on water absorption and by Brown in 1960 on metabolism no conclusive outcomes or not clear suggestion appears to be finding until now on the influences on crop yield or animal production. By Zuercher *et al.* In 1998 found that an effect of lunar rhythms on the germination and rate of growth of tropical trees. The seedling removed before two days of full moon the percentage of germination and successive rate of growth were highest. Also, the magazine Nature published observations which showed that tree trunks expand and contract in conjunction with the cycles of the tides (Sparacino, Porro, & Valenzi, 2011).

In 1952 by Thun has done experiment on effect of moon on potatoes in different zodiac signs. Result found that potatoes did better plant while moon was clearly positioned in earth signs than at other time. By Kolisko in 1930 investigated the effect of the phases of the moon on seed germination and growth by using wheat. Result showed that the full moon has more effect on germinated seeds and the new moon gave the unsuccessful results (Crawford, 2005).

At the full moon lighter wood is softer with lower compression strength than at the new moon in heavier wood and latter it is being more acceptable for construction. Lighter wood could be more burnable due to a higher water loss and to a better passage of air than thick wood, and produce a better firewood quality. Norway-spruce wood of the lowland sections grows much faster, is lighter and is more easily attacked by fungi and decay than the wood of huge sections. In this sense, dense new moon wood could be more unaffected to decay than lighter full moon wood (Sciences, 2001).

2.1.6.2 North and the South Direction

The earth acts like a huge magnet with the dipolar points lying at the north and the south poles. The earth forms a electromegnetic energy around the globe. Which affect the human mind and body at a very subtle level. The human body also displays the magnet, head as a north pole. So should not sleep head in north direction as same poles are repel each other, this resulting in disturbed sleep (Pegrum, 2000).

2.1.6.3 Electromagnetic Fields

Electromagnetic fields are made of magnetic and electrical field which is existing surround all the objects with an electrical charge that charge will interrelate with other objects within that field. Electric field is strength of the charge and magnetic fields is a motion of the charge. These fields exist with changing of strength and degrees, and wavelength and frequency. Like earth has an electromagnetic filed because of movement of electrons within the core.

2.1.6.4 Effect of Electromagnetic Fields

By Belyavskaya in 2004 examine the electromagnetic fields in which he found that weak electromagnetic fields give repressed the growth of plants, decrease in cell division, improved

protein synthesis and also breakdown in plant roots. By Pazur *et al.* in 2006 found that exposure to weak electromagnetic fields remove calcium ions from cell membranes manipulating calcium availability and thereby affecting plant processes and ability to respond to stress. Same study was done by Vishki *et al.* in 2012 and found an increase in plant growth and in study by Davies in 1996 found some seeds increased in growth (Chantelle, 2013).

Magnetic water treatment has an effect on agriculture. Safety, compatibility and simplicity, environmentally friendliness, low operating cost and not proven harmful effects are the main advantages of electromagnetic field over conventional methods for water treatment. The electrochemical characteristics of magnetic water have involved developing of different devices and techniques in agricultural and environmental applications. Improvements of irrigation water quality and quantity, crop yields and quality, soil improvement and water saving are some of the benefits of magnetic water treatment in agriculture. And also in magnetic field treatments have shown positive effects on the germination of seeds, plant growth and development, the ripening and yield of field crops (Ali, Samaneh, & Kavakebian, 2014).

2.1.6.5 The Positive and Negative Ions

In the air ions are moving surrounding us. This is made of negative or positive charges. Humans, animals and plants have effect of fluctuations in the concentration or ratio of positive to negative charged. Surface of the earth has a negative charge which repelled from the earth, negative ions are extremely movable. This is very much beneficial for human's metabolism to enhancing the human behavior. Positive ions cause hyper function syndrome or irritation syndrome which involves sleeplessness, irritability, tension, migraine, nausea, heart palpitations, sweating, tremor and dizziness. By Tesla in 1943 was done the experiment on electromagnetic change and gravitational field. This study discovered that the ions movement can modify, when it was charged by radio wave transmissions in the low frequency range of 10 to 80 hertz. And it also becomes a cause of movement of positive and negative ions by the influencing of radio frequency. In other studies indicated that by positive ionization, people and animals became tired and lethargic and by negative ionization people and animals are feeling active and energetic (Ian & Balick, 2010).

2.2 Review of Scientific Literature

Effects of different intensities and exposure time of AC electric field and AC magnetic field on tomato seed have been investigated to determine the optimal conditions for accelerating germination. The seeds were treated with AC electric fields ranging from 4 to 12 kV/cm and AC magnetic flux densities ranging from 3 to 1000 G, and were exposed to three time periods ranging from 15 to 60 s with corresponding equal rest time periods. Untreated seed was germinated in under normal conditions. The treated sample seed were compared with the untreated seed. Result showed that the treated tomato seed were faster germination rates compared with the untreated seed (Moon & Chung, 2000).

In the study on evidence for lunar-sidereal rhythms in crop yield, developed a procedure of sowing according to the position of the moon in front of the twelve astrological constellations. These constellations were classified into four groups according to the element (earth, water, air and fire) on root, leaf, flower and fruit crops which is astrologically related with them. Result shown root, leaf, flower and fruit crops were increased yields if spread when the moon stood before earth, water, air and fire constellations (Kollerstrom & Staudenmaier, 2001).

In the study of the effect of *Agnihotrā* on the germination of rice seeds study time periods was 15 days, in which rice seeds were germinated in different four rooms. In one room utilized as control and other three rooms utilized as experiment. In one room fire was lit in a particular time of sunrise and sunset in second room *Agnihotrā Mantra* was chanted without fire at the same time. And in third room *Agnihotrā* was done with a specific *Mantra* along with fire at same time. Result showed an effect of *Agnihotrā* influenced on root length, shoot length, fresh weight and dry weight of seed germination from the first day itself. Limitation of the study indicated that in this study male recited the *Mantra* in the room while the sacrifice was being done. The effects of female voices or recorded voices need to be study (Devi, Swamy & Nagendra, 2004).

In the study on effect of pyramid on growth of microorganisms in milk sample five models are used, in which one flat roof was, four are in pyramidal shape and control was kept in open. Result showed that a pyramidal shape was more effective than a flat-roofed shape, and plastic

pyramid was more effective than a wooden pyramid on pH value, order, color, state of the sample and microorganisms count. Limitation of the study indicated that did not measure the temperature inside the pyramid during the testing (Kumar, Swamy & Nagendra, 2005).

In the study to find the effect of the colour of light on cucumber seedlings, seedling was done under green house by using daylight and blue light with verity of cucumber. The seedlings were assessed in terms of growth dynamics, features and the concentration of selected pigments in fresh leaf. Result showed that blue light was more effective on growing plants like taller, longer internodes, thicker stem and a higher dry matter content in fresh shoot weight. And number of leaves was not dependent on either the colour of light or the level of quantum irradiance (Seedlings, Piszczek & Gàowacka, 2008).

In the study on the effect of pyramid on preservation of milk study duration was 14 days, in which two of pyramid were used with different shapes, one was plywood pyramid and second was fiberglass pyramid and a shape was square and octagonal. Results were found wooden pyramid has shown better result than square. Limitation of the study indicated that study was essentially an exploratory pilot study to scientifically document the preservative effect of the pyramid power (Gopinath, Nagaraja & Nagendra, 2008).

In the study to examine the different pyramids, their materials and shapes on emergence, radical growth and seedling vigor of fenugreek two models are used, one was plywood pyramid and second was fiberglass pyramid with shape square and octagonal. Result was found positive influence of pyramids. Limitation of the study indicated that the study of 2nd and 4th day measurement is not carried on the same seeds, temperature changes could have been a predominate factor, there was no control study with non-pyramidal shape, only two pyramids in each study is carried out, needs more number of pyramids (Kumar, 2011).

In the study on the macronutrient potassium variation in mung bean sprouts with lunar phases, result found the variations in potassium contents are more in sprouts as compared to the original seeds, near new moon, first quarter and after full moon (Super Moon) phases there was rise in

the contents of potassium. Limitation of the study indicates that did not studied on proton and neutron content of potassium to check any variation in its isotope (Deep & Mittal, 2014).

In the study of the effects of *Vedic Mantrās* on plants three *Mantrās* are used *Om*, *Gāyatrī* and *Mṛtyuñjaya* along with control group, in three plants *Tulasī*, Rose and *Gajanīya* in different factors like height, number of flower, number of branches and number of leaves. The experiment was conducted in different area and different seasons. Result showed a *Gāyatrī Mantra* effect on increase of the leaves of Rose and the height of *Tulasī* plants. *Mṛtyuñjaya Mantra* showed effect on increase on the height of *Tulasī* plant. But *Om Mantra* increased the leaves of *Tulasī* and height of *Gajanīya* plant. There were effects of all the three *Mantrās* on the increase in number of flowers of the two plants, Rose and *Gajanīya* was found to be insignificant in this study. Limitation of the study indicated that this study was pilot study. Experiment of long duration need to be study (Kshirsagar & Ekbote, 2015).

In the study on seed germination test with influence of *Mahā Mṛtyuñjaya Mantra*, Śrīyantra and pyramid two types of designs were involved. In one design two types of pyramids and paper Śrīyantra were used to see influence on germination of green gram seeds. And in second design *Mahā Mṛtyuñjaya Mantra* were used to see its influence on germination of fenugreek seeds. Result showed that Śrīyantra, pyramids and *Mantra* showed positive influence on germination on radical length, fresh weight and dry weight of germinated seed than to control sample. Limitation of the study indicated that variation of temperature at day and night for each trial, size of plywood pyramid and plastic pyramid is not same and non uniform size between pyramid (Jungyun, Jeeye & kumar, 2016).

In the study on the nutritional and quality characteristics of cucumis sativus verities different varieties of cucumbers were used with different temperatures, *Prāṇic* treated raw cucumbers and control varieties, and their storage stability in room temperature 18 to 33°C and refrigerated temperature 4°C. The different varieties were analyzed for physical, nutritional, functional and

quality parameters. Result showed that the moisture content carried among the cucumber varieties, highest moisture content was seen in English, Zucchini and *Prāṇic* healed cucumbers and the lowest moisture content was found in Holenarasipur and Dotted variety and *Prāṇic* treated samples showed better stability at room temperature and refrigerated storage (Keerthika, Devaki, Suma & Urooj, 2016).

In the study to find the physico-chemical qualities of tomato fruits as influenced by $Pr\bar{a}nic$ treatment, an ancient technique for enhanced crop development study time periods was 15 days, and two different temperature of refrigerated condition (4°C) and room temperature (26°C). Observations was done on quality and quantity by measuring the overall yield, plant height, diameter of the stem, flowers, flowers per truss and also self life of tomatoes. Result was found $Pr\bar{a}nic$ group plants got increase in height, more stem diameter and more flowers in per plant as compared to control (Jois et al., 2016).

Summary of the review of scientific research literature and incorporation of factors in the present study

Sl.	Author Name	Title	Parameter	Limitation
No.				
1	Moon & Chung,	Acceleration of	Percent	
	2000	germination of	germination	
		tomato seed by	rates.	
		applying AC		
		electric and		
		magnetic fields.		
2	Kollerstrom &	Evidence for	Root, leaf,	
	Staudenmaier,	lunar-sidereal	flower and fruit	
	2001	rhythms in crop	crops.	
		yield.		
3	Devi, Swamy &	Effect of	Root length,	In this study male recited the
	Nagendra, 2004	Agnihotrā on	shoot length,	Mantra in the room while the
		the germination	fresh weight,	sacrifice was being done. The
		of the rice seeds	and dry weight	effects of female voices need
				to be study.
4	Kumar, Swamy &	Effect of	pH value, odor,	It did not measure the
	Negendra, 2005	pyramids on	color, state of	temperature inside the
		microorganisms.	the sample and	pyramid during the testing.
			microorganisms	_

			count.	
5	Seedlings, Piszczek & Gàowacka, 2008	Effect of the color of light on cucumber seedlings.	Dynamics, features and the concentration of selected pigments in fresh leaf weight.	The number of sample size is used in the study was small.
6	Gopinath, Nagaraja & Nagendra, 2008	The effect of pyramids on preservation of milk	Preservative capacity.	Study was essentially an exploratory pilot study to scientifically document the preservative effect of the pyramid power.
7	Kumar, 2011	Influence of pyramids on germination and growth of fenugreek	Shapes on emergence, radical growth and seedling vigor of fenugreek.	The study of 2 nd and 4 th day measurement was not carried on the same seeds, temperature changes could have been a predominate factor, there was no control study with non-pyramidal shape, only two pyramids in each study was carried out, needs more number of pyramids.
8	Deep & Mittal, 2014	Macronutrient K variation in mung bean sprouts with lunar phases.	Potassium nutrient and length of the sprout.	Did not studied on proton and neutron content of potassium to check any variation in its isotope.
9	Kshirsagar & Ekbote, 2015	Effects of Vedic Mantrās on plants.	Flowers, leaves and height of plants.	This study was pilot study. Experiment of long duration need to be study.
10	Jungyun, Jeeye & Kumar, 2016	Seed germination test with the influence of Śrīyantra, pyramid and Mahā Mṛtyuñjaya Mantra.	Radical length, fresh weight and dry weight of germinated seeds.	Variation of temperature at day and night for each trial, size of plywood pyramid and plastic pyramid is not same, non uniform size between <i>Śrīyantra</i> and pyramid.
11	Keerthika, Devaki, Suma & Urooj, 2016	Studies on the nutritional and quality characteristics	Physical, nutritional, functional and quality	The number of samples used in the study has not been mentioned.

		of cucumis	parameters.	
		sativus varities.		
12	Jois et al., 2016	Physico-	Quality,	However the number of
		chemical	quantity, overall	samples used in the study has
		qualities of	yield, plant	not been clearly mentioned
		tomato fruits as	height, diameter	which limits the
		influenced by	of the stem,	generalization of the study.
		Prāṇic treatment	flowers, and	
		an ancient	flowers per	
		technique for	truss and also	
		enhanced crop	self-life of	
		development.	tomatoes.	

No literature is found about the influence of pyramidal energy and lunar days on germination of seeds and hence this study was taken.

In this chapter, in section 2.1 review of ancient literature are discussed in that the concept of pyramid existed as *Śikhara* in temple and application of pyramids. In section 2.2 discussed about the scientific research literature related to pyramids. In next chapter discussed about aim and objective of the study.

CHAPTER-3

AIM AND OBJECTIVE OF THE STUDY

3.1 Aim

To study the effect of pyramids and lunar days on the germination of seeds.

3.2 Objective

- a. To study the effect of pyramids on the emergence, radical length, fresh weight and oven dry weight.
- b. To study the effect of size of pyramids on the emergence, radical length, fresh weight and oven dry weight.
- c. To study the effect of materials of pyramids on the emergence, radical length, fresh weight and oven dry weight.
- d. To study the effect of lunar days on the emergence, radical length, fresh weight and oven dry weight.

3.3 Research Question

- a. Is there any effect of pyramid on the emergence, radical length, fresh weight and oven dry weight?
- b. Can the pyramid and its size influence on the emergence, radical length, fresh weight and oven dry weight?
- c. Is there any effect of materials of pyramid on the emergence, radical length, fresh weight and oven dry weight?
- d. Is there any effect of lunar days on the energy of pyramid on the emergence, radical length, fresh weight and oven dry weight?

3.4 Hypotheses

- a. Effect of pyramid exhibit a positive influence on the emergence, radical length, fresh weight and oven dry weight.
- b. Effect of size of exhibit a positive influence on the emergence, radical length, fresh weight and oven dry weight.
- c. Effect of materials of pyramid exhibit a positive influence on the emergence, radical length, fresh weight and oven dry weight.
- d. Effect of lunar days on the energy of pyramid exhibit a positive influence on the emergence, radical length, fresh weight and oven dry weight.

3.5 Null Hypotheses

- a. Effect of pyramid do not exhibit a positive influence on the emergence, radical length, fresh weight and oven dry weight.
- b. Effect of size of pyramid do not exhibit a positive influence on the emergence, radical length, fresh weight and oven dry weight.
- c. Effect of materials of pyramid does not show a affirmative influence on the emergence, radical length, fresh weight and oven dry weight.
- d. Effects of lunar days on the energy of pyramid do not exhibit a positive influence on the emergence, radical length, fresh weight and oven dry weight.

In this chapter discussed in section 3.1 about aim of the study, 3.2 objective of the study, 3.3 research question, 3.4 hypotheses of the study and 3.5 null hypotheses of the study. In next chapter discussing about materials and method of the study.

CHAPTER-4

MATERIAL AND METHOD

4.1 Material

4.1.1 Treatments

1. Pyramids effect

Pyramids were used with two types of materials and with two different sizes.

- a. Plywood pyramid (20 cm \times 20 cm \times 15.5 cm and 13.5 cm \times 13.5 cm \times 10.5 cm).
- b. Copper pyramid (20 cm \times 20 cm \times 15.5 cm and 13.5 cm \times 13.5 cm \times 10.5 cm).

2. Lunar days effect

a. Phālguṇaḥ Māsa for fenugreek seeds

Śukla Pakṣaḥ tithis

Pratipat, Dvitīyā, Tṛtīyā, Caturthī, Pañcamī, Ṣaṣṭhi and Saptamī, Aṣṭamī, Navamī, Daśamī, Ekādaśī, Dvādaśī, Trayodaśī, Caturadaśī, Pūrṇimā.

Kṛṣṇa Pakṣaḥ tithis

Pratipat, Dvitīyā, Tṛtīyā, Caturthī, Pañcamī, Ṣaṣṭhi, Saptamī1, Saptamī2, Aṣṭamī, Navamī, Daśamī, Ekādaśī, Dvādaśī, Trayodaśī, Caturadaśī, Amāvasyā.

b. *Caitra Māsa* for green gram seeds

Śukla Pakṣaḥ tithis

Pratipat and Dvitīyā, Tṛtīyā, Caturthī, Pañcamī, Ṣaṣṭhi, Saptamī, Aṣṭamī, Navamī, Daśamī, Ekādaśī, Dvādaśī, Trayodaśī, Caturadaśī, Pūrṇimā.

Kṛṣṇa Pakṣaḥ tithis

Pratipat, Dvitīyā, Tṛtīyā, Caturthī, Pañcamī, Ṣaṣṭhi, Saptamī, Aṣṭamī, Navamī, Daśamī, Ekādaśī, Dvādaśī, Trayodaśī, Caturadaśī, Amāvasyā.

4.1.2 Seeds

Two type of seeds are used they are

- a. Fenugreek
- b. Green gram

Seeds are collected from recognized agriculture institute.

4.1.3 Laboratory Materials

- Distilled Water
- Petri Dish
- Germination Paper
- Measuring Scale
- Balance
- Hot Air Oven
- Thermometer
- Magnetic Compass
- Polythene Sheets
- Pipette
- Hygrometer

4.2 Sample Size

4.2.1 From Previous Study

- a. From the study of Jina Devi (2004) sample size was 375 rice seeds.
- b. From the study of Itagi Ravi Kumar (2011) sample size was 120 fenugreek seeds.
- c. From the study of Jang Jngyun (2016) sample size was 600 fenugreek seeds.

4.2.2 From Lab Manual

• According to International Standards for Genebanks (FAO/IPGRI, 1994) 200 seeds should be required for germination test with 100 seeds per replication.

• According to Lowa State University of Science and Technology 400 seeds are required for germination test with 100 seeds per replication (Stahr, n.d.).

4.2.3 For the Present Study

- For pyramid effect size of sample was taken as 40 seeds×15 replication = 600 number of seeds.
- For lunar days effect size of sample was taken as 40 seeds.

4.3 Inclusion Criteria

- Air dried seed
- Non-uniformity of size and color of seed
- Same testing room
- Each replication of all the treatments is on same day and same time

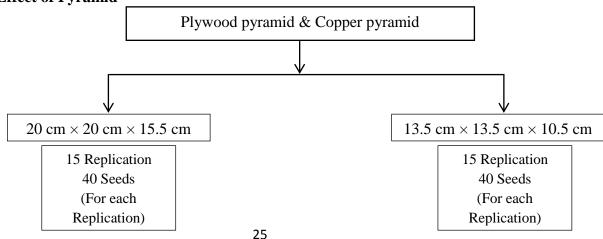
4.4 Exclusion Criteria

- Broken seed
- Decayed seed
- Color changed seed
- Too small or big size of seed

4.5 Method

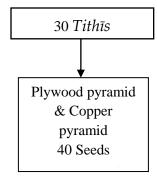
4.5.1 Design of the Study

4.5.1.1 Effect of Pyramid



Total size of sample is $40 \text{ seeds} \times 15 \text{ replications} = 600 \text{ number of seeds}$.

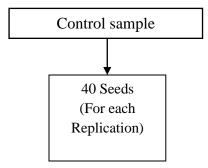
4.5.1.3 Effect of Lunar Days in Pyramidal Energy



Sample size 40

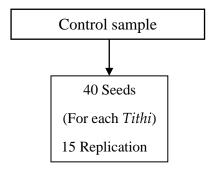
4.5.1.2 Control Sample

• For pyramid



Sample size $40 \text{ seeds} \times 15 \text{ replications} = 600 \text{ number of seeds}$.

• For lunar days



Sample size 40 seeds.

Table 1-Almanac ($Pa\~nc\=a\'nga$): Durmukhināmasaṁvatsaraḥ uttarāyaṇam śiśiraṛtvaḥ phālguṇamāsaḥ

Śuklapakṣaḥ							
Day	Date	Lunar Day/Tithī	Sign/Rāśi	Element/ Tattva	Star/ Nakṣatra	Sunrise time	
Monday	27/2/2017	Pratipat	Aquarius (Kumbha)	Air/Vāyu	Śatabhiṣa and Pūrvabhādra	6:36 am	
Tuesday	28/2/2017	Dvitīyā	Pisces (Mīna)	Water/ Jala	Uttarābhadra	6:36 am	
Wednesday	01/3/2017	Tṛtīyā	Pisces (Mīna)	Water/ Jala	Revati	6:29 am	
Thursday	02/3/2017	Caturthī	Aries (Meṣa)	Fire/Agni	Aśvini	6:29 am	
Friday	03/3/2017	Pañcamī	Aries (Meṣa)	Fire/Agni	Bharaṇi	6:29 am	
Saturday	04/3/2017	Ṣaṣṭhi and Saptamī	Taurus (<i>Vṛṣabha</i>)	Earth/ <i>Pṛthivī</i>	Kṛttika	6:29 am	
Sunday	05/3/2017	Aṣṭamī	Taurus (<i>Vṛṣabha</i>)	Earth/ <i>Pṛthivī</i>	Rohiņi	6:29 am	
Monday	06/3/2017	Navamī	Taurus (<i>Vṛṣabha</i>)	Earth/ <i>Pṛthivī</i>	Mṛgaśira	6:29 am	
Tuesday	07/3/2017	Daśamī	Gemini (Mithana)	Air/Vāyu	Ārdra	6:29 am	
Wednesday	08/3/2017	Ekādaśī	Gemini (Mithana)	Air/Vāyu	Punarvasu	6:29 am	
Thursday	09/3/2017	Dvādaśī	Cancer (Karkaṭaka)	Water/ Jala	Риѕуа	6:29 am	
Friday	10/3/2017	Trayodaśī	Cancer (Karkaṭaka)	Water/ Jala	Āśleṣa	6:29 am	
Saturday	11/3/2017	Caturadaśī	Leo (Simha)	Fire/Agni	Makha	6:29 am	
Sunday	12/3/2017	Pūrṇimā	Leo (Simha)	Fire/Agni	Pubba	6:23 am	

Kṛṣṇapakṣaḥ							
Day	Date	Lunar Day/Tithī	Sign/Rāśi	Element/ Tattva	Star/ Nakṣatra	Sunrise time	
Monday	13/3/2017	Pratipat	Virgo (Kanyā)	Earth/ <i>Pṛthivī</i>	Uttara	6:23 am	
Tuesday	14/3/2017	Dvitīyā	Virgo (Kanyā)	Earth/ <i>Pṛthivī</i>	Hasta	6:23 am	
Wednesday	15/3/2017	Tṛtīyā	Virgo (Kanyā)	Earth/ <i>Pṛthivī</i>	Citta	6:23 am	
Thursday	16/3/2017	Caturthī	Libra (Tulā)	Air/Vāyu	Svāti	6:23 am	
Friday	17/3/2017	Pañcamī	Libra (Tulā)	Air/Vāyu	Viśākha	6:23 am	
Saturday	18/3/2017	Şaşţhi	Scorpio (Vṛścika)	Water/ Jala	Anūradha	6:23 am	
Sunday	19/3/2017	Saptamī1	Scorpio (Vṛścika)	Water/ Jala	Jyeṣṭha	6:23 am	
Monday	20/3/2017	Saptamī2	Scorpio (Vṛścika)	Water/ Jala	Jyeṣṭha	6:23 am	
Tuesday	21/3/2017	Aṣṭamī	Sagittarius (Dhanussu)	Fire/Agni	Mūla	6:23 am	
Wednesday	22/3/2017	Navamī	Sagittarius (Dhanussu)	Fire/Agni	Pūrvāṣāḍha	6:17 am	
Thursday	23/3/2017	Daśamī	Capricorn (Makara)	Earth/ <i>Pṛthivī</i>	Uttarāṣāḍha	6:17 am	
Friday	24/3/2017	Ekādaśī	Capricorn (Makara)	Earth/ <i>Pṛthivī</i>	Śravaṇa	6:17 am	
Saturday	25/3/2017	Dvādaśī	Aquarius (Kumbha)	Air/Vāyu	Dhaniṣṭha	6:17 am	
Sunday	26/3/2017	Trayodaśī	Aquarius (Kumbha)	Air/Vāyu	Śatabhiṣa	6:17 am	
Monday	27/3/2017	Caturadaśī	Aquarius (Kumbha)	Air/Vāyu	Pūrvābhadra	6:17 am	
Tuesday	28/3/2017	Amāvasyā	Pisces (Mīna)	Water/ Jala	Uttarābhadra	6:17 am	

Table 2-Almanac (Pañcāṅga): Hevilambhināmasaṁvatsaraḥ uttarāyaṇam vasantaṛtvaḥ caitramāsaḥ

Śuklapakṣaḥ						
Day	Date	Lunar Day/Tithī	Sign/Rāśi	Element/ Tattva	Star/ Nakṣatra	Sunrise time
Wednesday	29/3/2017	Pratipat and Dvitīyā	Pisces (Mīna)	Water/ Jala	Revati	6:17 am
Thursday	30/3/2017	Tṛtīyā	Aries (Meṣa)	Fire/Agni	Aśvini	6:17 am
Friday	31/3/2017	Caturthī	Aries (Meṣa)	Fire/Agni	Bharaṇi & Kṛttika	6:17 am
Saturday	01/4/2017	Pañcamī	Taurus (<i>Vṛṣabha</i>)	Earth/ <i>Pṛthivī</i>	Rohiņi	6:09 am
Sunday	02/4/2017	Ṣaṣṭhi	Taurus (<i>Vṛṣabha</i>)	Earth/ <i>Pṛthivī</i>	Mṛgaśira	6:09 am
Monday	03/4/2017	Saptamī	Gemini (<i>Mithana</i>)	Air/Vāyu	Ārdra	6:09 am
Tuesday	04/4/2017	Aṣṭamī	Gemini (<i>Mithana</i>)	Air/Vāyu	Punarvasu	6:09 am
Wednesday	05/4/2017	Navamī	Cancer (Karkaṭaka)	Water/ Jala	Риѕуа	6:09 am
Thursday	06/4/2017	Daśamī	Cancer (Karkaṭaka)	Water/ Jala	Āśleṣa	6:09 am
Friday	07/4/2017	Ekādaśī	Leo (Simha)	Fire/Agni	Makha	6:09 am
Saturday	08/4/2017	Dvādaśī	Leo (Siṁha)	Fire/Agni	Pubba	6:09 am
Sunday	09/4/2017	Trayodaśī	Virgo (Kanyā)	Earth/ <i>Pṛthivī</i>	Uttara	6:09 am
Monday	10/4/2017	Caturadaśī	Virgo (Kanyā)	Earth/ <i>Pṛthivī</i>	Hasta	6:09 am
Tuesday	11/4/2017	Pūrņimā	Virgo (Kanyā)	Earth/ <i>Pṛthivī</i>	Citta	6:04 am

Kṛṣṇapakṣaḥ						
Day	Date	Lunar Day/Tithī	Sign/Rāśi	Element/ Tattva	Star/ Nakṣatra	Sunrise time
Wednesday	12/4/2017	Pratipat	Libra (Tulā)	Air/Vāyu	Svāti	6:04 am
Thursday	13/4/2017	Dvitīyā	Libra (<i>Tulā</i>)	Air/Vāyu	Svāti	6:04 am
Friday	14/4/2017	Tṛtīyā	Scorpio (<i>Vṛścika</i>)	Water/ Jala	Viśākha	6:04 am
Saturday	15/4/2017	Caturthī	Scorpio (<i>Vṛścika</i>)	Water/ Jala	Anūradha	6:04 am
Sunday	16/4/2017	Pañcamī	Scorpio (<i>Vṛścika</i>)	Water/ Jala	Jyeṣṭha	6:04 am
Monday	17/4/2017	Şaşţhi	Sagittarius (<i>Dhanussu</i>)	Fire/Agni	Mūla	6:04 am
Tuesday	18/4/2017	Saptamī	Sagittarius (<i>Dhanussu</i>)	Fire/Agni	Pūrvāṣāḍha	6:04 am
Wednesday	19/4/2017	Aṣṭamī	Capricorn (Makara)	Earth/ <i>Pṛthivī</i>	Uttarāṣāḍha	6:04 am
Thursday	20/4/2017	Navamī	Capricorn (Makara)	Earth/ <i>Pṛthivī</i>	Śravaṇa	6:04 am
Friday	21/4/2017	Daśamī	Capricorn (Makara)	Earth/ <i>Pṛthivī</i>	Dhaniṣṭha	5:59 am
Saturday	22/4/2017	Ekādaśī	Aquarius (Kumbha)	Air/Vāyu	Śatabhiṣa	5:59 am
Sunday	23/4/2017	Dvādaśī	Aquarius (Kumbha)	Air/Vāyu	Pūrvābhadra	5:59 am
Monday	24/4/2017	Trayodaśī	Pisces (Mīna)	Water/ Jala	Uttarābhadra	5:59 am
Tuesday	25/4/2017	Caturadaśī	Pisces (Mīna)	Water/ Jala	Revati	5:59 am
Wednesday	26/4/2017	Amāvasyā	Aries (Meṣa)	Air/Vāyu	Aśvini	5:59 am

4.5.2 Experiment Procedure

All samples were placed in same room of well ventilation and maintained uniformity in moisture. Photographic demonstration of experiment procedure is given in Fig. 1 and 2. Good seeds were selected randomly with sample size of 600 numbers. There was fifteen replications with each replication have 40 seeds. The schematic diagram of experimental procedure is given in Fig. 3.

Intervention was of two types pyramid that was plywood pyramid and copper pyramid with two different sizes ($20 \text{ cm} \times 20 \text{ cm} \times 15.5 \text{ cm}$ and $13.5 \text{ cm} \times 13.5 \text{ cm} \times 10.5 \text{ cm}$). Weight of each replication seeds that contain 40 seeds was taken and then cleaned the seeds with distilled water to remove foreign matter. After cleaning soaked the seeds for 10 hours by using 30 ml distilled water. Then removed the soaked seeds kept in petri dish with sandwiched between wet filter paper and covered with respective pyramids for treatment samples and control sample was kept in open air. Pyramids are oriented towards magnetic N-S direction. Has put distilled water morning and evening to maintain wetness of a filter paper and allowing samples to germinate for one day. After one day germinated seeds were counted, and measured radical length of each germinated seeds by using measuring scale, then measured weight of fresh seeds with balance of accuracy of 0.0001 gm. After measuring of fresh weight kept the seeds in hot air oven for six hours at 60° c and then measured weight of oven dry seeds. Atmospheric parameters temperature and humidity were recorded 6:00 to 6:30 am, 12 noon and 6 pm and noted weather condition on each day.

To study the effect of lunar days sample was soaked at sunrise time on each *Tithī* of *Phālguṇaḥ Māsa* for fenugreek seeds and for *Caitra Māsa* for green gram seeds and germinated for one day for each treatment of pyramid and for control sample. The details of almanac (*Pañcāṅga*) of these two months were given in Table 1 and 2.

Sample	Randomly	Soaked with	Sandwiched with	Covered with
	selected 40	distilled water	wet filter paper	treatment
	seeds and			
	washed with			
	distilled water			
С				
PSP				
PBP				1
CSP		0		
СВР	0	0		
Legend:	C: Control, PSP:	Plywood small pyra	amid, PBP: Plywood	big pyramid, CSP:

Fig. 1 - Photographic demonstration of experiment procedure of fenugreek seeds

Copper small pyramid, CBP: Copper big pyramid.

Sample	Randomly	Soaked with	Sandwiched with	Covered with
	selected 40 seeds	distilled water	wet filter paper	treatment
	and washed with distilled water			
	distilled water			
С				
PSP				
PBP				
CSP				
СВР				

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid.

Fig. 2 - Photographic demonstration of experiment procedure of green gram seeds

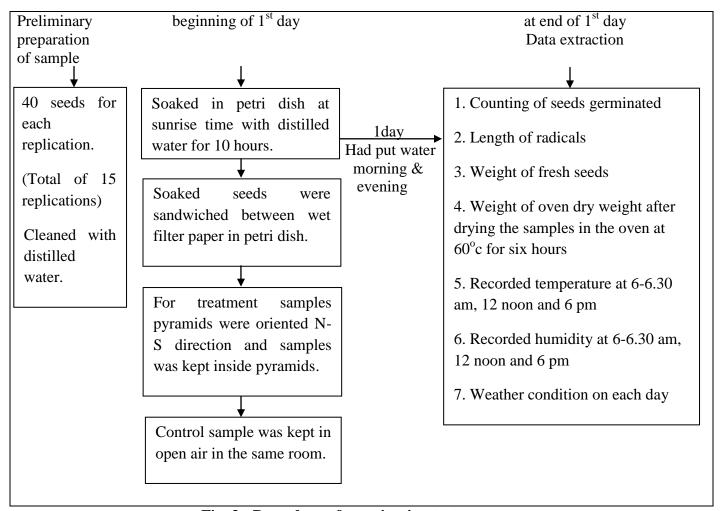


Fig. 3 - Procedure of germination test

In this chapter discussed in section 4.1 about material of the study, 4.2 sample size of the study, 4.3 inclusion criteria, 4.4 exclusion criteria of the study and 4.5 method of the study. In next chapter discussing about data extraction and analysis of the study.

CHAPTER-5

DATA EXTRACTION AND ANALYSIS

5.1 Variable Measured

Following variables are measured

- 1. Dry weight of sample in gm.
- 2. Number of seeds germinated.
- 3. Radical length in cm.
- 4. Fresh weight of germinated seeds in gm.
- 5. Oven dry weight of germinated seeds in gm.
- 6. Temperature at 6 to 6:30 am, 12 noon and 6 pm.
- 7. Humidity at 6 to 6:30 am, 12 noon and 6 pm.
- 8. Weather on each lunar day.

5.2 Analysis of Variables

Following analysis has done for the recorded variables.

5.2.1 Percentage of Germination

$$=\frac{\text{No. of seed germinated}}{\text{No. of seeds taken}} \times 100$$

5.2.2 Radical Length

- Mean, Standard Deviation and t-test were calculated by R studio software and R commander version 3.3.2.
- Shapiro-Wilk normality test was used for testing normal distribution. Conducted two sample independent Welch t-test for normal distribution and Wilcoxon test for non normal distribution.

5.2.3 Fresh Weight

Percentage change with respect of control = $\frac{\text{Fresh weight of pyramid sample} - \text{fresh weight}}{\text{of control sample}} \times 100$

5.2.3 Oven Dry Weight

Oven dry weight of pyramid sample – oven dry weight of control sample
$$=$$
 Weight of control sample \times 100 Oven dry weight of control sample

In this chapter discussed in section 5.1 about variable mesured in the study and 5.2 analysis of variables of the study. In next chapter discussing about result of the study.

CHAPTER-6

RESULT

6.1 Effect of Pyramids on Germination of Fenugreek Seeds

6.1.1 Effect of Pyramids

Table 3 shows the result of pyramids effect on germination of fenugreek seeds and Table 4 indicates summary of two sample independent t-test of mean radical length. Fig. 4 shows graphical representation of effect of pyramids on radicals and Fig. 5 shows graphical representation of variation of dry weight, fresh weight and oven dry weight of samples. Control (99.83%) and PBP had maximum % of germination compared to other samples and all treatment samples except CSP sample had more mean radical length compared to control sample and in this PBP sample had exponential increment (<0.001), PSP sample had higher significant (<0.01) and CBP sample had significant (<0.05) increment. All treatment samples had more fresh weight and oven dry weight of germinated samples compared to control sample and in this CBP sample had maximum fresh weight 26.69 gm and PSP had maximum oven dry weight 7.97 gm.

6.1.2 Effect of Material of Pyramids

Plywood pyramid sample had maximum % of germination (99.83) compared to copper pyramid samples (99.67) and all plywood pyramid had more mean radical length (1.11 cm) compared to copper pyramid sample (1.05 cm). Copper pyramid sample had more fresh weight (8.89 gm) of germinated samples compared to plywood pyramid sample (8.81gm) and plywood pyramid sample had more oven dry weight (7.92 gm) of germinated samples compared to copper pyramid sample (7.84 gm).

6.1.3 Effect of Size of Pyramids

PBP had maximum % of germination (99.83) compared to PSP (99.00) and CBP had maximum % of germination (99.67) compared to CSP (99.50). PBP had more mean radical length (1.11 cm) compared to PSP (1.05 cm) and CBP had more mean radical length (1.05 cm) compared to CSP (0.97 cm). PBP had more fresh weight (25.53 gm) of germinated samples compared to PSP (24.50 cm) and CBP had more fresh weight (26.69 gm) of germinated samples compared to CSP (25.16 cm). PSP had more oven dry weight (7.97 gm) of germinated samples compared to

PBP (7.92 gm) CSP had more oven dry weight (7.85 gm) of germinated samples compared to CBP (7.84 gm).

Table 3-Effect of pyramids on germination of fenugreek seeds

Variable	Treatment							
	C	PSP	PBP	CSP	CBP			
Number of seeds	600	600	600	600	600			
% of germinated seeds	99.83	99.00	99.83	99.50	99.67			
Mean of radicals length (cm)	0.98	1.05	1.11	0.97	1.05			
Standard deviation of radicals length	0.37	0.39	0.43	0.39	0.44			
Dry weight of seeds (gm)	8.87	8.87	8.89	8.81	8.81			
Fresh weight of germinated seeds (gm)	20.35	24.5	25.53	25.16	26.69			
% change of fresh weight		20.39	25.45	25.45	31.15			
Oven dry weight of germinated seeds (gm)	7.78	7.97	7.92	7.85	7.84			
% change of oven dry weight		2.44	1.80	0.90	0.77			

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid

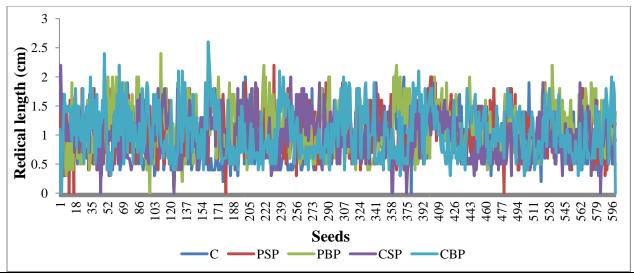
- 1. Samples C and PBP had maximum % of germination.
- 2. All treated samples had more mean radical length compared to C except CSP sample.
- 3. All treated samples had more fresh weight of germinated seeds compared to control sample.
- 4. All treated samples had more oven dry weight of germinated seeds compared to control sample.

Table 4-Summary of two sample independent t-test of radical length

Treatment	<i>p</i> -value
C vs PSP	0.0012**
C vs PBP	2.602e-07***
C vs CSP	0.6989
C vs CBP	0.0359*
PSP vs PBP	0.0426*
PSP vs CSP	0.0004***
PSP vs CBP	0.3630
PBP vs CSP	7.768e-08***
PBP vs CBP	0.0050**
CSP vs CBP	0.0168*

Legend: **p*<0.05,***p*<0.01,****p*<0.001

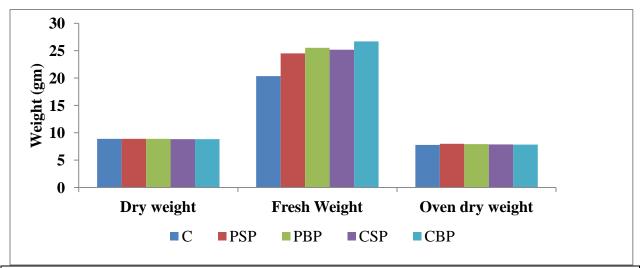
 PBP sample had shown exponential significant, PSP had higher significant, CBP had significant and CSP not had significant increment in radical length compared to control sample.



Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid

• Pyramid samples were more effective than control sample on mean radical length.

Fig. 4 - Effect of pyramids on radical length of fenugreek seeds



Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid

- Dry weight of the sample was almost same for all the samples.
- Copper big pyramid showed more effctive on fresh weight.
- Between the samples there was no much difference in the oven dry weight of germinated seeds

Fig. 5 – Dry weight, fresh weight and oven dry weight of germinated fenugreek seeds

6.2 Effect of Lunar Days on Germination of Fenugreek Seeds

Tables 5.1 & 5.2 and 6.1 & 6.2 showed the effect of lunar days on the fresh weight and oven dry weight of germinated seeds at Śukla Pakṣah and Kṛṣṇa Pakṣah respectively. Control sample that not had any treatment (pyramid) effect had variation in its weight due to the influence of lunar days. Control (1.61 gm), PSP (1.93 gm) and PBP (1.87 gm) samples had their maximum fresh weight of germinated seeds on Pūrnimā and CSP (1.88 gm) & CBP (2.03 gm) samples had their maximum fresh weight on Pañcamī and Dvādaśī respectively at Śukla Paksah. All samples had their maximum oven dry weight of germinated seeds on around Saptamī at Śukla Paksah. At Krsna Paksah all samples had their maximum fresh weight at between Pratipat to Astamī and they have maximum oven dry weight between Saptamī2 to Caturadaśī. Tables 7.1 & 7.2 and 8.1 & 8.2 indicated that control sample that not have any influence of treatment (pyramid) and samples PSP, PBP, CSP and CBP which had influence of respective pyramid (treatment) had variation in their % of germination and mean radical length due to the effect of lunar days at both Śukla Paksah and Krsna Paksah. Results show that control sample (1.27 cm) on Daśamī, PSP sample (1.22 cm) on *Dvādaśī*, PBP sample (1.36 cm) on *Pūrnimā*, CSP sample (1.25 cm) on Astamī, CBP sample (1.06 cm) on Navamī have maximum mean radical length at Śukla Paksah and at Kṛṣṇa Pakṣaḥ control sample (1.37 cm), PSP sample (1.34 cm), PBP sample (1.44 cm) and CSP sample (1.27 cm) on Navamī and CBP sample (1.21 cm) on Saptamī1 have more mean radical length. At average all samples had shown 100% germination on all days. Table 9.1 and 9.2 shows atmosphere parameter temperatures and humidity at Śukla Pakṣaḥ and Kṛṣṇa Pakṣaḥ respectively. Fig. 6 and 7 shows mean radical variation on lunar days at Śukla Paksah and Kṛṣṇa Paksah respectively. Fig. 8 shows photographic representation of Pattern of germination of fenugreek seeds

Table 5.1-Lunar days effect on fresh weight and oven dry weight of germinated fenugreek seeds at Śukla Pakṣaḥ

Day		С				PSP			PBP					
	dry weight (gm)	Fresh weight (gm)	Oven dry weight (gm)	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	
Pratipat	0.60	1.09	0.50	0.59	1.69	55.05	0.56	12.00	0.62	1.69	55.05	0.55	10.00	
Dvitīyā	0.60	1.60	0.53	0.58	1.77	10.63	0.51	-3.77	0.60	1.87	16.88	0.53	0.00	
Tṛtīyā	0.58	1.27	0.48	0.58	1.71	34.65	0.51	6.25	0.58	1.68	32.28	0.53	10.42	
Caturthī	0.58	1.45	0.53	0.60	1.45	0.00	0.51	-3.77	0.58	1.49	2.76	0.53	0.00	
Pañcamī	0.58	1.13	0.53	0.58	1.78	57.52	0.53	0.00	0.60	1.85	63.72	0.54	1.89	
Ṣaṣṭhiand Saptamī	0.61	1.17	0.56	0.59	1.41	20.51	0.53	-5.36	0.61	1.63	39.32	0.55	-1.79	
A ṣṭam $\bar{\imath}$	0.58	1.24	0.52	0.60	1.44	16.13	0.53	1.92	0.58	1.47	18.55	0.51	-1.92	
Navamī	0.62	1.55	0.55	0.58	1.61	3.87	0.53	-3.64	0.59	1.73	11.61	0.53	-3.64	
Daśamī	0.58	1.51	0.50	0.58	1.66	9.93	0.51	2.00	0.58	1.71	13.25	0.52	4.00	
Ekādaśī	0.58	1.57	0.48	0.58	1.71	8.92	0.55	14.58	0.59	1.70	8.28	0.53	10.42	
Dvādaśī	0.59	1.09	0.53	0.61	1.57	44.04	0.54	1.89	0.60	1.76	61.47	0.53	0.00	
Trayodaśī	0.58	1.26	0.52	0.59	1.52	20.63	0.52	0.00	0.58	1.52	20.63	0.52	0.00	
Caturadaśī	0.59	1.04	0.52	0.59	1.28	23.08	0.52	0.00	0.59	1.57	50.96	0.52	0.00	
Pūrṇimā	0.60	1.61	0.51	0.62	1.93	19.88	0.57	11.76	0.59	1.87	16.15	0.51	0.00	

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid

- 1. Due to lunar day effect there was variations in fresh and oven dry weight of germinated seeds of all sample in Sukla Pakṣaḥ.
- 2. PSP and PBP samples had more fresh weight compared to control sample on all lunar days in Śukla Pakṣaḥ.
- 3. All samples C, PSP and PBP had maximum fresh weight of germinated seeds on lunar day $P\bar{u}rnim\bar{a}$ in Sukla Pakṣah.
- 4. C and PBP samples had maximum oven dry weight on Ṣaṣṭhi & Saptamī and PSP sample on Pūrṇimā in Śukla Pakṣaḥ.

Table 5.2-Lunar days effect on fresh weight and oven dry weight of germinated fenugreek seeds at $\acute{S}ukla~Pakṣaḥ$

Day			CSP					CBP		
·	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	Dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight
Pratipat	0.58	1.68	54.13	0.51	2.00	0.60	1.90	74.31	0.53	6.00
Dvitīyā	0.58	1.52	-5.00	0.51	-3.77	0.58	1.80	12.50	0.51	-3.77
Tṛtīyā	0.59	1.84	44.88	0.52	8.33	0.58	1.86	46.46	0.55	14.58
Caturthī	0.58	1.40	-3.45	0.53	0.00	0.58	1.48	2.07	0.52	-1.89
Pañcamī	0.58	1.88	66.37	0.52	-1.89	0.58	1.84	62.83	0.52	-1.89
<i>Ṣaṣṭhi</i> and										
Saptamī	0.61	1.69	44.44	0.55	-1.79	0.59	1.54	31.62	0.54	-3.57
<i>Aṣṭamī</i>	0.58	1.49	20.16	0.51	-1.92	0.61	1.86	50.00	0.54	3.85
Navamī	0.60	1.67	7.74	0.53	-3.64	0.58	1.83	18.06	0.51	-7.27
Daśamī	0.59	1.75	15.89	0.52	4.00	0.58	1.94	28.48	0.53	6.00
Ekādaśī	0.58	1.39	-11.46	0.55	14.58	0.58	1.36	-13.38	0.47	-2.08
Dvādaśī	0.61	1.68	54.13	0.51	-3.77	0.59	2.03	86.24	0.54	1.89
Trayodaśī	0.58	1.78	41.27	0.52	0.00	0.58	1.68	33.33	0.52	0.00
Caturadaśī	0.59	1.56	50.00	0.52	0.00	0.60	1.69	62.50	0.53	1.92
Pūrņimā	0.58	1.80	11.80	0.52	1.96	0.60	1.96	21.74	0.53	3.92

Legend: CSP: copper small pyramid, CBP: copper big pyramid

^{1.} CSP sample had maximum fresh weight of germinated seeds on *Pañcamī* and CBP on *Dvādaśī* at Śukla *Pakṣaḥ*.

^{2.} CSP sample had maximum oven dry weight on Ṣaṣṭhi & Saptamī and Ekādaśī and CBP on Tṛtīyā at Śukla Pakṣaḥ.

Table 6.1-Lunar days effect on fresh weight and oven dry weight of germinated fenugreek seeds at Kṛṣṇa Pakṣaḥ

Day		С				PSP			PBP				
	dry weight (gm)	Fresh weight (gm)	Oven dry weight (gm)	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight
Pratipat	0.6	1.77	0.52	0.6	1.97	11.30	0.55	5.77	0.6	1.99	12.43	0.52	0.00
Dvitīyā	0.58	1.6	0.51	0.58	1.66	3.75	0.54	5.88	0.59	1.64	2.50	0.51	0.00
Tṛtīyā	0.62	1.49	0.51	0.62	1.62	8.72	0.55	7.84	0.62	1.8	20.81	0.56	9.80
Caturthī	0.58	1.5	0.52	0.59	1.57	4.67	0.53	1.92	0.58	1.6	6.67	0.5	-3.85
Pañcamī	0.61	1.87	0.53	0.58	1.82	-2.67	0.51	-3.77	0.61	1.73	-7.49	0.52	-1.89
Ṣaṣṭhi	0.58	1.59	0.51	0.58	1.64	3.14	0.52	1.96	0.58	1.76	10.69	0.52	1.96
Saptamī1	0.58	1.36	0.5	0.58	1.61	18.38	0.51	2.00	0.58	1.57	15.44	0.51	2.00
Saptamī2	0.59	1.72	0.52	0.62	1.85	7.56	0.55	5.77	0.62	1.91	11.05	0.56	7.69
Aṣṭamī	0.58	1.56	0.51	0.58	1.7	8.97	0.51	0.00	0.58	1.81	16.03	0.5	-1.96
Navamī	0.62	1.33	0.55	0.58	1.51	13.53	0.55	0.00	0.6	1.76	32.33	0.53	-3.64
Daśamī	0.58	1.6	0.52	0.6	1.58	-1.25	0.53	1.92	0.6	1.96	22.50	0.53	1.92
Ekādaśī	0.58	1.39	0.52	0.61	1.85	33.09	0.56	7.69	0.61	1.71	23.02	0.53	1.92
Dvādaśī	0.59	0.93	0.53	0.59	1.59	70.97	0.52	-1.89	0.58	1.52	63.44	0.5	-5.66
Trayodaśī	0.61	1.23	0.57	0.62	1.4	13.82	0.55	-3.51	0.62	1.37	11.38	0.56	-1.75
Caturadaśī	0.62	1.35	0.53	0.59	1.49	10.37	0.56	5.66	0.59	1.71	26.67	0.53	0.00
Amāvasyā	0.59	1.48	0.52	0.58	1.59	7.43	0.51	-1.92	0.59	1.78	20.27	0.52	0.00

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid

- 1. Variations in fresh weight and oven dry weight of all samples due to the effect of lunar days at Kṛṣṇa Pakṣaḥ.
- 2. Control sample had maximum fresh weight on Pañcamī, PSP and PBP samples had on Pratipat at Kṛṣṇa Pakṣaḥ.
- 3. Control sampe had maximum oven dry weight on *Trayodaśī*, PSP had on *Ekādaśī* and *Caturadaśī* and PBP had on *Tṛtīyā*, *Saptamī*2and *Trayodaśī* at *Kṛṣṇa Pakṣah*.

Table 6.2-Lunar days effect on fresh weight and oven dry weight of germinated fenugreek seeds at *Kṛṣṇa Pakṣaḥ*

Day			CSP			СВР						
	Dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	Dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight		
Pratipat	0.58	2.03	14.69	0.53	1.92	0.58	1.92	8.47	0.5	-3.85		
Dvitīyā	0.6	1.92	20.00	0.54	5.88	0.58	1.89	18.13	0.52	1.96		
Tṛtīyā	0.61	1.77	18.79	0.54	5.88	0.62	1.87	25.50	0.55	7.84		
Caturthī	0.58	1.77	18.00	0.5	-3.85	0.58	1.73	15.33	0.5	-3.85		
Райсаті	0.58	1.87	0.00	0.51	-3.77	0.58	1.87	0.00	0.53	0.00		
Şaşţhi	0.58	1.83	15.09	0.47	-7.84	0.6	1.94	22.01	0.54	5.88		
Saptamī1	0.58	1.73	27.21	0.5	0.00	0.58	1.68	23.53	0.52	4.00		
Saptamī2	0.61	1.88	9.30	0.55	5.77	0.62	1.95	13.37	0.56	7.69		
Aṣṭamī	0.6	1.8	15.38	0.53	3.92	0.61	2.03	30.13	0.55	7.84		
Navamī	0.58	1.72	29.32	0.52	-5.45	0.62	1.89	42.11	0.56	1.82		
Daśamī	0.58	1.72	7.50	0.51	-1.92	0.62	1.93	20.63	0.55	5.77		
Ekādaśī	0.58	1.8	29.50	0.51	-1.92	0.58	1.83	31.65	0.52	0.00		
Dvādaśī	0.58	1.74	87.10	0.52	-1.89	0.59	1.79	92.47	0.52	-1.89		
Trayodaśī	0.59	1.59	29.27	0.53	-7.02	0.61	1.62	31.71	0.53	-7.02		
Caturadaśī	0.62	1.85	37.04	0.56	5.66	0.62	2.03	50.37	0.56	5.66		
Amāvasyā	0.61	1.99	34.46	0.54	3.85	0.62	1.99	34.46	0.55	5.77		

Legend: CSP: copper small pyramid, CBP: copper big pyramid

- 1. CSP and CBP samples had more fresh weight of germinated seeds compared to control sample on all lunar days at *Kṛṣṇa Pakṣaḥ*.
- 2. CSP sample had maximum fresh weight of germinated seeds on *Pratipat* and CBP had on *Aṣṭamī* and *Caturadaśī* at *Kṛṣṇa Pakṣaḥ*.
- 3. CSP sample had maximum oven dry weight of germinated seeds on *Caturadaśī* and CBP had on *Saptamī*2, *Navamī* and *Caturadaśī* at *Kṛṣṇa Pakṣaḥ*.

Table 7.1-Lunar days effect on germination and radical length of fenugreek seeds on day 1 at Śukla Pakṣaḥ

Day		C				PS	P		PBP					
	Mean (cm)	Std.	% of germ.	Mean (cm)	Std.	% change	p-value	% of germ.	Mean (cm)	Std.	% change	p-value	% of germ	
Pratipat	0.77	0.16	100	0.96	0.46	25.16	0.0161*	95	0.82	0.37	6.86	0.9806	100	
Dvitīyā	1.05	0.34	100	1.20	0.40	14.59	0.0372*	100	1.32	0.41	26.56	0.0014**	100	
Tṛtīyā	0.68	0.22	100	1.03	0.38	51.84	3.473e-05***	97.5	1.08	0.50	58.82	0.0001***	97.5	
Caturthī	0.82	0.30	100	0.99	0.42	21.17	0.0357*	97.5	1.06	0.44	30.06	0.0091**	100	
Pañcamī	0.65	0.32	100	1.08	0.43	66.15	1.996e-06***	100	1.21	0.46	85.38	3.379e-08***	100	
<i>Ṣaṣṭhi</i> and														
Saptam ī	1.03	0.40	100	1.16	0.37	12.86	0.1294	100	1.17	0.45	13.11	0.1631	100	
Aṣṭamī	0.74	0.33	100	1.01	0.36	36.61	0.0004***	100	1.04	0.34	40.68	0.0001***	100	
Navamī	1.06	0.29	100	1.02	0.38	-3.54	0.5458	100	1.07	0.40	0.89	0.5493	100	
Daśamī	1.27	0.22	100	1.12	0.39	-12.01	0.1124	100	1.00	0.41	-21.26	0.0009***	100	
Ekādaśī	1.25	0.40	97.5	0.96	0.42	-23.25	0.0019**	97.5	1.18	0.51	-5.21	0.3878	100	
Dvādaśī	1.26	0.24	100	1.22	0.37	-3.38	0.5406	100	1.22	0.37	-2.78	0.6165	100	
Trayodaśī	1.10	0.28	100	0.99	0.37	-10.66	0.1119	97.5	0.98	0.38	-11.34	0.0973	100	
Caturadaśī	1.19	0.32	100	1.02	0.37	-14.50	0.0292*	100	0.92	0.33	-23.11	0.0002***	100	
Pūrņimā	1.07	0.30	100	1.00	0.34	-6.54	0.3374	100	1.36	0.35	27.34	0.0002***	100	

Legend: PSP: plywood small pyramid, PBP: plywood big pyramid, germ: germination

*p<0.05, ** p<0.01, *** p<0.001

- 1. In all the samples there is variations in mean radical length due to the effect of lunar days at Śukla Pakṣaḥ.
- 2. Control sample had maximum mean radical on lunar day Daśamī at Śukla Pakṣaḥ.
- 3. Compared to control sample PSP sample had exponential increment in radicals on *Tṛtīyā*, *Pañcamī* and *Aṣṭamī*,

higher significant on Ekādaśī and significant on Pratipat, Dvitīyā, Caturthī and Caturadaśī at Śukla Pakṣaḥ

4. Compared to control sample PBP sample had exponential increment in radicals on *Tṛtīyā*, *Pañcamī*,

Aṣṭamī, Daśamī, Caturadaśī and Pūrṇimā and higher significant on Dvitīyā and Caturthī at Śukla Pakṣaḥ.

Table 7.2-Lunar days effect on germination and radical length of fenugreek seeds on day 1 at Śukla Pakṣaḥ

Day			CS	P		СВР						
	Mean (cm)	Std.	% change	<i>p</i> -value	% of germ.	Mean (cm)	Std.	% change	<i>p</i> -value	% of germ.		
Pratipat	1.15	0.35	50.65	3.79e-08***	100	1.18	0.44	54.25	8.561e-07***	97.5		
Dvitīyā	0.82	0.40	-22.01	0.0082**	97.5	1.19	0.52	14.11	0.1352	100		
Tṛtīyā	1.12	0.38	63.97	2.82e-07***	100	1.06	0.40	55.15	7.368e-06***	100		
Caturthī	0.93	0.45	14.42	0.2665	100	1.08	0.46	31.90	0.0085**	100		
Pañcamī	1.06	0.44	63.46	1.02e-05***	100	1.08	0.55	66.54	0.0001***	100		
<i>Şaşţhi</i> and												
Saptamī	0.94	0.41	-8.98	0.2665	100	0.84	0.37	-18.20	0.0236*	100		
<i>A</i> ṣṭamī	1.25	0.33	69.49	9.41e-09***	100	0.98	0.40	32.20	0.0027**	100		
Navamī	0.97	0.38	-8.73	0.2242	100	1.06	0.46	0.00	0.5174	100		
Daśamī	0.99	0.42	-22.44	0.0003***	100	1.05	0.46	-17.32	0.0054**	100		
Ekādaśī	0.90	0.39	-27.86	0.0002***	97.5	1.11	0.51	-10.82	0.2237	100		
Dvādaśī	1.09	0.33	-13.12	0.0243*	100	0.96	0.41	-24.06	0.0002***	100		
Trayodaśī	0.69	0.27	-37.19	5.2e-08***	100	1.10	0.32	-0.45	0.9415	100		
Caturadaśī	0.80	0.30	-33.19	2.21e-07***	100	1.01	0.40	-14.92	0.0319*	100		
Pūrṇimā	0.92	0.31	-14.49	0.0262*	100	0.99	0.36	-7.48	0.2858	100		

Legend: CSP: copper small pyramid, CBP: copper big pyramid, germ: germination

- 1. With respect to control sample CSP sample had exponential increment in radicals on *Pratipat*, *Tṛtīyā*, *Pañcamī*, *Aṣṭamī*, *Daśamī*, *Ekādaśī*, *Trayodaśī* and *Caturadaśī*, higher significant on *Dvitīyā* and significant on *Dvādaśī* and *Pūrṇimā* at *Śukla Pakṣaḥ*.
- 2. Compared to control sample CBP sample had exponential increment in radicals on *Pratipat*, *Tṛtīyā*, *Pañcamī* and *Dvādaśī*, higher significant on *Caturthī*, *Aṣṭamī* and *Daśamī* and significant increment on *Ṣaṣṭhi* & *Saptamī* and *Caturadaśī* at Śukla Pakṣaḥ.

Table 8.1-Lunar days effect on germination and radical length of fenugreek seeds on day 1 at Kṛṣṇa Pakṣaḥ

Day		С				PS	P				PE	BP	
	Mean (cm)	Std.	% of germ.	Mean (cm)	Std.	% change	p-value	% of germ.	Mean (cm)	Std.	% change	p-value	% of germ.
Pratipat	0.72	0.27	100	1.02	0.40	40.97	0.0008***	100	1.23	0.35	70.49	1.279e-08***	100
Dvitīyā	0.72	0.30	100	1.16	0.42	62.02	0.0100**	100	1.01	0.38	40.77	3.977e-05***	100
Tṛtīyā	1.17	0.30	97.5	1.11	0.42	-5.54	0.5269	100	1.21	0.54	2.77	0.7401	100
Caturthī	0.85	0.45	100	1.00	0.42	17.06	0.0044**	100	1.26	0.47	48.53	0.0001***	97.5
Pañcam ī	0.65	0.29	100	1.02	0.32	56.54	1.35e-08***	100	1.06	0.43	63.08	1.405e-06***	100
Ṣaṣṭhi	1.07	0.38	100	0.85	0.34	-21.03	0.2217	100	0.81	0.31	-24.30	0.0007***	100
Saptamī1	1.28	0.31	100	1.29	0.26	0.39	0.4537	100	1.20	0.30	-6.82	0.0437*	100
Saptamī2	1.01	0.31	100	1.05	0.34	4.22	0.7827	100	0.88	0.30	-13.15	0.0287*	100
Așțamī	0.99	0.37	100	0.99	0.40	0.00	0.9474	100	0.90	0.30	-9.60	0.2289	100
Navamī	1.37	0.35	100	1.34	0.43	-2.20	0.0768	100	1.44	0.39	5.31	0.5517	100
Daśamī	0.74	0.28	100	1.04	0.34	40.54	0.4199	100	1.07	0.42	44.26	0.0001***	100
Ekādaśī	1.13	0.28	100	1.04	0.36	-8.41	0.0597	100	1.21	0.37	6.64	0.3102	100
Dvādaśī	0.98	0.28	100	1.10	0.36	12.21	0.0194*	100	0.91	0.44	-7.12	0.4037	100
Trayodaśī	0.90	0.30	100	0.81	0.23	-10.56	0.8883	100	0.99	0.35	9.44	0.2501	100
Caturadaśī	0.88	0.31	97.5	0.74	0.26	-16.19	0.9614	100	0.89	0.45	0.85	0.9313	100
Amāvasyā	1.12	0.30	100	1.08	0.45	-4.01	0.7891	95	1.17	0.40	4.01	0.5683	100

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, germ: germination

- 1. Variations in mean radical length in all the samples due to the effect of lunar days at *Kṛṣṇa Pakṣaḥ*.
- 2. Control sample had maximum mean radical length on lunar day Navamī at Kṛṣṇa Pakṣaḥ.
- 3. With respect to control sample PSP sample had exponential increment in mean radicals on *Pratipat* and *Pañcamī*, higher significant on *Dvītīyā* and *Caturthī* and significant increment on *Dvādaśī* at *Kṛṣṇa Pakṣaḥ*.
- 4. Compared to control sample PBP sample had exponential increment in mean radicals on *Pratipa*, *Dvitīyā*, *Caturthī*, *Pañcamī*, *Ṣaṣṭhi* and *Daśamī* and significant increment on *Saptamī1* and *Saptamī2* at *Kṛṣṇa Pakṣaḥ*.

Table 8.2-Lunar days effect on germination and radical length of fenugreek seeds on day 1 at Kṛṣṇa Pakṣaḥ

Day			CSP					CBP		
	Mean (cm)	Std.	% change	<i>p</i> -value	% of germ.	Mean (cm)	Std.	% change	p-value	% of germ.
Pratipat	0.97	0.38	35.07	0.0008***	97.5	1.02	0.48	42.01	0.0019**	97.5
Dvitīyā	1.03	0.48	43.21	0.0100**	100	0.89	0.50	23.34	0.1876	97.5
Tṛtīyā	1.26	0.47	7.46	0.5269	100	1.06	0.50	-9.38	0.1530	100
Caturthī	1.12	0.43	31.18	0.0044**	100	1.03	0.44	21.18	0.0540	100
Pañcamī	1.18	0.41	81.15	1.35e-08***	100	1.04	0.37	59.23	4.741e-07***	100
Ṣaṣṭhi	1.01	0.36	-6.07	0.2217	100	0.77	0.36	-28.27	0.0005***	97.5
Saptamī1	1.24	0.42	-3.12	0.4537	100	1.21	0.44	-5.46	0.3433	100
Saptamī2	1.02	0.34	0.74	0.7827	100	0.87	0.30	-13.65	0.0240*	100
<i>A</i> ṣṭamī	0.99	0.30	-0.51	0.9474	100	0.88	0.26	-11.11	0.1349	100
Navamī	1.27	0.35	-6.96	0.0768	100	1.06	0.34	-22.16	3.296e-05***	100
Daśamī	0.77	0.25	4.39	0.4199	100	0.85	0.35	15.20	0.2002	100
Ekādaśī	1.00	0.33	-11.73	0.0597	100	0.84	0.35	-25.66	0.0003***	100
Dvādaśī	0.85	0.34	-13.99	0.0194*	100	0.84	0.43	-14.50	0.0097**	100
Trayodaśī	0.96	0.41	6.39	0.8883	100	0.60	0.16	-33.33	7.26e-07***	100
Caturadaśī	0.94	0.44	7.10	0.9614	100	0.76	0.37	-13.64	0.0286*	100
Amāvasyā	1.10	0.36	-1.78	0.7891	100	0.90	0.40	-20.27	0.0018**	100

Legend: CSP: copper small pyramid, CBP: copper big pyramid, germ: germination

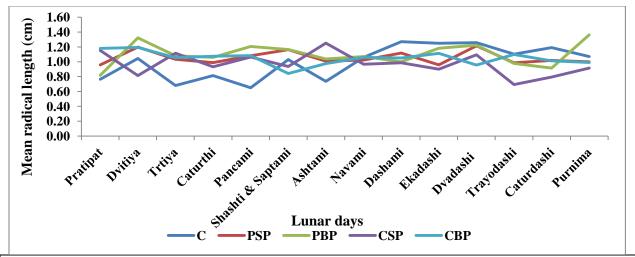
- 1. Compared to control sample CSP sample had exponential increment in mean radicals on *Pratipat* and *Pañcamī*, higher significant on *Dvītīyā* and *Caturthī* and significant increment on *Dvādaśī* at *Kṛṣṇa Pakṣaḥ*.
- 2. With respect to control sample CBP sample had exponential increment in mean radicals on *Pañcamī*, Ṣaṣṭhi, *Navamī*, *Ekādaśī* and *Trayodaśī*, higher significant on *Pratipat*, *Dvādaśī* and *Amāvasyā* and significant increment on *Saptamī*2 and *Caturadaśī* at *Kṛṣṇa Pakṣaḥ*.

Table 9.1- Atmosphere parameter at Śukla Pakṣaḥ of Phālguṇaḥ Māsa

Day		Tampratui	re (t) °c			Humidity	(h) %	
	6 to 6:30	12 noon	6 pm	Average	6 to 6:30	12 noon	6 pm	Average
	am				am			
Pratipat	25.6	25.8	28.9	26.77	42	41	27	36.67
Dvitīyā	23	25.5	29.2	25.90	46	35	26	35.67
Tṛtīyā	24.2	25	28	25.73	35	32	29	32.00
Caturthī	23	24.9	28.4	25.43	40	36	32	36.00
Pañcamī	23.1	26.4	30.1	26.53	51	44	37	44.00
Ṣaṣṭhiand Saptamī	24.5	28.1	30.7	27.77	51	49	42	47.33
<i>Aṣṭamī</i>	26.2	28.3	28.9	27.80	54	53	51	52.67
Navamī	26.3	27.6	29.5	27.80	58	61	52	57.00
Daśamī	25.2	27.6	29.7	27.50	63	56	53	57.33
Ekādaśī	26.1	27.1	30.1	27.77	64	60	52	58.67
Dvādaśī	26.2	27.9	30.3	28.13	62	57	51	56.67
Trayodaśī	26.4	28	31.4	28.60	56	47	44	49.00
Caturadaśī	26.8	28.4	20.4	25.20	48	40	37	41.67
Pūrṇimā	27.1	29.2	33.1	29.80	47	44	32	41.00
Mean	25.26	27.13	29.19	27.20	51.21	46.79	40.36	46.12
SD	1.45	1.37	2.84	1.32	8.88	9.52	10.19	9.27

Table 9.2- Atmosphere parameter at Kṛṣṇa Pakṣaḥ of Phālguṇaḥ Māsa

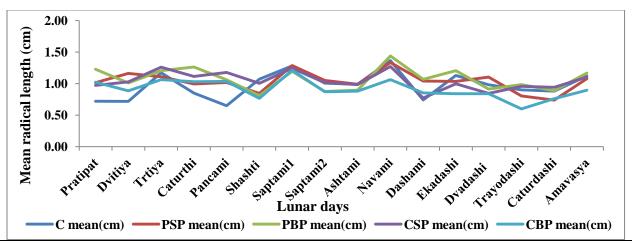
Day		Tampratu	re (t) °c		Humidity (h) %					
	6 to 6:30	12 noon	6 pm	Average	6 to 6:30	12 noon	6 pm	Average		
	am				am					
Pratipat	27.6	31.1	32.6	30.43	47	46	42	45.00		
Dvitīyā	27.4	28.4	29.1	28.30	55	57	52	54.67		
Tṛtīyā	25.1	27.5	30.1	27.57	62	52	44	52.67		
Caturthī	25.3	28.1	29.6	27.67	57	48	39	48.00		
Pañcamī	25.1	28.6	31.4	28.37	52	47	41	46.67		
Şaşţhi	26.3	29.3	32.6	29.40	55	47	37	46.33		
Saptamī1	27.8	30.1	34.2	30.70	50	49	35	44.67		
Saptamī2	28.2	30.4	35.1	31.23	50	49	36	45.00		
<i>Aṣṭamī</i>	27.7	29.8	34.8	30.77	47	47	34	42.67		
Navamī	27.0	29.6	32.3	29.63	50	44	33	42.33		
Daśamī	26.5	29.1	32.6	29.40	51	43	39	44.33		
Ekādaśī	26.8	29.8	33.1	29.90	47	38	24	36.33		
Dvādaśī	26.9	29.8	30.6	29.10	39	31	26	32.00		
Trayodaśī	27.1	29.8	32.3	29.73	35	32	24	30.33		
Caturadaśī	27.5	30.1	33.2	30.27	35	30	26	30.33		
Amāvasyā	27.8	29.9	30.4	29.37	33	35	24	30.67		
Mean	26.88	29.46	32.13	29.49	47.81	43.44	34.75	42.00		
SD	0.99	0.92	1.80	1.09	8.40	7.97	8.25	7.81		



Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid, germ: germination

• Second phase of Śukla Pakṣaḥ had more influence on the mean radical length.

Fig. 6 - Mean radical length on each tithi at Śukla Pakṣaḥ of fenugreek seeds



Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid, germ: germination

• Second phase of Kṛṣṇa Pakṣaḥ had more influence on the mean radical length.

Fig. 7 - Mean radical length on each tithi at Kṛṣṇa Pakṣah of fenugreek seeds

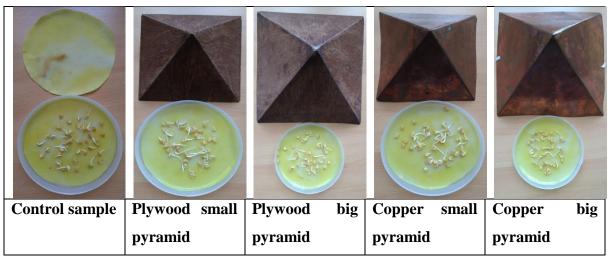


Fig. 8 - Pattern of germination of fenugreek seeds

6.3 Effect of Pyramid on Germination of Green Gram Seeds

6.3.1 Effect of Pyramids

Table 10 shows the result of pyramids effect on germination of green gram seeds and Table 11 indicates summary of two sample independent t-test of mean radical length. All pyramid samples had more % of germination in compared to control samples, PBP (99.5%) and CBP had maximum % of germination compared to other samples and all treatment samples had more mean radical length compared to control sample and all sample had exponential increment (<0.001). All treatment samples had more fresh weight compared to control sample and in this CBP sample had maximum fresh weight (82.06 gm) and control had more oven dry weight (23.12 gm) of germinated samples compared to all treatment. Fig 9 shows graphical representation of effect of pyramids on radicals and Fig. 10 shows graphical representation of dry weight, fresh weight and oven dry weight of sample.

6.3.2 Effect of Material of Pyramids

Both PBP (99.5%) and CBP (99.5%) samples show maximum % of germination. CSP (2.34 cm) & CBP (2.47 cm) had more mean radical length compared to PSP (2.26 cm) & PBP (2.47 cm). CSP (80.04 gm) & CBP (82.06 gm) had more fresh weight of germinated samples compared to PSP (76.21 gm) & PBP (78.77 gm). PSP (20.97 gm) & PBP (25.03 gm) had more oven dry weight of germinated samples compared to CSP (22.59 gm) & CBP (22.63 gm).

6.3.3 Effect of Size of Pyramids

PBP (99.5) & CBP (99.5) had maximum % of germination compared to PSP (99) & CSP (99) and PBP (2.45 cm) & CBP (2.47 cm) had more mean radical length compared to PSP (2.34 cm) & CSP (2.47 cm) and PBP (78.77 gm) & CBP (82.06 gm) had more fresh weight compared to PSP (76.21 gm) & CSP (80.04 gm). PBP (22.88 gm) & CBP (22.63 gm) had more oven dry weight compared to PSP (22.62 gm) & CSP (22.59 gm).

Table 10-Effect of pyramids on germination of green gram seeds

Variable		T	reatment	;	
	C	PSP	PBP	CSP	CBP
Number of seeds	600	600	600	600	600
% of germinated seeds	98.83	99	99.5	99	99.5
Mean of radicals length (cm)	1.57	2.26	2.45	2.34	2.47
Standard deviation of radicals length	0.64	1.03	1.09	1.05	1.23
Dry weight of seeds (gm)	27.55	27.49	27.59	27.49	27.55
Fresh weight of germinated seeds (gm)	63.00	76.21	78.77	80.04	82.06
% change of fresh weight		20.97	25.03	27.05	30.25
Oven dry weight of germinated seeds					
(gm)	23.12	22.62	22.88	22.59	22.63
% change of oven dry weight		-2.16	-1.04	-2.29	-2.12

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid

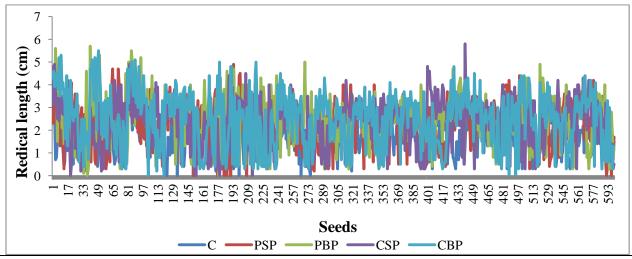
- 1. Samples PBP and CBP had maximum % of germination.
- 2. All treated samples had more mean radical length compared to control sample.
- 3. All treated samples had more fresh weight of germinated seeds compared to control sample.
- 4. Control samples had more oven dry weight of germinated seeds compared to treated sample.

Table 11-Summary of two sample independent t-test of radical length

Treatment	<i>p</i> -value
C vs PSP	< 2.20e-16***
C vs PBP	< 2.20e-16***
C vs CSP	< 2.20e-16***
C vs CBP	< 2.20e-16***
PSP vs PBP	0.0065**
PSP vs CSP	0.1724
PSP vs CBP	0.0009***
PBP vs CSP	0.1609
PBP vs CBP	0.4444
CSP vs CBP	0.0285*

Legend: *p<0.05,**p<0.01,***p<0.001

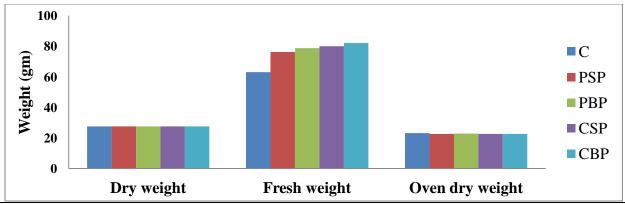
- 1. All treated sample had shown exponential significant compared to control sample.
- 2. PBP sample had higher significant compare to PSP and CBP sample had significant compare to CSP.



Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid

• Pyramid samples were more effective than control on mean radical length.

Fig. 9 - Effect of pyramids on radical length of green gram seeds



Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid

- Dry weight of the sample was almost same for all the groups of samples
- Copper big pyramid had more influence on fresh weight.
- Between the difference groups of samples there was no much difference in the oven dry weight of the germinated seeds.

Fig. 10 – Dry weight, fresh weight and oven dry weight of germinated green gram seeds

6.4 Effect of Lunar Days on Germination of Green Gram Seeds

Tables 12.1 & 12.2 and 13.1 & 13.2 showed the effect of lunar days on the fresh weight and oven dry weight of germinated green gram seeds at Śukla Pakṣaḥ and Kṛṣṇa Pakṣaḥ respectively. Control sample that not had any treatment (pyramid) effect had variation in its weight due to the influence of lunar days. PSP (6.79 gm), PBP (7.09 gm), CSP (7.49 gm) and CBP (7.74 gm) samples had maximum fresh weight of germinated seeds on lunar day Tṛṭīyā and control sample (5.72 gm) had maximum fresh weight on Caturthī at Śukla Pakṣaḥ. PSP (1.59 gm) and PBP (1.59 gm) samples had maximum oven dry weight on Ekādaśī and control sample (1.61 gm) on Caturadaśī, CSP (1.55 gm) sample had maximum oven dry weight on Tṛṭīyā and CBP (1.57 gm) on Caturadaśī at Śukla Pakṣaḥ. At Kṛṣṇa Pakṣaḥ control sample (6.03 gm) had maximum fresh weight on Daśamī, PSP (6.63 gm) and PBP (7.38 gm) samples had on Navamī, CSP (7.01 gm) and CBP (7.07 gm) samples on Dvādaśī. All samples had maximum oven dry weight on Dvitīyā. Tables 14.1 & 14.2 and 15.1 & 15.2 indicated that control sample that not have any influence of treatment (pyramid) and samples PSP, PBP, CSP and CBP which had influence of respective

pyramid (treatment) had variation in their % of germination and mean radical length due to the effect of lunar days at both Śukla Pakṣaḥ and Kṛṣṇa Pakṣaḥ. Results show that samples C (2.02 cm) on Caturthī, PSP (2.65 cm) on Caturadaśī, PBP (3.60 cm) on Navamī, CSP (2.91 cm) on Dvādaśī and CBP (2.89 cm) on Pratipat and Dvitīyā had maximum mean radical length at Śukla Pakṣaḥ and samples C (2.74 cm) and PBP (3.03 cm) on Dvādaśī, PSP (2.62 cm) on Trayodaśī, CSP (2.77 cm) on Dvādaśī and CBP (2.94 cm) on Amāvasyā had maximum radical length at Kṛṣṇa Pakṣaḥ. And also results show that average 100% germination on all lunar days at Kṛṣṇa Pakṣaḥ and Kṛṣṇa Pakṣaḥ respectively. Fig. 11 and 12 shows mean radical variation on lunar days at Śukla Pakṣaḥ and Kṛṣṇa Pakṣaḥ respectively. Fig. 13 shows photographic representation of Pattern of germination of green gram seeds.

Table 12.1-Lunar days effect on fresh weight and oven dry weight of germinated green gram seeds at Śukla Paksah

Day		С				PSP			PBP				
	dry weight (gm)	Fresh weight (gm)	Oven dry weight (gm)	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight
Pratipatand													
Dvitīyā	1.85	5.46	1.59	1.86	6.18	13.19	1.57	-1.26	1.84	6.22	13.92	1.56	-1.89
Tṛtīyā	1.82	4.75	1.47	1.82	6.79	42.95	1.52	3.40	1.85	7.09	49.26	1.58	7.48
Caturthī	1.82	5.72	1.54	1.82	6.65	16.26	1.49	-3.25	1.82	6.69	16.96	1.58	2.60
Pañcamī	1.85		1.55	1.83			1.49	-3.87	1.85			1.48	-4.52
Ṣaṣṭhi	1.84	5.04	1.5	1.84	5.78	14.68	1.52	1.33	1.84	6.29	24.80	1.53	2.00
Saptamī	1.84	4.6	1.53	1.83	5.89	28.04	1.46	-4.58	1.85	6.23	35.43	1.48	-3.27
<i>Aṣṭamī</i>	1.84	4.29	1.54	1.82	5.13	19.58	1.46	-5.19	1.84	5.84	36.13	1.48	-3.90
Navamī	1.82	4.85	1.52	1.82	5.86	20.82	1.52	0.00	1.85	5.87	21.03	1.52	0.00
Daśamī	1.85	5.46	1.54	1.83	6.09	11.54	1.52	-1.30	1.82	5.54	1.47	1.51	-1.95
Ekādaśī	1.84	4.94	1.59	1.86	5.32	7.69	1.59	0.00	1.86	5.93	20.04	1.59	0.00
Dvādaśī	1.84		1.51	1.84			1.51	0.00	1.86			1.53	1.32
Trayodaśī	1.85	4.88	1.52	1.83	5.27	7.99	1.52	0.00	1.84	5.51	12.91	1.51	-0.66
Caturadaśī	1.82	3.6	1.61	1.85	5.63	56.39	1.47	-8.70	1.82	5.55	54.17	1.54	-4.35
Pūrṇimā	1.84	5.11	1.54	1.82	6.12	19.77	1.47	-4.55	1.83	6.1	19.37	1.49	-3.25

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid

^{1.} Due to lunar day effect there was variations in fresh and oven dry weight of germinated seeds in Śukla Pakṣaḥ.

^{2.} PSP and PBP samples had more fresh weight compared to control sample on all lunar days in Śukla Pakṣaḥ.

^{3.} PSP and PBP sample had maximum fresh weight of germinated seeds on lunar day $Trt\bar{\imath}y\bar{a}$ and control sample had maximum fresh weight on $Caturth\bar{\imath}$ in Sukla~Pakṣah.

^{4.} PSP and PBP samples had maximum oven dry weight on Ekādaśī and C sample on Caturadaśī in Śukla Pakṣaḥ.

Table 12.2-Lunar days effect on fresh weight and oven dry weight of germinated green gram seeds at $\acute{S}ukla~Pakṣaḥ$

Day	CSP CBP									
·	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	Dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight
Pratipatand										
Dvitīyā	1.84	6.61	21.06	1.52	-4.40	1.83	7.05	29.12	1.53	-3.77
Tṛtīyā	1.84	7.49	57.68	1.55	5.44	1.86	7.74	62.95	1.53	4.08
Caturthī	1.83	6.71	17.31	1.52	-1.30	1.82	7.00	22.38	1.53	-0.65
Pañcamī	1.83			1.46	-5.81	1.85			1.49	-3.87
Ṣaṣṭhi	1.84	5.65	12.10	1.54	2.67	1.84	5.93	17.66	1.52	1.33
Saptamī	1.83	6.07	31.96	1.47	-3.92	1.83	5.51	19.78	1.46	-4.58
<i>A</i> ṣṭamī	1.83	5.77	34.50	1.48	-3.90	1.82	5.82	35.66	1.46	-5.19
Navamī	1.82	5.75	18.56	1.51	-0.66	1.85	6.18	27.42	1.51	-0.66
Daśamī	1.82	6.45	18.13	1.50	-2.60	1.83	5.98	9.52	1.5	-2.60
Ekādaśī	1.83	5.52	11.74	1.53	-3.77	1.82	5.99	21.26	1.53	-3.77
Dvādaśī	1.86			1.52	0.66	1.86			1.53	1.32
Trayodaśī	1.83	5.52	13.11	1.52	0.00	1.84	6.22	27.46	1.48	-2.63
Caturadaśī	1.84	6.53	81.39	1.47	-8.70	1.82	6.48	80.00	1.57	-2.48
Pūrņimā	1.82	6.17	20.74	1.49	-3.25	1.83	6.19	21.14	1.5	-2.60

Legend: CSP: copper small pyramid, CBP: copper big pyramid

^{1.} CSP and CBP samples had more fresh weight compared to control sample on all lunar days in Śukla Pakṣaḥ.

^{2.} CSP and CBP sample had maximum fresh weight of germinated seeds on *Tṛtīyā* at Śukla Pakṣaḥ.

^{3.} CSP sample had maximum oven dry weight on *Tṛtīyā* and CBP on *Caturadaśī* at Śukla Pakṣaḥ.

Table 13.1-Lunar days effect on fresh weight and oven dry weight of germinated green gram seeds at *Kṛṣṇa Pakṣaḥ*

Day		С				PSP				PBP				
	dry weight (gm)	Fresh weight (gm)	Oven dry weight (gm)	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	
Pratipat	1.83	4.3	1.57	1.82	5.5	27.91	1.51	-3.82	1.82	5.91	37.44	1.5	-4.46	
Dvitīyā	1.83	4.39	1.63	1.85	6.04	37.59	1.73	6.13	1.86	5.54	26.20	1.84	12.88	
Tṛtīyā	1.82	4.58	1.56	1.84	5.68	24.02	1.56	0.00	1.86	5.77	25.98	1.56	0.00	
Caturthī	1.82		1.52	1.85			1.53	0.66	1.85			1.51	-0.66	
Pañcamī	1.85	5.06	1.56	1.83	6.01	18.77	1.51	-3.21	1.84	6.16	21.74	1.53	-1.92	
Ṣaṣṭhi	1.84	4.14	1.42	1.85	5.54	33.82	1.48	4.23	1.83	5.55	34.06	1.49	4.93	
Saptamī	1.82	4.97	1.52	1.83	5.5	10.66	1.49	-1.97	1.83	5.57	12.07	1.48	-2.63	
<i>Aṣṭamī</i>	1.86	4.98	1.53	1.83	6.02	20.88	1.5	-1.96	1.85	6.35	27.51	1.54	0.65	
Navamī	1.85	5.95	1.55	1.85	6.63	11.43	1.53	-1.29	1.86	7.38	24.03	1.53	-1.29	
Daśamī	1.86	6.03	1.57	1.86	6.17	2.32	1.57	0.00	1.85	6.27	3.98	1.55	-1.27	
Ekādaśī	1.83	4.58	1.54	1.85	6.09	32.97	1.53	-0.65	1.86	6.61	44.32	1.54	0.00	
Dvādaśī	1.86	5.95	1.57	1.82	6.51	9.41	1.51	-3.82	1.83	7.08	18.99	1.51	-3.82	
Trayodaśī	1.85	5.28	1.56	1.86	6.2	17.42	1.54	-1.28	1.82	6.73	27.46	1.51	-3.21	
Caturadaśī	1.84	4.41	1.56	1.85	6.00	36.05	1.55	-0.64	1.83	5.24	18.82	1.54	-1.28	
Amāvasyā	1.82	4.92	1.59	1.83	6.32	28.46	1.54	-3.14	1.85	6.69	35.98	1.55	-2.52	

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid

- 1. Variations in fresh weight and oven dry weight of all samples due to the effect of lunar days at Kṛṣṇa Pakṣaḥ.
- 2. PSP and PBP sample had more fresh weight compared to control sample on all lunar days at Kṛṣṇa Pakṣaḥ.
- 3. Control sample had maximum fresh weight on Daśamī, PSP and PBP samples had on Navamī at Kṛṣṇa Pakṣaḥ.
- 4. Control, PSP and PBP sample had maximum oven dry weight on Dvitīyā at Kṛṣṇa Pakṣaḥ.

Table 13.2-Lunar days effect on fresh weight and oven dry weight of germinated green gram seeds at *Kṛṣṇa Pakṣaḥ*

Day			CSP					CBP		
	Dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight	Dry weight (gm)	Fresh weight (gm)	% change fresh weight	Oven dry weight (gm)	% change oven dry weight
Pratipat	1.83	5.8	34.88	1.51	-3.82	1.85	5.97	38.84	1.49	-5.10
Dvitīyā	1.84	6.07	38.27	1.81	11.04	1.84	6.17	40.55	1.68	3.07
Tṛtīyā	1.82	5.23	14.19	1.56	0.00	1.84	6.56	43.23	1.54	-1.28
Caturthī	1.86			1.51	-0.66	1.86			1.53	0.66
Pañcamī	1.82	6.54	29.25	1.52	-2.56	1.82	6.14	21.34	1.51	-3.21
Ṣaṣṭhi	1.85	5.37	29.71	1.47	3.52	1.84	5.66	36.71	1.42	0.00
Saptamī	1.82	6.13	23.34	1.48	-2.63	1.84	6.24	25.55	1.5	-1.32
<i>Aṣṭamī</i>	1.86	6.05	21.49	1.58	3.27	1.83	6.78	36.14	1.49	-2.61
Navamī	1.84	6.75	13.45	1.5	-3.23	1.82	6.68	12.27	1.51	-2.58
Daśamī	1.82	6.44	6.80	1.49	-5.10	1.85	6.3	4.48	1.58	0.64
Ekādaśī	1.83	6.46	41.05	1.51	-1.95	1.84	6.25	36.46	1.53	-0.65
Dvādaśī	1.82	7.01	17.82	1.51	-3.82	1.85	7.07	18.82	1.53	-2.55
Trayodaśī	1.83	6.35	20.27	1.54	-1.28	1.83	6.57	24.43	1.52	-2.56
Caturadaśī	1.86	6.3	42.86	1.55	-0.64	1.84	6.07	37.64	1.53	-1.92
Amāvasyā	1.83	6.63	34.76	1.53	-3.77	1.85	6.97	41.67	1.53	-3.77

Legend: CSP: copper small pyramid, CBP: copper big pyramid

- 2. CSP and CBP sample had maximum fresh weight of germinated seeds on Dvādaśī at Kṛṣṇa Pakṣaḥ.
- 3. CSP and CBP sample had maximum oven dry weight of germinated seeds on *Dvitīyā* at *Kṛṣṇa Pakṣaḥ*.

^{1.} CSP and CBP samples had more fresh weight of germinated seeds compared to control sample on all lunar days at *Kṛṣṇa Pakṣaḥ*.

Table 14.1-Lunar days effect on germination and radicals of green gram seeds on day 1 at Śukla Pakṣaḥ

Day		С		PSP PBP						P			
	Mean (cm)	Std.	% of germ.	Mean (cm)	Std.	% change	p-value	% of germ.	Mean (cm)	Std.	% change	p-value	% of germ.
Pratipatand													
Dvitīyā	1.40	0.66	100	2.34	1.42	67.26	7.57e-07***	100	2.34	1.42	67.26	0.0004***	97.5
Tṛtīyā	1.40	0.57	100	2.11	1.25	50.36	0.0271*	100	2.27	1.31	62.14	0.0003***	100
Caturthī	2.02	0.69	100	2.40	1.12	18.94	0.0706	100	2.90	1.31	43.56	0.0004***	100
Pañcamī	1.63	0.76	90	2.53	0.98	55.38	2.15e-06***	97.5	2.41	0.95	48.15	3.06e-05***	100
Şaşţhi	1.33	0.68	97.5	2.10	1.35	57.71	0.0022**	92.5	2.62	1.26	96.62	4.38e-07***	97.5
Saptamī	1.49	0.63	100	2.06	1.02	38.72	0.0033**	97.5	2.58	1.25	73.91	1.13e-05***	97.5
Aṣṭamī	1.66	0.72	95	1.87	1.04	12.69	0.3626	100	2.47	0.88	49.40	1.85e-05***	100
Navamī	1.64	0.57	100	2.31	0.89	41.13	5.76e-05***	100	3.60	0.89	120.18	0.0001***	100
Daśamī	1.59	0.49	100	2.15	0.85	35.38	0.0002***	100	2.30	0.77	44.50	6.95e-06***	100
Ekādaśī	1.69	0.50	100	2.15	0.87	27.74	0.0003***	100	2.66	0.63	57.72	5.60e-11***	100
Dvādaśī	1.59	0.75	100	2.26	1.06	42.05	0.0023**	100	2.53	1.07	59.21	1.60e-05***	100
Trayodaśī	1.74	0.58	100	2.34	0.81	34.60	0.0001***	100	2.29	0.89	31.44	0.0015**	100
Caturadaśī	1.50	0.61	100	2.65	1.03	77.09	1.44e-07***	100	2.23	1.07	49.00	0.0018**	100
Pūrṇimā	1.47	0.66	100	2.21	0.89	49.75	0.0002***	100	2.53	1.19	71.48	7.43e-06***	100

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid

- 1. In all the samples there is variations in mean radical length due to the effect of lunar days at Śukla Pakṣaḥ.
- 2. On all lunar days PSP and PBP samples had more mean radical length compared to control sample.
- 3. Control and PBP sample had maximum mean radical on lunar day *Caturthī* and PSP sample had on *Caturadaśī* at *Śukla Pakṣah*.
- 4. Compared to control sample PSP sample had exponential increment in mean radicals on *Pratipat*, *Dvitīyā*, *Pañcamī*, *Navamī*, *Daśamī*, *Ekādaśī*, *Trayodaśī*, *Caturadaśī* and *Pūrṇimā*, higher significant on *Ṣaṣṭhi*, *Saptamī* and *Dvādaśī* and significant increment on *Trtīyā* at *Śukla Paksah*.
- 5. Compared to control sample PBP sample had exponential increment in mean radicals on all lunar days except Trayodaśī and Caturadaśī and higher significant on Trayodaśī and Caturadaśī at Śukla Pakṣaḥ.

Table 14.2-Lunar days effect on germination and radicals of green gram seeds on day 1 at Śukla Pakṣaḥ

Day			CS	P				CB	P	
	Mean (cm)	Std.	% change	<i>p</i> -value	% of germ	Mean (cm)	Std.	% change	<i>p</i> -value	% of germ
Pratipatand										
Dvitīyā	2.23	1.22	59.39	0.0004***	97.5	2.89	1.32	106.80	3.45e-08***	100
Tṛtīyā	2.09	1.11	49.46	0.0008***	100	2.68	1.48	91.07	5.52e-06***	100
Caturthī	2.56	1.16	26.86	0.0138*	100	2.83	1.45	40.22	0.0023**	97.5
Pañcamī	2.34	1.06	44.00	0.0002***	95	2.80	1.09	72.15	2.45e-07***	100
Ṣaṣṭhi	1.70	1.12	27.63	0.1790	97.5	2.14	1.46	60.53	0.0222*	100
Saptamī	2.33	1.16	56.57	0.0002***	97.5	1.78	1.35	19.87	0.7542	100
<i>A</i> ṣṭamī	2.45	1.01	47.73	0.0001***	100	2.50	1.12	50.91	0.0003***	100
Navamī	2.26	0.87	38.23	1.32e-05***	100	2.36	1.02	44.50	0.0001***	100
Daśamī	2.60	0.65	63.21	6.28e-10***	100	2.36	1.01	48.27	0.0001***	100
Ekādaśī	2.00	0.94	18.69	0.0132*	97.5	2.67	0.85	58.61	2.49e-08***	100
Dvādaśī	2.91	0.98	83.31	1.49e-08***	100	2.20	1.20	38.27	0.0164*	100
Trayodaśī	2.46	0.92	41.65	1.51e-05***	100	2.48	1.09	42.51	0.0003***	100
Caturadaśī	2.22	1.15	48.66	0.0019**	100	2.45	1.31	63.55	0.0001***	95
Pūrṇimā	2.53	0.80	71.48	1.13e-08***	100	2.39	1.04	61.97	1.43e-05***	100

Legend: CSP: copper small pyramid, CBP: copper big pyramid

- 1. On all lunar days CSP and CBP samples had more mean radical length compared to control sample.
- 2. Compared to control sample CSP sample had exponential increment in mean radicals on *Pratipat*, *Dvitīyā*, *Tṛtīyā*, *Pañcamī*, *Saptamī*, *Aṣṭamī*, *Navamī*, *Daśamī*, *Dvādaśī*, *Trayodaśī* and *Pūrṇimā*, higher significant on *Caturadaśī* and significant increment on *Caturthī* and *Ekādaśī* at *Kṛṣṇa Pakṣaḥ*.
- 3. Compared to control sample CBP sample had exponential increment in mean radicals on *Pratipat*, *Dvitīyā*, *Tṛtīyā*, *Pañcamī*, *Aṣṭamī*, *Navamī*, *Daśamī*, *Ekādaśī*, *Trayodaśī*, *Caturadaśī* and *Pūrṇimā*, higher significant on *Caturthī* and significant increment on *Ṣaṣṭhi* and *Dvādaśī* at *Kṛṣṇa Pakṣaḥ*.

Table 15.1-Lunar days effect on germination and radicals of green gram seeds on day 1 at

Kṛṣṇa Pakṣaḥ

Day		C		PSP PBP							P		
	Mean (cm)	Std.	% of germ.	Mean (cm)	Std.	% change	<i>p</i> -value	% of germ.	Mean (cm)	Std.	% change	p-value	% of germ.
Pratipat	1.52	0.49	100	2.41	1.12	58.81	8.30e-05***	97.5	2.35	1.14	55.02	0.0015***	100
Dvitīyā	1.54	0.48	100	2.22	0.85	44.16	2.24e-05***	100	2.11	0.93	36.69	0.0023**	100
Tṛtīyā	1.56	0.60	100	1.94	1.00	24.76	0.0345*	97.5	2.39	0.90	53.70	4.97e-06***	100
Caturthī	1.46	0.53	100	2.11	0.74	44.60	2.55e-05***	100	2.21	0.97	51.80	5.91e-05***	100
Pañcamī	1.35	0.64	100	2.02	1.03	49.81	0.0022**	100	2.21	1.06	64.50	0.0001***	100
Şaşţhi	1.36	0.58	100	1.82	0.88	33.95	0.0075**	100	1.91	1.08	40.96	0.0203*	100
Saptam ī	1.43	0.72	100	1.93	1.00	34.62	0.0416*	100	2.13	1.11	48.95	0.0043**	100
A ṣṭam $\bar{\imath}$	1.64	0.62	100	2.24	1.33	36.59	0.0123*	97.5	2.50	1.27	52.44	0.0003***	100
Navamī	1.66	0.85	100	2.31	1.24	38.65	0.0087**	100	3.01	1.30	80.90	6.79e-07***	100
Daśam ī	1.93	0.71	100	2.21	0.91	14.55	0.1280	100	2.47	1.11	28.18	0.0111*	100
Ekādaśī	1.85	0.72	100	2.23	1.10	20.87	0.0693	100	2.90	1.13	56.91	5.16e-06***	100
Dvādaśī	2.74	5.78	100	2.32	1.25	-15.51	0.1431	97.5	3.03	1.29	10.49	2.31e-05***	100
Trayodaśī	1.78	0.77	100	2.62	1.25	46.91	0.0006***	100	2.78	1.48	56.32	0.0003***	100
Caturadaś ī	1.54	0.64	100	2.37	0.91	54.07	1.18e-05***	100	1.88	1.01	22.48	0.3087	100
Amāvasyā	1.77	0.55	100	2.07	0.99	17.42	0.0919	100	2.50	1.02	41.36	0.0002***	100

Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid

- 1. Variations in mean radical length in all the samples due to the effect of lunar days at Kṛṣṇa Pakṣaḥ.
- 2. On all lunar days PSP and PBP samples had more mean radical length compared to control sample except $Dv\bar{a}das\bar{\imath}$ of PSP.
- 3. Control and PBP samples had maximum mean radical length on $Dv\bar{a}das\bar{\imath}$, PSP sample had on $Trayodas\bar{\imath}$ at Krsna Paksah.
- 4. Compared to control sample PSP sample had exponential increment in mean radicals on *Pratipat*, *Dvitīyā*, *Caturthī*, *Trayodaśī* and *Caturadaśī*, higher significant on *Pañcamī*, *Ṣaṣṭhi* and *Navamī* and significant increment on *Tṛtīyā*, *Saptamī* and *Aṣṭamī* at *Kṛṣṇa Pakṣaḥ*.
- 3. Compared to control sample PBP sample had exponential increment in mean radicals on *Pratipat*, *Tṛtīyā*, *Caturthī*, *Pañcamī*, *Aṣṭamī*, *Navamī*, *Ekādaśī*, *Dvādaśī*, *Trayodaśī* and *Amāvasyā*, higher significant on *Dvitīyā* and *Saptamī* and significant increment on *Ṣaṣṭhi* and *Daśamī* at *Kṛṣṇa Pakṣaḥ*.

Table 15.2-Lunar days effect on germination and radicals of green gram seeds on day 1 at

Kṛṣṇa Pakṣaḥ

Day			CSP					CBP		
	Mean (cm)	Std.	% change	<i>p</i> -value	% of germ.	Mean (cm)	Std.	% change	<i>p</i> -value	% of germ
Pratipat	2.49	1.05	63.76	2.06e-06***	100	2.52	1.19	65.90	6.94e-05***	100
Dvitīyā	2.39	1.01	55.19	0.0001***	100	2.56	1.22	66.07	1.24e-05***	100
Tṛtīyā	2.25	1.08	44.37	0.0007***	100	2.58	1.11	65.76	4.27e-06***	100
Caturthī	2.44	0.98	67.58	6.13e-07***	100	2.73	1.18	86.96	2.86e-06***	100
Pañcamī	2.28	0.89	69.70	2.63e-06***	100	2.28	1.16	69.14	0.0002***	100
Şaşṭhi	2.00	1.03	47.79	0.0010***	100	2.16	1.22	59.41	0.0004***	100
Saptamī	2.07	0.97	44.93	0.0009***	100	2.49	1.15	74.30	6.57e-06***	100
Aṣṭamī	2.49	0.95	51.83	1.09e-05***	100	2.36	1.53	43.75	0.0709	100
Navamī	2.30	1.09	38.05	0.0049**	100	2.43	1.34	46.02	0.0033**	100
Daśamī	2.13	1.03	10.65	0.3024	100	2.12	1.29	10.00	0.5033	100
Ekādaśī	2.46	0.94	33.47	0.0007***	100	2.43	1.36	31.71	0.0761	100
Dvādaśī	2.77	1.32	1.09	0.0021**	100	2.61	1.35	-4.74	0.0148*	100
Trayodaśī	2.41	1.25	35.53	0.0083**	100	2.84	1.40	59.69	0.0007***	100
Caturadaśī	2.58	1.26	68.24	1.63e-05***	100	2.36	1.30	53.75	0.0007***	100
Amāvasyā	2.61	1.01	47.59	2.13e-05***	100	2.94	0.81	66.71	1.17e-10***	100

Legend: CSP: copper small pyramid, CBP: copper big pyramid

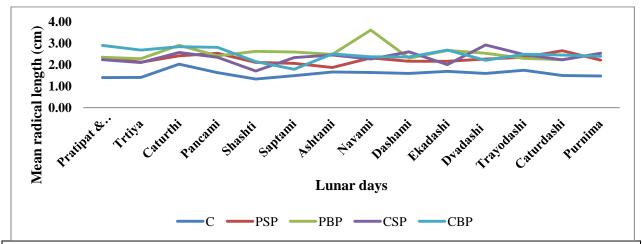
- 1. On all lunar days CSP and CBP samples had more mean radical length compared to control sample except $Dv\bar{a}das\bar{i}$ of CBP.
- 2. Compared to control sample CSP sample had exponential increment in mean radicals on *Pratipat*, *Dvitīyā*, *Tṛtīyā*, *Caturthī*, *Pañcamī*, *Ṣaṣṭhi*, *Saptamī*, *Aṣṭamī*, *Ekādaśī*, *Caturadaśī* and *Amāvasyā*, higher significant on *Navamī*, *Dvādaśī* and *Trayodaśī* at *Kṛṣṇa Pakṣaḥ*.
- 3. Compared to control sample CBP sample had exponential increment in mean radicals on *Pratipat*, *Dvitīyā*, *Tṛtīyā*, *Caturthī*, *Pañcamī*, *Ṣaṣṭhi*, *Saptamī*, *Trayodaśī*, *Caturadaśī* and *Amāvasyā*, higher significant on *Navamī* and *Dvādaśī* at *Kṛṣṇa Pakṣaḥ*.

Table 16.1- Atmosphere parameter at Śukla Pakṣaḥ of Caitra Māsa

Day		Tampratu	re (t) °c			Humidity	(h) %		Weather
	6 am	12 noon	6 pm	Average	6 am	12 noon	6 pm	Average	
Pratipat and									Cloudy
Dvitīyā	27.70	30.40	33.50	30.53	36.00	37.00	26.00	33.00	
Tṛtīyā	27.90	30.50	33.80	30.73	35.00	37.00	25.00	32.33	Clear
Caturthī	28.10	31.10	34.30	31.17	33.00	30.00	27.00	30.00	Clear
Pañcamī	28.10	34.00	35.00	32.37	35.00	29.00	24.00	29.33	Clear
Şaşţhi	28.80	31.20	34.40	31.47	40.00	44.00	32.00	38.67	Cloudy
Saptamī	29.40	31.40	33.90	31.57	44.00	43.00	29.00	38.67	Cloudy
Aṣṭamī	29.60	31.60	34.70	31.97	38.00	38.00	31.00	35.67	Cloudy
Navamī	29.50	31.90	34.20	31.87	42.00	43.00	36.00	40.33	Cloudy
Daśamī	29.10	31.10	32.10	30.77	45.00	42.00	39.00	42.00	Cloudy
Ekādaśī	27.60	30.10	33.20	30.30	49.00	49.00	38.00	45.33	Cloudy
Dvādaśī	29.00	31.20	32.40	30.87	45.00	43.00	39.00	42.33	Clear
Trayodaśī	29.40	31.40	35.20	32.00	42.00	42.00	34.00	39.33	Cloudy
Caturadaśī	29.40	31.80	34.30	31.83	44.00	44.00	35.00	41.00	Clear
Pūrņimā	29.50	31.60	34.30	31.80	45.00	45.00	36.00	42.00	Clear
Mean	28.79	31.38	33.95	31.37	40.93	40.43	32.21	37.86	
SD	0.75	0.92	0.90	0.64	4.83	5.64	5.28	4.98	

Table 16.2- Atmosphere parameter at $Krsna\ Paksah$ of $Caitra\ M\bar{a}sa$

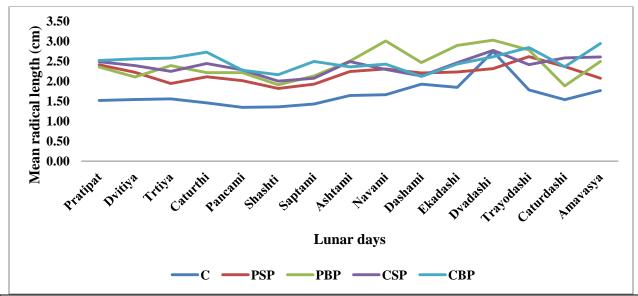
Day		Tampratu	re (t) °c			Humidity	(h) %		Wather
	6 am	12 noon	6 pm	Averag	6 am	12 noon	6 pm	Average	
				e					
Pratipat	29.20	31.60	34.80	31.87	42.00	44.00	26.00	37.33	Clear
Dvitīyā	29.60	32.10	35.20	32.30	42.00	42.00	22.00	35.33	Clear
Tṛtīyā	29.20	31.10	35.20	31.83	37.00	42.00	28.00	35.67	Clear
Caturthī	28.20	31.20	34.80	31.40	42.00	44.00	30.00	38.67	Clear
Pañcamī	29.70	31.80	34.30	31.93	42.00	44.00	35.00	40.33	Clear/ Cloudy
Ṣaṣṭhi	29.20	31.50	33.50	31.40	40.00	41.00	37.00	39.33	Clear/ Rain
Saptamī	28.10	30.80	34.50	31.13	44.00	42.00	35.00	40.33	Clear
<i>A</i> ṣṭamī	29.00	31.40	35.10	31.83	49.00	47.00	37.00	44.33	Clear
Navamī	30.20	31.50	34.30	32.00	46.00	44.00	39.00	43.00	Clear/ Cloudy
Daśamī	28.00	30.80	34.80	31.20	49.00	49.00	36.00	44.67	Clear/ Rain
Ekādaśī	27.60	30.20	34.80	30.87	54.00	53.00	36.00	47.67	Clear/ Cloudy
Dvādaśī	29.00	31.40	35.00	31.80	54.00	51.00	37.00	47.33	Cloudy
Trayodaśī	29.50	31.90	35.20	32.20	51.00	46.00	34.00	43.67	Clear/ Cloudy
Caturadaśī	30.20	32.20	32.40	31.60	50.00	46.00	40.00	45.33	Clear/ Cloudy
Amāvasyā	27.10	29.00	32.80	29.63	54.00	49.00	40.00	47.67	Clear
Mean	28.90	31.21	34.42	31.51	46.71	45.71	34.71	42.38	
SD	0.96	0.84	0.90	0.68	5.64	3.69	4.98	4.17	



Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid

• First half of Śukla Pakṣaḥ was more effect on germination of seeds.

Fig. 11 - Mean radical length on each tithi at Śukla Pakṣaḥ of green gram seeds



Legend: C: control, PSP: plywood small pyramid, PBP: plywood big pyramid, CSP: copper small pyramid, CBP: copper big pyramid

• Second half of *Kṛṣṇa Pakṣaḥ* was more effect on germination of seeds.

Fig. 12 - Mean radical length on each tithi at Kṛṣṇa Pakṣaḥ of green gram seeds

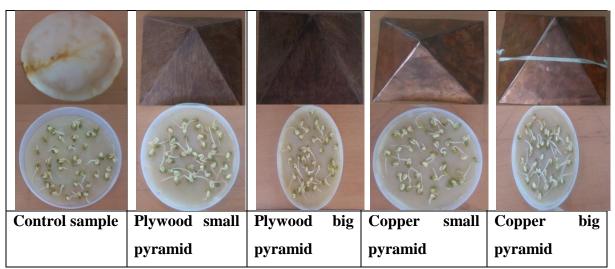


Fig. 13 - Pattern of germination of green gram seeds

In this chapter has covered the results of the study of the different aspect of the study. In the next chapter elaborated the discussions and conclusions of the result of various facets of the study.

CHAPTER – 7

DISCUSSION AND CONCLUSION

7.1 Discussion

7.1.1 Effect of Pyramids on Germination of Fenugreek Seeds

7.1.1.1 Effect of Pyramid

All pyramids were not more effective on percentage germination, but have more effect on mean radical length, fresh weight and oven dry weight compared to control samples. Pyramid have power to absorb more cosmic energy from the atmosphere to influence on the germination of seeds and earlier study (Jang, 2016) was also demonstrated that pyramid sample had positive influence then compared to control sample, and pyramid is store houses of energy (Dwivedi, 2003).

7.1.1.2 Effect of Pyramid Material

Plywood pyramid sample showed more significant improvement on % germination and on radical compare to copper pyramid on fenugreek seeds and plywood pyramid sample showed more effective on oven dry weight than copper pyramid. This indicate that plywood material is more effective in absorbing cosmic energy from the atmosphere than copper material to influence on the germination of seeds and earlier studies (Kumar, 2011; Jang, 2016) were also demonstrated that pyramid made of plywood material was more effective than pyramid made of fiberglass and plastic. But copper pyramid had more effective on fresh weight compared to plywood pyramid.

7.1.1.3 Effect of Pyramid Size

Big size of pyramids showed more effective on % of germination, mean radical length, fresh weight compared to small size of pyramids. Results indicated that for the increment in the volume of 3.24 times for the plywood and copper pyramids there was significant increment (<0.05) in mean radical length compared to the respective small size pyramid. In the earlier studies (Kumar, 2005) showed that big size of pyramid sample not showed any discoloration of milk sample while smaller pyramid sample showed coloration of milk sample after seven days kept inside the pyramids. In the present study size of pyramid not have influence on oven dry weight of germinated seeds.

7.1.2 Effect Lunar Days on germination of Fenugreek seeds

Of almanac *Durmukhināmasamvatsaraḥ uttarāyaṇam śiśiraṛtvaḥ phālguṇamāsaḥ* second half phase is more effective on radical length for all the types of samples at both *Śukla pakṣaḥ* and *Kṛṣṇa pakṣaḥ*. Variation in the variables of germinated seeds may be due to varying weather and geomagnetic field due to lunar influence (Deep, 2014). Enzyme activity is the biological process in the seeds that effect on their germination. Variation in the mean length of radicals may due to the effect of variation in geo magnetic field as these are not uniformly distributed in lunar phase/day (Bigg, 1963).

7.1.3 Effect of Pyramid on Germination of Green Gram Seeds

7.1.3.1 Effect of Pyramid

All treatment samples were more effective on percentage germination, mean radical length and fresh weight compared to control samples. This indicate that pyramid have capacity to absorbing more cosmic energy from the atmosphere and earlier study (Kumar, 2011) was also demonstrated that pyramid sample had positive influence on germination of seeds then compared to control sample. In the present study there is no effect of pyramid on oven dry weight of germinated seeds.

7.1.3.2 Effect of Pyramid Material

Plywood pyramid sample showed more effect on % germination compare to copper pyramid on fenugreek seeds. And the present study showed more effect of copper pyramid on mean radical length and fresh weight of germinated seeds. The earlier studies (Kumar, 2011; Jang, 2016) were also demonstrated that pyramid made of plywood material was more effective than pyramid made of fiberglass and plastic. But copper pyramid had more effective on oven dry weight compared to plywood pyramid.

7.1.3.3 Effect of Pyramid Size

Big size of pyramids showed more effective on % of germination, mean radical length, fresh weight compared to small size of respective pyramids and there is no effect of size of pyramid on oven dry weight of germinated seeds. Results indicated that for the increment in the volume of

3.24 times for the plywood and copper pyramids there was higher significant increment (<0.01) and significant increment (<0.05) respectively in mean radical length compared to the respective small size pyramid. In the earlier study of (Gopinath, 2008) found that bigger fiberglass pyramid sample showed reduction in lactic streptococci compared to smaller fiberglass pyramid sample.

7.1.4 Effect of Lunar Days on Germination of Green Gram Seeds

Of almanac Hevilambhināmasamvatsaraḥ uttarāyaṇam vasantaṛtvaḥ caitramāsaḥ first half of Śukla Pakṣaḥ and second half of Kṛṣṇa Pakṣaḥ was more effect on germination of green gram seeds. Thun effect shwoed that root, leaf, flower and fruit crops were found to show increased yields if sown when the moon stood before earth, water, air and fire constellations, respectively. Sowing by this sidereal rhythm has become a major component of biodynamic planting calendars. Earlier study of Rudolf Steiner, had mentioned positive effects of the full moon in an agricultural context and Spiess's study showed confirmation of Thun effect (Kollerstrom, 2001).

7.2 Conclusion

7.2.1 Effect of Pyramid on Germination of Fenugreek Seeds

7.2.1.1 Effect of Pyramid

The present study on variables of germination of fenugreek seeds found that pyramid is more effective than control on % of germination, mean radical length, fresh weight and oven dry weight.

7.2.1.2 Effect of Materials

The present study found that Compared to copper pyramid, plywood pyramid showed more effctive on % of germination, radical length and oven dry weight but not in fresh weight.

7.2.1.3 Effect of Size

The study showed that compared to plywood small pyramid & copper small pyramid, plywood big pyramid & copper big pyramid showed more effective on % of germination, mean radical length and fresh weight but not in oven dry weight.

7.2.2 Effect of Lunar Days on Germination of Fenugreek Seeds

Variations in results of variables of germination on lunar days is due to the change in geo magnetic filed and atmospheric weather. Second phase of Śukla Pakṣaḥ had more influence on the germination of seeds than Kṛṣṇa Pakṣaḥ.

7.2.3 Effect of Pyramid on Germination of Green Gram Seeds

7.2.3.1 Effect of pyramid

The present study on variables of germination of green gram seeds found that pyramid is more effective than control on % of germination, mean radical length, fresh weight but not on oven dry weight.

7.2.3.2 Effect of materials

The investigation had found that copper pyramid had more influence on mean radical length and fresh weight not on oven dry weight.

7.2.3.3 Effect of size

The present study showed that big size of plywood and copper pyramids had more effective on germination of seeds compared to small size of plywood and copper pyramids.

7.2.4 Effect of Lunar Days on Germination of Green Gram Seeds

In this study variations in variables of germination on lunar days on green gram seeds is due to the change in geo magnetic filed and atmospheric weather. First half of $Sukla\ Pakṣaḥ$ and second half of $Kṛṣṇa\ Pakṣaḥ$ was more effect on germination of seeds

In this chapter had elaborated in relations to review of scientific research literature, from the view point of morden science about the result of various facets of the study, and enumerated the conclusions of the study. In the next chapter enumerated the appraisal of the study.

CHAPTER - 8

APPRAISAL

8.1 Strength of the Study

- The study had been carried out to the pyramidal effect, its materials and size effect on the germination of fenugreek and green gram seeds.
- The study had been carried out to the lunar days effect with pyramid energy on the germination of fenugreek and green gram seeds.
- In the study two types of materials with same sizes pyramids are used.
- Larger sample size had been used in the study of pyramidal effect.

8.2 Limitation of the Study

- Temperature and humidity changes could have been a confounding factor.
- Did not measure the temperature and humidity inside the pyramids.
- Small sample size in the study of lunar effect
- Two days germination test was not done
- Study had been done on only two materials. Required study of more number materials of pyramid
- Study had done on only two different sizes of pyramids. Need to study on various different sizes of pyramids.

8.3 Suggestion for Future Study

- To study on more number of trial studies of different sizes.
- To study effect of orientation towards south, west and east.
- To study the effect of temperature pattern at inside the pyramids.
- Need more comparative study with other materials of pyramids on germination test.

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APPENDIX 1

Raw Data

Table 1.1 Radical length (cm) of fenugreek seeds and green gram seeds of pyramids effect

Sl.			Fenugreel	k			G	reen Gra	ım	
No.	С	PSP	PBP	CSP	CBP	C	PSP	PBP	CSP	CBP
1	0.7	1.6	0.5	1.4	1.1	3.3	2.3	4.6	4.8	4.3
2	0.7	0.7	0.5	2.2	0.3	2.4	4	4.6	3.1	4.6
3	0.9	0.5	0.5	1.5	0	2.7	2.6	3.4	4.9	3.9
4	0.8	0.9	1.3	0.4	0.8	0.7	2.3	5.6	3.7	4.4
5	0.3	1.1	1	1.7	1.3	0.8	2.8	4.2	3.4	4.5
6	0.8	0.3	0.5	1.6	1.7	1.6	3.1	1.5	2.5	4
7	0.9	1.1	0.5	1.3	1.4	1.7	2	4.8	3.4	3.8
8	0.7	1.5	0.3	0.9	1.5	1.6	3.8	3.9	2.4	5.2
9	0.7	0.6	0.9	1.2	1.4	2	1.3	3.8	3.3	3.5
10	0.9	1.2	0.4	0.9	1.5	2.1	1.5	3	3.5	5.3
11	0.8	0	1.2	0.9	1.5	1.6	1.5	2.1	2.8	3.8
12	0.9	1.6	1	1.2	1.4	1.1	1.5	3.3	2.7	4.1
13	0.6	0.5	0.4	0.9	1.1	0.4	0.3	1.4	3.8	3.4
14	1	1	1.9	0.9	0.9	0.6	1.8	3.4	2.9	3.3
15	0.9	1.3	0.4	1	1.5	2	3.1	2.2	1.1	1.6
16	0.6	0	0.8	1.4	1	1.8	3.5	2.2	1.3	4.4
17	0.7	1.6	1.1	0.7	1.2	1.1	2.3	2.6	4.2	1.3
18	0.9	1.7	0.9	1	1.8	1.8	4.1	2.8	1.5	3.8
19	0.8	1	1.1	1.2	0.8	1.5	3.5	2.5	1.5	2.1
20	0.5	1	0.6	1.4	1.1	1.9	3.4	3.4	0	4.2
21	0.7	1.1	0.6	1.5	1.5	0.8	4.1	0.9	0.4	3.4
22	0.8	1	0.8	0.7	1.2	1	1.8	2.3	3.2	2.7
23	0.7	0.8	0.5	1.1	1	0.5	2.8	2.3	2.8	2.4
24	0.9	0.8	0.5	1.3	0.9	1.7	3	2	3.1	2.9
25	1.1	1.8	1.5	1.6	1.3	1.8	3.6	0.8	1.2	2.6
26	0.6	0.9	0.8	0.7	1.8	2.5	3.2	1.7	2.2	2.9
27	0.6	1.1	0.6	1.2	0.5	1.6	2.6	0.9	1.5	3.6
28	0.8	0.9	0.8	1	0.9	1.3	3.1	1.6	0.7	2.2
29	0.9	0.7	0.8	1.3	0.9	1.4	1.3	0.7	0.8	0.6
30	0.6	0.7	1.2	1.5	1.5	1.3	2.1	1.3	1.8	1.5
31	0.8	1.2	1.6	1.3	1.1	1.5	2.6	1.5	0.2	1.1
32	0.9	0.4	1	1.3	0.7	1	3	1.2	0.7	2.5
33	1.1	1.7	0.4	0.7	1.4	1	0.5	2.2	2.1	2
34	0.7	0.7	0.6	1.3	2	1.1	1.9	0.1	2	0.4
35	0.7	0.8	0.9	1.1	1.1	0.8	2.7	1	1.4	2.5
36	0.7	0.9	0.7	1.1	1.8	1.3	1.9	1.6	1.7	1.4
37	0.7	0.5	0.9	1.1	1.5	0.2	2.1	4.6	1.4	1.4
38	0.6	1.8	1.3	1	1.6	0.7	0.5	0	1.4	1.9
39	1	0.6	0.9	1.1	0.5	0.7	1.2	0.3	1.8	0.7
40	0.6	0.7	0.5	0.5	0.7	1	2.2	1.2	1.9	1.4
41	1.3	0.4	0.6	0.7	1.7	1.1	1.3	5.7	3	4.7

10	0.0	0.5	0.5	0.4	0.0		0.6	2.7	2.6	4.5
42	0.9	0.7	0.6	0.4	0.8	2	0.6	3.7	2.6	4.5
43	1.3	0.6	0.6	1.1	1.4	2	3.1	2.6	1.7	5.1
44	0.7	0.5	0.8	0.9	0.8	1.6	1.4	3.7	2.3	4.7
45	0.5	0.9	0.9	0	1.3	2.1	3.4	2.7	1.7	3.3
46	0.3	1	1	0.8	1.2	1.8	0.7	2.7	1.2	5.2
47	0.9	1.1	0.7	0.5	1.6	1.9	0.5	3.3	1.4	3.8
48	1.4	0.5	0.9	1.5	1.3	1.3	3.6	1.4	1.2	2
49	0.9	1.3	1.2	1.5	2.4	0.4	2.9	3.4	1.2	5
50	1.3	0.7	1.5	1.6	1.7	1.9	1.4	4.2	1.4	5.5
51	1.4	1.6	1.5	1.4	1.6	1.6	1.3	5.3	3.2	4.7
52	0.6	1.1	1.6	0.9	0.4	1.5	1.6	2.4	1	3.8
53	1.2	1.8	2	1	0.8	2.5	0.5	3	0.2	1.8
54	0.9	1.8	1.1	0.3	0.4	1.3	1.7	1.6	0.4	2.1
55	1.2	1.5	1.6	0.4	0.7	2	1.5	2.8	0.3	3.2
56	1	1.2	1.2	0.5	0.3	2.3	1.7	2.3	1.2	1.7
57	0.9	1.7	1.7	0.5	0.5	2.2	0.9	1.2	2.4	3.3
58	1.5	0.7	2	0.4	0.6	1.6	0.3	3.7	2	2.4
59	1.1	1.4	1.4	1.2	1.2	1.9	0.8	2	1.2	1.2
60	1.1	0.5	1.3	1.3	1.4	1.5	1.2	1.5	1.4	3.4
61	1	1.4	1.4	1.2	0.8	2	1.1	1	0.9	2.7
62	1.2	1.6	2	1.3	1.4	1.2	0.6	1.1	2.7	2.8
63	1.1	1.2	1.8	0.8	1.7	1.8	3.8	1.1	2.7	4
64	1.4	1.4	1.5	0.5	0.9	1.3	3.9	1.7	3.2	2.2
65	0.7	1.7	1	0.6	2.2	1.5	4.7	2	2	2
66	0.4	1.2	1.7	0.8	1.4	1	3	2.8	1.2	2.4
67	0.5	1.2	1.4	1.5	1	0.5	2.1	1.3	4.2	1.2
68	0.7	1.3	1.6	0.6	1.9	0.7	1.6	2.2	2.8	1.2
69	1.2	1.7	1.3	1	1.2	1.7	3.6	2	3.4	0.9
70	1.1	1.3	1.9	0.8	0.5	1	2	2.4	3	2.4
71	1.2	1.4	1.4	0.6	1.7	1.2	4.7	0.9	3.9	2.7
72	0.7	1.4	1.6	0.9	1.4	1.5	4	0.7	0.6	2.5
73	1.2	1.3	1.1	1.4	1.9	0.8	3.6	0.3	3.8	1.5
74	1.9	1.4	1.4	0.6	0.7	1.1	2.9	0.3	4	0.4
75	1.3	1.7	1.6	0.6	1.5	0.7	3.2	2.2	1.4	0.3
76	1.4	1.4	1.5	0.6	1.4	1	1.3	2.5	3	2.4
77	0.9	0.7	1.2	0.5	0.9	0.4	1.4	1.4	1	2.1
78	1	1.3	1	0.4	1.4	0.8	1.7	0.7	3.2	0.9
79	1	1.3	1.7	0.5	1.2	0.3	2.3	4.5	2.9	0.3
80	1.5	1	0.6	0.5	0.5	1	2.3	0.5	2.8	0.7
81	0.9	0.6	0.9	1.2	1.1	2.6	3.1	1.4	4.7	4.7
82	0.9	0.8	0.8	1.2	1.2	3.1	3.8	5	2.9	3.2
83	0.6	0.5	1.2	0.9	0.9	2.7	4.5	4.3	4.9	4.4
84	0.6	0.7	2	1	0.9	3.3	3.9	3.8	3	4.6
85	0.6	1.3	1.3	1.6	0.7	3	2.6	5.5	3.5	5
86	0.5	0.7	2	1.4	1	2	3.4	5	2.3	4.3
87	0.7	1.2	1.4	0.9	1.2	3.1	3.3	3.9	4.1	3.5
88	0.8	0.6	1.2	1.7	0.9	3	4	2.2	2.6	3.7
89	0.5	1.4	1.3	0.7	0.5	2.8	4.8	2.6	3.5	5.1
90	0.5	1.4	1.3	0.7	1.8	2.8	4.3	3	3	3.2

		1		1						
91	0.4	0.9	0.7	0.8	0.7	2.1	3.5	4.5	2.5	4.2
92	0.6	1.4	0.8	1.6	0.8	2.1	1.9	3.9	3.2	3
93	0.5	0.9	0.6	0.7	0.9	1.9	2.5	3.6	3.7	4.8
94	0.6	1.5	0.6	0.6	1.7	1.5	2.1	3.3	2.6	4.1
95	0.9	1.6	0.4	0.8	1.9	2.4	1.4	5.2	3.8	2.7
96	0.6	0.7	0.4	0.6	1.8	2.3	2.6	3.3	3.2	2.9
97	0.4	0.9	0.6	0.5	1.2	1.7	3.1	4	3.1	3.5
98	0.6	1.5	0	0.7	1.1	2.5	2.6	3	2.3	4.4
99	0.5	1	1	0.7	0.7	1.8	1.6	3	2.8	3.3
100	0.6	0.8	0.5	0.9	0.5	3.1	2.7	2.8	3.4	3.2
101	0.5	1	0.6	0.6	0.8	1.3	2.8	2.1	2.2	3.4
102	0.9	0.5	0.5	1.2	1.7	1.8	0.8	3.8	1.7	1.6
103	0.3	0.6	0.9	1.2	1.2	1.3	1.2	3	3	0
104	0.4	0.8	1.3	0.9	1.4	1.6	2.1	3.2	0.8	2.7
105	0.7	0.6	1.7	1.4	1.7	0.8	3.8	2.1	1.7	3
106	0.7	0.9	1.1	1.3	1	2.4	2.7	2.4	1.4	3.3
107	0.9	0.4	0.8	1.8	1.5	2.2	1.8	4.4	2.2	2.3
108	0.6	1.1	1.7	1.1	1.6	1.7	1	2.1	1.2	1.9
109	1.3	1.4	1	0.6	1.4	1.6	2.5	3.8	2.8	3.6
110	0.9	1	2.4	1.2	0.9	2.2	2.1	1.9	2.7	1.9
111	0.7	1.4	1.4	1.4	0.8	1.3	1.9	0.4	4.1	1.6
112	1.1	1.4	1.5	1.7	0.8	2.2	1.5	2.4	2.6	0.2
113	0.4	0.6	1.4	1.5	0.6	0.8	1	2	3.9	2
114	0.6	0.5	1.2	1.8	0.9	1.9	1.4	1	1.2	0.8
115	0.9	1.7	1.1	1.5	0.8	1.4	1.3	1.6	2.7	0.8
116	0.7	1.3	1.8	1.1	1	0.8	2	0.9	1	1.6
117	0.9	1.4	0.8	1.2	0.7	1.4	1.4	2.3	0.8	1.1
118	1	1.6	0.8	1.3	0.6	1.5	0.4	1.2	0.7	3.3
119	0.5	1.2	0.8	1.4	0.8	1.6	2	1.1	0.7	0.4
120	0.9	1.5	1.4	1.2	0.5	1.2	0.7	1	0	0
121	0.4	1.1	0.7	0.4	1.6	0	3.9	4	3.5	3.3
122	0.8	0.5	0.9	0.5	0.9	0	2.7	3.1	2.3	4
123	0.7	0.5	1.2	0.5	0.4	0	3	3.2	3.7	3.2
124	0.5	0	1	0	0.8	1.7	2	3.1	2.5	3.4
125	0.9	0.5	0.7	0.5	0.7	1.4	2.8	2.6	3	3.6
126	0.8	0.6	0.9	0.6	0.4	0.9	3.9	2.5	3.2	2.6
127	1.1	0.5	1.2	0.6	0.6	1.7	3.2	2.8	2.8	2.6
128	1	0.4	1.9	1.8	0.7	2.5	2.9	3.6	2.3	3
129	1.7	0.9	0.7	1	2.1	1	3.4	3	3.3	3.6
130	1	0.8	1.2	0.4	1.4	1.9	3.4	2.5	3.4	2.6
131	0.7	0.7	0.6	0.7	1.4	1.9	2.2	3	3.8	2.7
132	0.5	0.5	0.5	0.4	0.7	2.7	2.8	0.5	3.2	4.2
133	1	1.1	0.2	0.6	2.1	2.3	3	2.6	2.8	4
134	1.1	1.4	0.6	1.2	0.9	0	3.1	3	1.7	3
135	0.8	0.5	0.6	1.9	1.6	2.5	2.7	2.5	3.4	3.2
136	1.5	1	0.5	1.7	1.9	2.1	2.2	3.2	3.2	3.2
137	1.2	1.6	0.6	1.4	1.3	2	3	3	2.8	3.6
138	1.3	1.6	0.6	1.2	1	1.4	0.5	2.4	2	1.6
139	0.5	1.5	1.8	1.2	0.6	2.1	2.4	2.8	3.1	0.4

		1	1	1		1	1			1
140	0.5	1.8	1.8	0.6	1.3	2.2	3.5	3.7	3.1	3.1
141	0.6	1.8	1.5	1.6	1.1	0.4	2.5	2.2	3.2	3.8
142	1.1	0.9	1.6	1	1.2	1	2.8	1.3	2.3	3.9
143	0.4	0.9	1.6	1.5	1.3	2.4	3.6	3	2.8	2.3
144	0.5	1.1	1.7	1.2	0.7	1.9	3.4	2.5	3.4	3.3
145	0.7	1.4	0.5	1.4	1.7	2.3	2.8	2.3	1.4	2.9
146	0.7	1.2	0.9	1.2	1	1.6	1.8	3	2.7	3.5
147	0.7	1.1	1.3	0.8	1.1	1.7	3.5	1.4	2.5	3.9
148	0.8	1.1	1.7	1	0.9	2.5	1.2	4	0.8	2.9
149	0.8	1.1	1	0.4	1.3	2.2	0.6	0.5	2.6	3.4
150	0.7	0.7	1.2	1.1	0.6	1.7	2.8	1.3	2.8	3.6
151	0.4	0.8	1.1	1.1	1	2	0	1.9	1.3	3.7
152	0.6	0.9	1	0.9	0.8	2.1	1.8	2.5	0.3	0.4
153	0.6	1	1.3	1.3	0.6	1.6	0.8	2.5	0	1.8
154	0.8	1.1	1.3	0.9	1.1	2.6	2.7	2.8	0	3
155	0.9	1	0.7	1.3	0.7	1.3	2.5	2.7	2.6	3
156	0.8	0.9	1	0.7	0.4	1.7	3.3	1.4	1.9	2.8
157	1	0.7	1	0.5	0.9	1.7	0.5	0.7	0.9	1.3
158	0.5	1.6	0.9	1.1	1.9	1.7	1.8	0.7	1.8	0.3
159	1.1	1.6	1.7	0.5	1.2	1.8	2.9	2	0.7	0.5
160	0.9	1.1	1.2	0.6	1.1	0.5	3.1	0.5	0.5	0.7
161	0.4	0.5	2.6	2.1	2.6	2.4	1.7	3.1	1	0.4
162	0.4	1.6	1.4	1.7	2.3	2	1.6	2.6	2	0.3
163	0.4	1.4	1	1.6	2	2.6	3.2	4.2	2.8	0.5
164	0.6	1.8	1.7	1.1	1.5	1.8	2.1	2.9	2	0.7
165	0.4	1.5	1.5	1.3	1.6	1.9	2.8	2.5	2.3	1.6
166	0.4	1.6	1.4	1.2	1.6	1.5	0.5	2.9	0.7	2.2
167	0.4	1.7	1.5	1.1	1.8	2.4	0.6	3.1	0.3	2.2
168	0.4	1.5	1.1	1.8	1.1	1.3	2.3	3.8	1.1	4.4
169	0.5	0.8	1.7	0.8	1.7	1.5	3.3	3.5	1	2.7
170	1	1.1	0.6	1.5	1.1	2.8	1.9	3.3	0.4	3.4
171	0.7	1.7	1.6	1.6	1.4	2	2.6	0.5	2.9	1.7
172	0.4	0.6	2	1.3	1.6	1.9	1.3	1.2	2	0.9
173	0.5	1.3	1.5	1.3	1.4	1.6	2.8	0.9	2.5	2.6
174	0.4	1.4	0.6	0.8	0.8	1.4	3.6	1.1	1	0.4
175	0.5	1.6	0.6	1.6	0.7	2	3.8	3.4	0.2	3
176	0.7	0.7	0.8	0.7	0.5	1.6	0.5	1.9	0.9	3
177	0.2	1.7	1	0.4	0.6	1.4	0	3.8	2.5	4.4
178	1	1.3	1	0.5	0.6	1.7	0.4	0	0.7	2.7
179	0.7	0.6	0.8	0.5	0.6	1.2	1.8	1.6	0	5
180	1.1	0	0.9	0.5	0.6	0.8	3.2	4.3	0.5	3.2
181	0.5	1	0.9	1.1	0.8	1.3	1	0.5	0.3	3.1
182	0.7	0.7	1.6	0.7	1.1	1	3.3	1.7	1.1	0.5
183	0.9	1.2	1.4	0.6	1.6	1.5	0.7	3.5	0.9	3.6
184	0.7	1.2	1.9	0.9	0.5	0.8	0	3.8	2.7	2.6
185	0.3	0.9	1	0.6	0.5	0.5	0.5	2.2	0.5	0.8
186	0.6	0.7	0.6	0.5	0.8	1.8	1.3	3	0.7	0.3
187	0.9	0.7	1.7	0.7	0.5	1.6	0	4.6	2.5	0.9
188	0.6	1	1.4	0.5	0.8	0.3	1.6	3.2	2.7	1.5

		ı	1	1	1	1	1		1	
189	1.2	0.7	1.7	0.5	0.6	0.5	3.2	2.8	4.4	2.2
190	0.4	1.2	1.3	1.1	0.5	0.5	3.6	3.7	2.1	2.2
191	0.6	1.2	1	1.2	0.7	0.8	0	2.6	0.9	4.8
192	0.6	0.4	1.2	1	0.8	0.9	3.5	3.8	2.3	4.8
193	0.3	0.8	0.5	1.8	0.4	0.8	1.1	0.6	3.9	0.5
194	0.6	0.9	0.7	0.7	0.8	0.3	4.9	4.7	1	1.5
195	1.1	1.4	1.1	1.2	1.3	0.7	2.6	2.5	2	3.5
196	0.7	1.3	1.2	1.6	0.7	1.6	3	2.3	2.5	0.4
197	1	1.2	1	1.2	1.5	0.7	3.6	2.9	1.1	0.4
198	0.8	0.8	1	0.9	1.4	0.5	2.8	1.2	3.5	2.8
199	1.9	0.9	0.8	1.2	0.7	1.3	2.8	3.9	2.6	0.4
200	0.5	0.6	0.9	1.1	1.2	0	4.4	0.5	3.4	3.3
201	2	1.9	1.6	1.6	0.8	2.6	4.5	2.8	3.4	2.9
202	1.6	1.2	0.9	1.1	0.7	1.8	2	3.2	3	2.9
203	0.9	1.6	0.4	1.6	0.7	2.4	2.2	3.2	3.3	2.5
204	0.7	0.9	0.9	0.6	0.7	1.3	2.1	4	3	2.9
205	1.4	0.8	1.1	1.4	0.5	0.5	2.6	3.6	3.2	2.3
206	1.7	1.3	1.4	1.2	0.9	1.7	2	3.2	2.5	0.3
207	1	1.5	0.7	1.2	1.2	2	0.4	0.5	4.5	1
208	1.3	1.5	1.3	1.8	0.5	2.3	0	4	2.5	3
209	1	1.3	1.8	1.1	1.1	2.3	2.8	3.5	1.1	3
210	1.1	1	0.7	1	0.7	2.1	3.5	3.4	3	1.4
211	0.5	1	0.9	0.7	0.6	1.8	2.4	2.7	2.7	4.2
212	0.7	0.9	1.2	1.9	0.6	0.9	2.5	3.4	2.8	0.5
213	1.3	1.3	1.1	1.8	0.7	0.7	3.5	2.7	2.6	3.7
214	0.6	1.8	0.7	0.8	0.7	1.3	1.3	0	0	0.6
215	1.1	1	0.9	0.5	0.4	1.5	2.5	2.5	1	0.3
216	1.4	1.2	1.1	0.7	0.5	2.5	3	2.2	3.6	0.7
217	1.4	1.1	0.6	1.1	0.5	2	4	2.4	2.9	4.4
218	0.8	1	1	1.1	1.4	1.5	2.5	3	4.4	5
219	1.4	0.9	1.4	1.2	0.9	0.6	2.2	1.7	2.6	3.5
220	1.1	0.8	1.9	0.8	0.4	2.4	2.5	0.5	2.5	0.3
221	0.7	1.5	2.2	0.7	0.8	0.5	1.3	0.7	3.5	1
222	1.7	1.6	1.5	0.9	0.8	1.4	1.2	0.5	3	2.6
223	1.7	1.3	2	0.6	0.9	2	2.7	4.3	3.7	2.2
224	0.7	1.1	0.9	0.7	0.8	1.3	2.8	3.5	1.8	0.4
225	0.7	0.9	1.1	0.8	0.7	1.7	1.1	2.9	1.8	1.2
226	0.9	0.6	1.1	1	1	1.5	0.4	3.9	2.3	0.4
227	0.9	1.6	1.9	1.3	0.7	0.4	1.3	3.1	0.5	2.3
228	1	1.1	1.6	0.8	0.5	1.8	2.3	0.4	2.7	2.9
229	1.2	1.3	0.4	0.3	0.9	1.5	1.4	2.3	1.3	0.3
230	1.3	0.8	0.4	0.4	0.6	0.8	0.3	3.2	0.9	0.9
231	0.8	0.9	1.7	0.9	0.5	0.9	2.8	0.4	1.5	0.5
232	0.4	2.2	1.4	0.5	0.8	1.4	2.4	3.2	4	0.4
233	0.8	0.7	0.9	0.7	1.1	1.6	1.7	0.3	2.1	0.5
234	0.4	0.5	1.4	0.5	0.5	1.5	1.3	4	3.3	2.7
235	1.1	0.8	0.8	0.9	0.8	1.1	1.8	2.7	1.3	2.9
236	1.1	1.5	1.5	0.4	1.6	2	3.3	2.2	2.3	1.5
237	1.3	1.1	1	0.7	1.1	1.1	2	3.5	0.6	1.4

220						0.0		2.2	0.7	0.0
238	0.6	1	1.4	0.4	2.1	0.3	2	2.3	0.7	0.9
239	0.4	1.2	1	1.1	1.4	1.7	1.3	3	0.5	0.3
240	0.5	0.8	0.8	0.7	1.6	0.7	0.5	4.4	0.6	0.5
241	0.6	1.1	1	1.1	1.5	1.8	2.6	3.5	3.1	4
242	0.6	0.6	1.4	1.1	2	1.2	3.7	2.2	3.5	2.9
243	0.6	1	1.7	1.1	1.7	2	2.3	2.3	3.6	3.5
244	0.9	1.2	1.1	0.9	1.3	3.1	3	0.8	2.5	4.5
245	0.7	0.5	1.3	1.3	1.7	1.7	2.2	2.8	3	2.9
246	0.6	1.3	1.7	0.8	1.5	1.8	2.8	3	2.9	4.2
247	0.4	1.8	1.7	0.8	1.6	2	3.1	2.8	3.4	3.2
248	0.4	1.1	0.9	1.6	1.6	1.9	3.1	2.6	2	4
249	0.4	0.6	0.6	1.6	1.2	3	3.2	2.6	3.1	2.6
250	0.5	0.8	1.3	2	0.9	1.6	2.8	2.1	3.2	3.5
251	0.4	1.4	0.9	1.2	0.9	1.8	2	2.9	2.2	2.6
252	0.4	1.4	1.4	1.5	1.5	1.2	2.3	3	2.9	1.9
253	0.5	1.2	1.1	0.9	1	2.5	2.8	0.9	3	3
254	0.9	1	1.1	0.9	0.5	2.3	2.5	3.9	2.8	3.9
255	1.4	0.8	1.3	1	1	2	1.4	2.2	4	3.5
256	0.7	0.3	1.2	1.7	1.2	1.9	2.6	2.5	3.2	2.3
257	0.6	0.8	1.2	0.9	1.3	2.1	3.8	2.4	3.4	1.5
258	1.2	1	1.4	0.9	1	2.3	3.2	1.3	3.2	3.6
259	0.7	1.4	1.1	1.7	0.6	1.1	2.3	1.5	3.2	2.6
260	0.8	1	0.5	0.6	0.6	1.9	1.4	2.6	2.8	3.3
261	0.4	1.6	0.6	1	1	1.8	0.9	2.9	3.3	2.6
262	0.4	1.2	0.6	1.8	0.8	1.7	2	2.9	2.9	1.4
263	0.5	1.5	0.6	1.4	0.7	2.1	3.1	3	3	3
264	0.6	1	1.1	1.8	0.7	0.5	1.6	3	2.7	2.8
265	0.9	0.5	0.9	1.4	0.7	2.2	1.2	3.2	2.3	3.3
266	0.9	1	1.2	1	0.5	0	1.5	2.7	3.2	3.5
267	1.2	0.8	0.6	1.7	0.8	2	1.4	2	2.3	2.5
268	1	1	1.1	1.5	0.6	2.5	0.8	2	1.5	1.4
269	0.8	1	1	0.9	0.4	1.6	1.7	2.3	1.7	1.9
270	0.7	1.6	1.1	1.2	0.7	0.8	0.6	5	1.5	0.4
271	1.4	0.7	0.6	1.5	0.8	2	0.8	3	0.4	1.5
272	0.7	0.7	1.2	1.2	0.7	0.5	0.4	3.2	0.9	0.5
273	1.8	1.3	0.8	1.5	0.8	1.4	0.8	2.5	3.5	1.1
274	0.5	0.7	0.5	1.3	0.6	1.1	1.3	1.6	0.3	0.3
275	0.4	0.9	0.6	1.1	0.6	0.3	0.3	1.4	2.6	2.5
276	0.8	1.4	0.5	1.2	0.8	0	1	1.9	0.3	2.1
277	1.2	0.4	1	1	0.8	0.8	1.2	3.7	1.3	2.7
278	0.9	1.1	1.3	1.2	0.7	1.9	0.4	0.7	1	0.5
279	0.6	1.1	1.4	1.3	1	1.9	0.3	1.1	1.4	1.2
280	0.5	0.5	0.9	1.4	0.7	1.9	0.2	2.9	0.7	1.2
281	1.1	0.5	1.1	1.9	1.1	1.8	2.4	2.4	2.2	2
282	1.3	1.4	1.3	0.6	0.6	2	1.5	2.5	2.4	3.5
283	1.4	1.6	1.8	0.5	0.7	1.6	1.9	3.1	2.9	3.2
284	1.8	1.5	1.6	0.4	0.8	1.9	1	2.7	1.9	2.5
285	1.4	1.4	1.4	0.8	0.7	2.4	0.9	1.5	3	3
286	1.5	1.2	1.2	1.7	0.5	1.9	2.4	1.6	1.7	3.8

287	1.4	0.8	1.3	1.4	0.9	1.9	1.2	2.9	0.9	2.9
288	1.5	1.9	0.5	0.7	1.1	1.9	1.8	2.3	0.5	3.3
289	0.9	0.7	1.4	1.1	0.8	1.9	2.9	2.8	2.4	3.5
290	1	0.8	1.6	1.2	1.2	1.8	3	3.3	0.8	2.6
291	1.1	1.4	2	0.9	0.5	1.9	2.3	0.3	1.2	4.3
292	1.2	0.9	2	0.4	0.4	1.6	0.9	0.3	0.3	3.6
293	0.5	0.5	0.7	1.4	0.8	1.6	1.7	2.5	0.7	3.2
294	0.5	1.2	0.9	0.6	1.2	1.7	2.7	2.5	2.2	2.7
295	0.7	0.6	0.8	0.8	0.7	1.4	0.3	2.5	2.2	2.8
296	1.1	1.3	1	1.1	0.9	1.5	2.2	2.6	0.4	3.3
297	1.2	1.3	0.8	1.6	0.9	2	2.5	3.6	2.3	1.5
298	1.2	1	0.6	1.4	1.6	2.2	3.2	2.8	1.9	2.5
299	1.2	0.6	1.3	1	1	1.2	1.9	1.6	2.3	1.8
300	1.2	1.2	1.4	0.5	1.4	1.8	0.3	2	2.2	2.3
301	0.7	0.6	1.3	0.9	0.8	2.1	2.5	2	2.3	1.5
302	1.3	0.7	1.6	1.3	1.1	2.1	3.5	2.2	2.5	2
303	0.9	1	1	0.5	1.3	1	2.7	3	2.6	2.3
304	1.4	1.2	0.8	1	1.8	1	2.4	0.7	2.5	3.4
305	0.8	1	1.7	1.2	1.7	0.3	1.5	2	2.2	3.1
306	0.8	1.9	1.1	0.8	1	2.2	2	1.5	2.9	2.5
307	1.1	1.1	1	1.6	2	2.3	2.9	1.6	2.4	3
308	1	0.5	0.4	0.5	0.4	1.3	2.7	3	2.7	3
309	1	1.1	1.1	0.8	1.9	1.6	2.3	2	2.8	0.7
310	0.7	1.3	0.9	1	1.8	2.5	2.2	3.2	2.8	2.3
311	1.3	0.7	0.8	0.8	1.1	2	4	2.8	3	1.8
312	1.1	1.2	0.7	1	1.3	2.2	3.2	2.9	2.7	2.7
313	0.9	0.6	1	0.8	1.9	0.5	2.6	1.3	2.3	1.6
314	1	0.6	1	0.9	1.8	1.3	3.4	2.6	4.2	0.4
315	1	0.9	0.9	1.2	1	1.7	2.5	3	3.1	0.5
316	1.1	0.5	1.1	0.9	0.7	2.2	2	2.9	3	1.2
317	0.8	1	1.1	0.6	0.5	1.4	3	0.3	3	2.5
318	0.8	1.1	1.1	1	0.9	0.8	3	0.4	2.4	0.8
319	1	0.7	0.6	0.6	1.1	0.7	4	2.4	3	0.4
320	0.5	1.4	0.4	1.3	0.5	0.2	2.9	3.3	3.6	0.5
321	1.6	1.1	1.8	1.1	1.7	2	3	3.5	2.5	2
322	1.4	1.2	1.6	0.6	1.8	2	2.1	2.5	3	3
323	0.9	1.5	1.8	1	1.6	2.8	3	3.2	2.3	3.2
324	1.3	1.1	1.7	0.9	1.8	2.2	1	2.5	3	2.7
325	1.3	0.4	1.6	0.7	0.7	1.5	2.8	2.6	3.4	3
326	1.1	0.6	0.6	0.5	0.6	2.5	2.6	2.7	2.6	3.2
327	1.2	0.6	1.2	0.6	1.5	1.2	2.8	3.2	2.7	2.5
328	1.4	0.6	1.3	1	1.3	1	2.5	2.7	2.9	3.5
329	1.2	0.7	1.3	0.8	1.2	1.3	3.3	3.3	3.2	3.4
330	1.2	1	1.3	1.1	1.8	1.8	2.6	3.3	3.4	2.1
331	1.1	1.5	1.4	0.5	1.9	1.7	1.8	2.4	2.9	3.1
332	1.6	0.8	1.2	1.4	1.2	2.3	2.1	1.9	3	3.2
333	1.6	0.5	0.4	0.6	1.6	1.3	0.3	1.7	2.4	3
334	1.2	1.3	0.5	1.2	0.6	1.5	2.1	2.3	3.4	3.9
335	1.5	1.5	0.4	0.5	1	1.2	1.7	2.7	2.2	0.9

226	1.0	1.6	0.5			1.4	2.0	2.6	2.5	
336	1.6	1.6	0.5	1	1	1.4	2.8	2.6	2.5	3
337	1.2	1.4	0.5	1.1	1	1.9	1.5	3	3	2.5
338	1.3	0.7	0.5	1.3	1	2.1	2.4	1.1	2.4	2.4
339	1.6	1.1	0.6	1.5	1.4	2	2.5	0.8	2.3	3.7
340	1.5	1.4	0.5	1.7	1.9	1.2	1.6	2.7	2.5	3.2
341	1.2	0.7	1.1	0.5	0.6	2	2.3	1.7	1.6	2.8
342	1.4	1.3	1.4	1.9	0.5	2.3	2.2	1.7	1.9	2.2
343	1.4	1.5	0.9	1.5	0.6	2	0.6	1.7	2.4	3.5
344	1.2	1.7	1.3	1.2	0.5	1.3	4	2.4	2.8	2.2
345	1.1	1.5	0.6	0.9	0.7	1.3	2.7	3.7	3.4	1
346	1.5	1.6	1.1	1.2	0.7	1.5	2.6	0.9	2.5	1.5
347	1.2	0.8	0.9	1.1	0.5	1.3	2	2	2.5	3
348	1.3	1.6	1	1	0.5	1	2.6	2	3	0.8
349	1.2	1.2	0.8	1.2	0.8	1.1	2.5	2	1.9	0.3
350	1.5	0.5	0.9	1.4	0.4	2.1	2.8	0.4	2.4	1.7
351	1	1.1	1	1.5	1.1	1.3	0.7	0.7	3.4	0.8
352	1.3	1.1	1.2	0.6	1.4	1.3	0.5	2.2	2.5	0.5
353	1.3	1	1	1.2	1	1.7	1.7	2.6	2.5	2.6
354	1.3	0.8	1.2	1	1.1	0.8	2.3	2.7	3.6	0.4
355	1	1.4	0.7	1.1	1	1.5	1.7	3.1	3	1.5
356	1	1	0.9	0.5	0.4	1.5	2.9	2.3	2.8	3
357	1.2	0.7	0.6	1.5	0.9	1.9	3.1	2.5	2.6	0.9
358	1.1	1.7	1.2	1	0.6	1.2	1.3	2.5	0.3	2.1
359	1.2	1.6	1	0	1.1	0.7	2.6	1.8	0.9	3.5
360	0.6	1.3	0.5	0	1	0.9	0.5	2.3	2.2	2.5
361	1.7	0.8	2	0.7	0.6	2.2	3.8	3.1	3	4.1
362	1.5	0.7	1.4	0.5	0.6	2	2.3	3	2.3	1.8
363	1.8	0.6	2	0.5	0.6	2.5	3	2.5	2.3	3.5
364	1.1	0.4	2.2	0.6	0.8	1.4	2.4	3.1	2.5	3
365	1.4	0.6	1.8	0.7	0.5	0.9	2.7	2.3	2.7	3.5
366	1	1	1.3	0.7	0.5	1.7	3.5	2.5	3	3.2
367	1.6	1	1.7	1	1.4	1.4	2.8	3.5	3.1	3.8
368	1.3	0.6	2	0.3	0.3	2.2	2.6	2.7	3.3	3
369	1.4	0.9	0.9	0.8	0.8	2.1	2	2.6	2.9	2.3
370	1.5	0.5	1.3	0.5	1.3	1.9	0.5	3.1	2.5	2.3
371	1.7	0.8	1.4	0.8	0.6	1.7	2	2.5	2.6	2.5
372	2	0.6	1.8	0.4	0.5	1.6	2.5	3.3	3	0.5
373	0.8	0.8	1.2	0.8	0.6	1.4	1.4	2.7	2.6	3
374	1.4	1	1.6	0.5	0.6	1.9	1.9	3.5	3	2.2
375	1.5	0	1.8	0	0.5	2.4	3.6	3	2.6	2.5
376	1.6	0.4	1.6	0.9	0.5	1.4	2.9	1.8	3	3.7
377	1.6	0.6	0.9	0.7	1.1	2	1.6	1.4	1.1	3.1
378	1.6	0.9	1.8	0.8	0.9	2	2.1	2.8	2	3.4
379	1.5	1.5	1.4	1.5	1	1.7	0.5	3	2	3.2
380	0	1.1	1.3	0.8	1.5	1.7	2.6	3	2.6	2.1
381	1.5	0.9	0.9	0.6	0.9	1.9	2.5	1.5	2.5	3.4
382	0.5	0.6	1.3	0.8	1.9	1	2.6	2.1	0.9	3
383	1.2	0.6	0.9	1	1.4	1.7	3	3.7	2.5	3.7
384	1.2	0.7	0.4	0.8	1.4	1.9	2	2.4	1.7	3.2

		1	1		1		1		1	1
385	1.2	1	1.1	1.6	1.8	2	2.9	2.5	2.4	3.2
386	1.5	0.8	0.8	1.1	1.8	2.1	2.3	2.6	2.7	2.5
387	0.8	1.6	0.5	1.5	1.7	1.8	2.3	2.1	2.5	1.8
388	1	1.2	0.6	1.2	2.1	1.5	2	1.9	2.2	3.3
389	1.2	1.6	0.8	0.6	1.4	2	1.5	2.9	0.6	2
390	1.4	1.3	0.7	1.6	1.6	1.7	2.4	2.6	1.5	2.7
391	1.4	1.2	0.6	0.8	1.7	1.4	2.3	2.4	1.6	3.2
392	1.2	1.5	0.8	1.2	0.7	1.8	2.8	3	0.6	2.6
393	1.2	1	0.7	0.5	1.5	1	2.4	1.8	0.4	2
394	0.9	0.8	0.5	1.2	0.5	1.7	0.3	4	0.3	0.7
395	0.7	1.3	0.6	1.3	1.8	2.8	2.3	3.5	2	2.1
396	0.8	1.7	1.5	1.1	1	1.8	2	3	1.4	1.1
397	0.6	1.4	1.1	1.5	1.4	1.3	0.3	3.2	0.3	3.7
398	1.5	1.8	0.7	1.2	1.4	0.9	0.8	2.2	0.3	2.5
399	1.3	0.7	0.8	1.5	1.6	0.5	2.2	2.3	0.4	2
400	0.8	1.8	0.6	1.4	1.7	0.5	0.5	1.2	1.1	1.5
401	1.5	2	1.7	1	1.8	2.3	2.8	1.8	4.8	1.5
402	1.6	2	1.4	1.2	1.8	2.4	3	1.1	4	2.5
403	1.1	1.4	1.6	1.9	1.4	0.6	2.7	0.7	4.6	0.7
404	1.6	1.5	1.4	1.2	1.5	1.2	3	1	3.8	2.1
405	1.5	1.8	2	1.3	1.1	2	1.7	1.3	3.7	1.2
406	1.5	1.9	1.2	1.1	1.5	0.3	3.5	0.4	3.1	3.2
407	1.2	0.9	1.4	1.3	1.3	2.2	2.7	1.7	3.5	0.7
408	1.2	1.6	1.6	1.2	1.4	2.2	3.3	3.2	3	2.2
409	1.6	1.1	1.4	1.5	1	2	0.7	1.7	3.9	0.7
410	1.6	1.4	1.6	1.4	1.2	2.4	2	2.4	2.5	1.5
411	1	1.6	1.6	1.2	1	2.2	1.4	3	2.9	1.6
412	1.4	1.3	1.6	1.4	0.8	2.3	1.2	2.8	3.8	1.5
413	1.2	1	1.8	1.2	0.7	3	0.8	2.5	2.8	1.5
414	1.3	1.5	1.1	1	1	0.8	1.1	2.7	3.2	1
415	1.3	1.4	1.5	1.5	0.7	1.9	1.4	2.7	2.8	1.3
416	1.3	1.2	0.9	1.6	0.7	1.9	0.6	2.5	3.3	0.6
417	1.1	1.4	0.9	1.1	0.5	1.9	0.5	1.5	4	0.3
418	1.3	1.3	1.9	1.1	0.5	2.4	1.5	3.3	3.8	0.4
419	1.3	1.2	1.2	1.4	1.1	2.1	0.8	2.9	2.9	0.6
420	1.1	1.1	1.4	1.2	1	2	0.4	2.5	3	0.6
421	1.2	1.2	1.4	1.1	0.6	2.2	1	2.5	2.9	1.4
422	1.4	1.5	1.1	1.3	0.3	0.5	3.7	2.8	1	2.2
423	1	1.7	0.9	0.9	0.7	1.1	2.5	2.7	1.8	3.2
424	1.3	1	0.7	1.3	0.6	2.1	3.5	3.2	2.1	2.5
425	0.9	1.2	0.8	1.2	1.2	2.5	2.9	3.7	2.3	3
426	1.3	0.7	1.2	1	1.6	1.5	3	2.8	2	4.2
427	1.3	0.9	0.8	0.8	0.9	2.3	3.1	1	1	2.5
428	1.4	1	1.7	1.1	0.6	0.8	2.7	4.7	2.5	3
429	0.8	1.1	1.2	1.3	0.7	0.7	3.1	2.4	3.7	4.8
430	1.1	0.9	1	1.1	0.5	0.5	2	3.6	3.5	3.2
431	1.6	1.2	1.2	1.1	0.8	0.3	3	3.5	3.2	3.7
432	1.7	0.8	0.7	0.8	0.8	1.5	3.4	3.3	2.2	2.2
433	1.2	1.1	0.9	0.6	0.6	0.8	3.7	3	3	3.6

434 1.5 0.7 0.9 0.5 0.5 1.2 0.7 2.5 3.9 3.3 3. 3. 435 1 1 1.1 0.7 0.5 0.5 0.5 2 3.6 4.1 2.2 3.1 436 0.9 1 0.8 0.5 0.6 1.5 3.2 4.3 3.3 2.5 437 1.1 1 0.6 1.0 0.8 0.5 0.6 1.5 3.2 4.3 3.5 3.5 3.5 438 1 0.6 1 0.6 1 1 0.5 0.4 1.8 2 2.2 7.7 0.8 3.5 3.5 439 0.9 0.6 0.7 1 1 1.2 2.2 1 2.2 1 2.5 3.4 440 1 0.7 1.3 0.5 1.8 0.5 0.6 0.7 0.5 3.9 441 1.6 1.1 1.5 0.5 0.5 1.6 1.3 2.6 3.4 5.8 4.2 442 1.3 1 1 1.5 0.5 0.5 1.6 1.3 2.5 2.8 3.3 3.2 3.4 444 1.1 0.7 1.4 0.5 1.5 0.5 0.8 0.8 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3						1					
436 0.9	434	1.5	0.7	0.9	0.5	1.2	0.7	2.5	3.9	3.3	3
437 1.1 1 0.7 0.8 0.8 0.9 3.4 3.5 3.5 3.6 438 1 0.6 1 0.5 0.4 1.8 2 2.7 0.8 3.5 3 440 1 0.7 1.3 0.5 1.8 0.5 0.6 0.7 0.5 3.9 441 1.6 1.1 1.5 0.5 1.6 1.3 2.6 3.4 5.8 4.2 442 1.3 1 1.5 0.6 1.5 2.5 2.8 3 3.2 3.4 443 1.7 1 2 0.5 1.4 2.7 2.6 3.6 3.5 4.3 444 1.1 0.9 1.4 0.5 1.4 2.7 2.6 3.6 2.5 3.3 444 1.3 1.7 1.1 0.5 1.4 2.7 1.1 3.7 2.5 3.3 4447	-										
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442 1.3 1 1.5 0.6 1.5 2.5 2.8 3 3.2 3.4 443 1.7 1 2 0.5 1.3 2 2.9 2.9 2.7 3 444 1.1 0.7 1.4 0.5 1.4 2.7 2.6 3.6 2.5 4.3 445 0.9 0.8 1.2 0.7 1.2 2.2 2.5 3.7 2.5 3.3 446 1.4 0.5 1 0.7 1.5 3.3 2.2 3 2.7 2.9 447 1.3 1.4 1.7 1.1 3 1.7 2.9 4 447 1.1 0.9 1 0.9 1.7 2.3 2.4 2.5 3.5 3.2 2.8 4450 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 452 1.3 1.5 <t>1.1 0.9 0.7 1</t>		1	0.7	1.3	0.5	1.8					
443 1.7 1 2 0.5 1.3 2 2.9 2.9 2.7 3 444 1.1 0.7 1.4 0.5 1.4 2.7 2.6 3.6 2.5 4.3 445 0.9 0.8 1.2 0.7 1.5 3.3 2.2 3 2.7 2.9 447 1.3 1.4 1.3 0.5 1.4 1.7 1.1 3 2.7 2.9 447 1.3 1.4 1.3 0.5 1.4 1.7 1.1 3 2.7 2.9 448 1.1 1 1.6 0.3 1.4 2.1 2.8 2.9 3 2.8 449 1.1 0.9 1 0.9 1.7 2.3 2.4 2.5 3.5 3.2 450 0.9 0.8 1.3 0.4 1 1.8 1.4 3.2 2.5 1.5 1.5 451 1.4	-	1.6	1.1	1.5	0.5	1.6	1.3				+
4444 1.1 0.7 1.4 0.5 1.4 2.7 2.6 3.6 2.5 4.3 445 0.9 0.8 1.2 0.7 1.2 2.2 2.5 3.7 2.5 3.3 446 1.4 0.5 1 0.7 1.5 3.3 2.2 3 2.7 2.9 447 1.3 1.4 1.3 0.5 1.4 1.7 1.1 3 2.7 2.7 448 1.1 1 1.6 0.3 1.4 2.1 2.8 2.9 3 2.8 450 0.9 0.8 1.3 0.4 1 1.8 1.4 3.2 2.5 1.5 451 1.4 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 452 1.3 1.5 1.1 0.9 0.7 1.9 1 3.2 2.9 2.8 3.4 453		1.3			0.6	1.5					
445 0.9 0.8 1.2 0.7 1.2 2.2 2.5 3.7 2.5 3.3 446 1.4 0.5 1 0.7 1.5 3.3 2.2 3 2.7 2.9 448 1.1 1 1.6 0.3 1.4 2.1 2.8 2.9 3 2.8 449 1.1 0.9 1 0.9 1.7 2.3 2.4 2.5 3.5 3.2 449 1.1 0.9 1 0.9 1.7 2.3 2.4 2.5 3.5 3.2 450 0.9 0.8 1.3 0.4 1 1.8 1.4 3.2 2.5 1.5 451 1.4 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 452 1.3 1.5 1.1 0.9 0.7 1.9 1 3.2 2.9 2.8 3.4 453 <	-	1.7	1		0.5	1.3					
446 1.4 0.5 1 0.7 1.5 3.3 2.2 3 2.7 2.9 447 1.3 1.4 1.3 0.5 1.4 1.7 1.1 3 2.7 2.7 2.7 448 1.1 0.9 1 0.9 1.7 2.3 2.4 2.5 3.5 3.2 450 0.9 0.8 1.3 0.4 1 1.8 1.4 3.2 2.5 1.5 3.2 450 0.9 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 451 1.4 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 452 1.3 1.5 1.1 0.6 1.4 1.7 3.5 2.5 2.8 3.4 453 1.2 1 1 1.5 0.8 0.8 3.3 3 2.4 2.8 <		1.1	0.7		0.5						
447 1.3 1.4 1.3 0.5 1.4 1.7 1.1 3 2.7 2.7 448 1.1 1 1.6 0.3 1.4 2.1 2.8 2.9 3 2.8 450 0.9 0.8 1.3 0.4 1 1.8 1.4 3.2 2.5 1.5 451 1.4 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 452 1.3 1.5 1.1 0.9 0.7 1.9 1 3.2 2.9 2.8 453 1.2 1 1 0.6 1.4 1.7 3.5 2.5 2.8 3.4 454 1.4 0.6 1 1.5 0.8 0.8 3.3 3 2.4 2.8 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 456 1.2 1	445	0.9	0.8	1.2	0.7	1.2	2.2	2.5		2.5	3.3
448 1.1 1 1.6 0.3 1.4 2.1 2.8 2.9 3 2.8 449 1.1 0.9 1 0.9 1.7 2.3 2.4 2.5 3.5 3.2 450 0.9 0.8 1.3 0.4 1 1.8 1.4 3.2 2.5 1.5 451 1.4 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 0.3 4.5 452 1.3 1.5 1.1 0.9 0.7 1.9 1 3.2 2.9 2.8 453 1.2 1 1 0.6 1.4 1.7 3.5 2.5 2.8 3.4 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 456 1.2 1.5 1.1 0.5 1.1 2.5 3 2.7 2.6 3.1 457 <td< td=""><td></td><td>1.4</td><td>0.5</td><td>1</td><td>0.7</td><td>1.5</td><td>3.3</td><td>2.2</td><td></td><td></td><td></td></td<>		1.4	0.5	1	0.7	1.5	3.3	2.2			
449 1.1 0.9 1 0.9 1.7 2.3 2.4 2.5 3.5 3.2 450 0.9 0.8 1.3 0.4 1 1.8 1.4 3.2 2.5 1.5 451 1.4 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 452 1.3 1.5 1.1 0.9 0.7 1.9 1 3.2 2.9 2.8 453 1.2 1 1 0.6 1.4 1.7 3.5 2.5 2.8 3.4 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 456 1.2 1.5 1.1 0.5 0.1 2.2 2.7 1.7 3 4.2 457 1.1 <		1.3	1.4	1.3	0.5	1.4					
450 0.9 0.8 1.3 0.4 1 1.8 1.4 3.2 2.5 1.5 451 1.4 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 452 1.3 1.5 1.1 0.9 0.7 1.9 1 3.2 2.9 2.8 453 1.2 1 1 0.6 1.4 1.7 3.5 2.5 2.8 3.4 454 1.4 0.6 1 1.5 0.8 0.8 3.3 3 2.4 2.8 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 456 1.2 1.5 1.1 0.5 0.8 1.2 2.2 2.7 1.7 7.3 3.2 2 2.3 3.2 2 2.3 3.2 2 2.5 2.5 3.1 3.3 2.2 2.7 1.9 <	448	1.1	1	1.6	0.3	1.4	2.1	2.8			2.8
451 1.4 0.8 0.9 0.6 1.2 2.2 0.8 0.3 0.3 4.5 452 1.3 1.5 1.1 0.9 0.7 1.9 1 3.2 2.9 2.8 453 1.2 1 1 0.6 1.4 1.7 3.5 2.5 2.8 3.4 454 1.4 0.6 1 1.5 0.8 0.8 3.3 3 2.4 2.8 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 456 1.2 1.5 1.1 0.5 1.4 2.2 2.7 1.7 3 4.2 459 0.9 0.8 0.7 0.5 1.5 1.5 2.9 2.5 2.5 3.2 460 1.2 <		1.1	0.9	1	0.9	1.7					
452 1.3 1.5 1.1 0.9 0.7 1.9 1 3.2 2.9 2.8 453 1.2 1 1 0.6 1.4 1.7 3.5 2.5 2.8 3.4 454 1.4 0.6 1 1.5 0.8 0.8 3.3 3 2.4 2.8 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 456 1.2 1.5 1.1 0.5 1.1 2.5 3 2.7 2.6 3.1 457 1.1 1.3 0.5 0.8 1.2 2.2 2.7 1.7 3 4.2 458 1.2 1.3 1.3 0.5 1.4 2 3.1 2.3 3.3 2 459 0.9 0.8 0.7 0.5 1.5 1.5 2.9 2.5 2.5 3.2 460 1.2 1		0.9	0.8	1.3	0.4	1					
453 1,2 1 1 0,6 1,4 1,7 3.5 2.5 2.8 3.4 454 1,4 0,6 1 1,5 0,8 0,8 3.3 3 2.4 2.8 455 0.8 0.8 1,2 0,6 1,2 2.2 3.2 2 2.3 3.2 456 1.2 1,5 1,1 0.5 1,1 2.5 3 2.7 2.6 3.1 457 1,1 1,3 0.5 0.8 1,2 2.2 2.7 1,7 3 4.2 458 1,2 1,3 1,3 0.5 0.8 1,2 2.2 2.7 1,7 3 4.2 459 0.9 0.8 0.7 0.5 1,5 1,5 2.9 2.5 2.5 3.2 1 460 1.2 1.2 1,6 1,4 1,4 1,6 2.7 2,7 2,7 3.2 1	451	1.4	0.8	0.9	0.6	1.2	2.2	0.8	0.3	0.3	4.5
454 1.4 0.6 1 1.5 0.8 0.8 3.3 3 2.4 2.8 455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 456 1.2 1.5 1.1 0.5 1.1 2.5 3 2.7 2.6 3.1 457 1.1 1.3 0.5 0.8 1.2 2.2 2.7 1.7 3 4.2 458 1.2 1.3 1.3 0.5 1.4 2 3.1 2.3 3.3 2 459 0.9 0.8 0.7 0.5 1.5 1.5 2.9 2.5 2.5 3.2 460 1.2 1.2 1.6 1.4 1.4 1.6 2.7 2.7 3.2 1 461 1.5 1.2 0.6 1 0.8 1 2.9 2.4 2.5 2.5 462 1.2 1	452	1.3	1.5	1.1	0.9	0.7	1.9	1	3.2	2.9	2.8
455 0.8 0.8 1.2 0.6 1.2 2.2 3.2 2 2.3 3.2 456 1.2 1.5 1.1 0.5 1.1 2.5 3 2.7 2.6 3.1 457 1.1 1.3 0.5 0.8 1.2 2.2 2.7 1.7 3 4.2 458 1.2 1.3 1.3 0.5 1.4 2 3.1 2.3 3.3 2 459 0.9 0.8 0.7 0.5 1.5 1.5 2.9 2.5 2.5 3.2 460 1.2 1.2 1.6 1.4 1.4 1.6 2.7 2.7 3.2 1 461 1.5 1.2 0.6 1 0.8 1 2.9 2.4 2.5 2.5 2.5 462 1.2 1 0.4 0.6 1.2 1.9 2 2.7 1.9 2.5 463 1	453	1.2	1	1	0.6	1.4	1.7	3.5		2.8	
456 1.2 1.5 1.1 0.5 1.1 2.5 3 2.7 2.6 3.1 457 1.1 1.3 0.5 0.8 1.2 2.2 2.7 1.7 3 4.2 458 1.2 1.3 1.3 0.5 1.4 2 3.1 2.3 3.3 2 459 0.9 0.8 0.7 0.5 1.5 1.5 2.9 2.5 2.5 3.2 460 1.2 1.2 1.6 1.4 1.4 1.6 2.7 2.7 3.2 1 461 1.5 1.2 0.6 1 0.8 1 2.9 2.4 2.5 2.5 2.5 2.5 2.5 4.6 1.2 1.9 2 2.7 1.9 2.5 4.6 2.2 2.9 4.6 1.2 1.9 2.7 3.6 2 2.9 4.6 1.2 1.9 2.7 3.6 2 2.9	454	1.4	0.6	1	1.5	0.8	0.8	3.3		2.4	2.8
457 1.1 1.3 0.5 0.8 1.2 2.2 2.7 1.7 3 4.2 458 1.2 1.3 1.3 0.5 1.4 2 3.1 2.3 3.3 2 459 0.9 0.8 0.7 0.5 1.5 1.5 2.9 2.5 2.5 3.2 460 1.2 1.2 1.6 1.4 1.4 1.6 2.7 2.7 3.2 1 461 1.5 1.2 0.6 1 0.8 1 2.9 2.4 2.5 2.5 462 1.2 1 0.4 0.6 1.2 1.9 2 2.7 1.9 2.5 463 1.3 1.3 0.6 1 0.5 1.9 2.7 3.6 2 2.9 464 1.2 0.5 0.7 0.9 0.5 2 2.2 2.2 3.3 2.3 465 0.7 1.6	455	0.8	0.8	1.2	0.6	1.2	2.2		2	2.3	
458 1.2 1.3 1.3 0.5 1.4 2 3.1 2.3 3.3 2 459 0.9 0.8 0.7 0.5 1.5 1.5 2.9 2.5 2.5 3.2 460 1.2 1.2 1.6 1.4 1.4 1.6 2.7 2.7 3.2 1 461 1.5 1.2 0.6 1 0.8 1 2.9 2.4 2.5 2.5 462 1.2 1 0.4 0.6 1.2 1.9 2 2.7 1.9 2.5 463 1.3 1.3 0.6 1 0.5 1.9 2.7 3.6 2 2.9 464 1.2 0.5 0.7 0.9 0.5 2 2.2 2.2 3.3 2.3 465 0.7 1.6 1.4 1 0.5 1.3 2.8 2.2 2.3 2.5 466 0.3 1.5	456	1.2	1.5	1.1	0.5	1.1	2.5	3	2.7	2.6	3.1
459 0.9 0.8 0.7 0.5 1.5 1.5 2.9 2.5 2.5 3.2 460 1.2 1.2 1.6 1.4 1.4 1.6 2.7 2.7 3.2 1 461 1.5 1.2 0.6 1 0.8 1 2.9 2.4 2.5 2.5 462 1.2 1 0.4 0.6 1.2 1.9 2 2.7 1.9 2.5 463 1.3 1.3 0.6 1 0.5 1.9 2.7 3.6 2 2.9 464 1.2 0.5 0.7 0.9 0.5 2 2.2 2.2 3.3 2.3 465 0.7 1.6 1.4 1 0.5 1.3 2.8 2.2 2.3 2.5 466 0.3 1.5 0.7 0.8 0.9 2.4 3 1.3 3 2.6 467 0.8 0.9	457	1.1	1.3	0.5	0.8	1.2		2.7	1.7	3	4.2
460 1.2 1.2 1.6 1.4 1.4 1.6 2.7 2.7 3.2 1 461 1.5 1.2 0.6 1 0.8 1 2.9 2.4 2.5 2.5 462 1.2 1 0.4 0.6 1.2 1.9 2 2.7 1.9 2.5 463 1.3 1.3 0.6 1 0.5 1.9 2.7 3.6 2 2.9 464 1.2 0.5 0.7 0.9 0.5 2 2.2 2.2 2.2 2.9 465 0.7 1.6 1.4 1 0.5 1.3 2.8 2.2 2.3 2.5 466 0.3 1.5 0.7 0.8 0.9 2.4 3 1.3 3 2.6 467 0.8 0.9 0.8 0.6 0.8 2 2.8 2.5 2 2.5 468 1 1	458	1.2	1.3	1.3	0.5	1.4	2	3.1	2.3	3.3	2
461 1.5 1.2 0.6 1 0.8 1 2.9 2.4 2.5 2.5 462 1.2 1 0.4 0.6 1.2 1.9 2 2.7 1.9 2.5 463 1.3 1.3 0.6 1 0.5 1.9 2.7 3.6 2 2.9 464 1.2 0.5 0.7 0.9 0.5 2 2.2 2.2 3.3 2.3 465 0.7 1.6 1.4 1 0.5 1.3 2.8 2.2 2.3 2.5 466 0.3 1.5 0.7 0.8 0.9 2.4 3 1.3 3 2.6 467 0.8 0.9 0.8 0.6 0.8 2 2.8 2.5 2 2.5 468 1 1 0.5 0.5 1.1 1.6 2.7 2.4 2.5 3 469 1 1.8	459	0.9	0.8	0.7	0.5	1.5	1.5	2.9	2.5	2.5	3.2
462 1.2 1 0.4 0.6 1.2 1.9 2 2.7 1.9 2.5 463 1.3 1.3 0.6 1 0.5 1.9 2.7 3.6 2 2.9 464 1.2 0.5 0.7 0.9 0.5 2 2.2 2.2 3.3 2.3 465 0.7 1.6 1.4 1 0.5 1.3 2.8 2.2 2.3 2.5 466 0.3 1.5 0.7 0.8 0.9 2.4 3 1.3 3 2.6 467 0.8 0.9 0.8 0.6 0.8 2 2.8 2.5 2 2.5 468 1 1 0.5 0.5 1.1 1.6 2.7 2.4 2.5 3 469 1 1.8 0.6 0.7 1.1 1.6 2.5 1.5 3.2 1.3 470 1 1.3	460	1.2	1.2	1.6	1.4	1.4	1.6	2.7	2.7	3.2	1
463 1.3 1.3 0.6 1 0.5 1.9 2.7 3.6 2 2.9 464 1.2 0.5 0.7 0.9 0.5 2 2.2 2.2 3.3 2.3 465 0.7 1.6 1.4 1 0.5 1.3 2.8 2.2 2.3 2.5 466 0.3 1.5 0.7 0.8 0.9 2.4 3 1.3 3 2.6 467 0.8 0.9 0.8 0.6 0.8 2 2.8 2.5 2 2.5 468 1 1 0.5 0.5 1.1 1.6 2.7 2.4 2.5 3 469 1 1.8 0.6 0.7 1.1 1.6 2.5 1.5 3.2 1.3 470 1 1.3 0.8 0.6 0.9 1.5 2.8 2.7 1.5 2 471 1.2 1.5	461	1.5	1.2	0.6	1	0.8	1	2.9	2.4	2.5	2.5
464 1.2 0.5 0.7 0.9 0.5 2 2.2 2.2 3.3 2.3 465 0.7 1.6 1.4 1 0.5 1.3 2.8 2.2 2.3 2.5 466 0.3 1.5 0.7 0.8 0.9 2.4 3 1.3 3 2.6 467 0.8 0.9 0.8 0.6 0.8 2 2.8 2.5 2 2.5 468 1 1 0.5 0.5 1.1 1.6 2.7 2.4 2.5 3 469 1 1.8 0.6 0.7 1.1 1.6 2.5 1.5 3.2 1.3 470 1 1.3 0.8 0.6 0.9 1.5 2.8 2.7 1.5 2 471 1.2 1.5 0.9 0.9 0.8 1.3 2.4 0.8 2.2 3.2 472 0.8 0.7 </td <td>462</td> <td>1.2</td> <td>1</td> <td>0.4</td> <td>0.6</td> <td>1.2</td> <td>1.9</td> <td>2</td> <td>2.7</td> <td>1.9</td> <td>2.5</td>	462	1.2	1	0.4	0.6	1.2	1.9	2	2.7	1.9	2.5
465 0.7 1.6 1.4 1 0.5 1.3 2.8 2.2 2.3 2.5 466 0.3 1.5 0.7 0.8 0.9 2.4 3 1.3 3 2.6 467 0.8 0.9 0.8 0.6 0.8 2 2.8 2.5 2 2.5 468 1 1 0.5 0.5 1.1 1.6 2.7 2.4 2.5 3 469 1 1.8 0.6 0.7 1.1 1.6 2.5 1.5 3.2 1.3 470 1 1.3 0.8 0.6 0.9 1.5 2.8 2.7 1.5 2 471 1.2 1.5 0.9 0.9 0.8 1.3 2.4 0.8 2.2 3.2 472 0.8 0.7 0.9 0.5 1.5 1.2 3.3 2.3 2.5 1.5 473 1.3 0.8	463	1.3	1.3	0.6	1	0.5	1.9	2.7	3.6	2	2.9
466 0.3 1.5 0.7 0.8 0.9 2.4 3 1.3 3 2.6 467 0.8 0.9 0.8 0.6 0.8 2 2.8 2.5 2 2.5 468 1 1 0.5 0.5 1.1 1.6 2.7 2.4 2.5 3 469 1 1.8 0.6 0.7 1.1 1.6 2.5 1.5 3.2 1.3 470 1 1.3 0.8 0.6 0.9 1.5 2.8 2.7 1.5 2 471 1.2 1.5 0.9 0.9 0.8 1.3 2.4 0.8 2.2 3.2 472 0.8 0.7 0.9 0.5 1.5 1.2 3.3 2.3 2.5 1.5 473 1.3 0.8 0.6 1.3 1.2 1 3 2.4 1.5 1.5 474 0.6 0.8 </td <td>464</td> <td>1.2</td> <td>0.5</td> <td>0.7</td> <td>0.9</td> <td>0.5</td> <td>2</td> <td>2.2</td> <td>2.2</td> <td>3.3</td> <td>2.3</td>	464	1.2	0.5	0.7	0.9	0.5	2	2.2	2.2	3.3	2.3
467 0.8 0.9 0.8 0.6 0.8 2 2.8 2.5 2 2.5 468 1 1 0.5 0.5 1.1 1.6 2.7 2.4 2.5 3 469 1 1.8 0.6 0.7 1.1 1.6 2.5 1.5 3.2 1.3 470 1 1.3 0.8 0.6 0.9 1.5 2.8 2.7 1.5 2 471 1.2 1.5 0.9 0.9 0.8 1.3 2.4 0.8 2.2 3.2 472 0.8 0.7 0.9 0.5 1.5 1.2 3.3 2.3 2.5 1.5 473 1.3 0.8 0.6 1.3 1.2 1 3 2.4 1.5 1.5 474 0.6 0.8 0.7 0.4 0.9 1.1 0.7 0.5 1.2 0.6 475 0.8 0	465	0.7	1.6	1.4	1	0.5	1.3	2.8	2.2	2.3	2.5
468 1 1 0.5 0.5 1.1 1.6 2.7 2.4 2.5 3 469 1 1.8 0.6 0.7 1.1 1.6 2.5 1.5 3.2 1.3 470 1 1.3 0.8 0.6 0.9 1.5 2.8 2.7 1.5 2 471 1.2 1.5 0.9 0.9 0.8 1.3 2.4 0.8 2.2 3.2 472 0.8 0.7 0.9 0.5 1.5 1.2 3.3 2.3 2.5 1.5 473 1.3 0.8 0.6 1.3 1.2 1 3 2.4 1.5 1.5 474 0.6 0.8 0.7 0.4 0.9 1.1 0.7 0.5 1.2 0.6 475 0.8 0.7 1 0.6 0.9 1 1 1.3 1.5 1.3 476 0.8 0.7	466	0.3	1.5	0.7	0.8	0.9			1.3	3	2.6
469 1 1.8 0.6 0.7 1.1 1.6 2.5 1.5 3.2 1.3 470 1 1.3 0.8 0.6 0.9 1.5 2.8 2.7 1.5 2 471 1.2 1.5 0.9 0.9 0.8 1.3 2.4 0.8 2.2 3.2 472 0.8 0.7 0.9 0.5 1.5 1.2 3.3 2.3 2.5 1.5 473 1.3 0.8 0.6 1.3 1.2 1 3 2.4 1.5 1.5 474 0.6 0.8 0.7 0.4 0.9 1.1 0.7 0.5 1.2 0.6 475 0.8 0.7 1 0.6 0.9 1 1 1.3 1.5 1.3 476 0.8 0.7 1.1 0.5 0.9 1.4 1.8 1.1 1.7 3 477 1.2 <td< td=""><td>467</td><td>0.8</td><td>0.9</td><td>0.8</td><td>0.6</td><td>0.8</td><td>2</td><td>2.8</td><td>2.5</td><td>2</td><td>2.5</td></td<>	467	0.8	0.9	0.8	0.6	0.8	2	2.8	2.5	2	2.5
470 1 1.3 0.8 0.6 0.9 1.5 2.8 2.7 1.5 2 471 1.2 1.5 0.9 0.9 0.8 1.3 2.4 0.8 2.2 3.2 472 0.8 0.7 0.9 0.5 1.5 1.2 3.3 2.3 2.5 1.5 473 1.3 0.8 0.6 1.3 1.2 1 3 2.4 1.5 1.5 474 0.6 0.8 0.7 0.4 0.9 1.1 0.7 0.5 1.2 0.6 475 0.8 0.7 1 0.6 0.9 1 1 1.3 1.5 1.3 476 0.8 0.7 1.1 0.5 0.9 1.4 1.8 1.1 1.7 3 477 1.2 0.8 0.5 0.7 1.2 0.6 1.3 1.9 1 0.5 478 1.2 <td< td=""><td></td><td>1</td><td>1</td><td>0.5</td><td>0.5</td><td>1.1</td><td></td><td></td><td></td><td></td><td></td></td<>		1	1	0.5	0.5	1.1					
471 1.2 1.5 0.9 0.9 0.8 1.3 2.4 0.8 2.2 3.2 472 0.8 0.7 0.9 0.5 1.5 1.2 3.3 2.3 2.5 1.5 473 1.3 0.8 0.6 1.3 1.2 1 3 2.4 1.5 1.5 474 0.6 0.8 0.7 0.4 0.9 1.1 0.7 0.5 1.2 0.6 475 0.8 0.7 1 0.6 0.9 1 1 1.3 1.5 1.3 476 0.8 0.7 1.1 0.5 0.9 1.4 1.8 1.1 1.7 3 477 1.2 0.8 0.5 0.7 1.2 0.6 1.3 1.9 1 0.5 478 1.2 0.6 0.5 0.6 0.9 0.8 0.5 2 0.6 0.5 479 0.8 <		1	1.8	0.6	0.7	1.1					
472 0.8 0.7 0.9 0.5 1.5 1.2 3.3 2.3 2.5 1.5 473 1.3 0.8 0.6 1.3 1.2 1 3 2.4 1.5 1.5 474 0.6 0.8 0.7 0.4 0.9 1.1 0.7 0.5 1.2 0.6 475 0.8 0.7 1 0.6 0.9 1 1 1.3 1.5 1.3 476 0.8 0.7 1.1 0.5 0.9 1.4 1.8 1.1 1.7 3 477 1.2 0.8 0.5 0.7 1.2 0.6 1.3 1.9 1 0.5 478 1.2 0.6 0.5 0.6 0.9 0.8 0.5 2 0.6 0.5 479 0.8 0.7 0.6 0.5 0.8 1.4 2.5 1.1 2.7 1.1 480 1.3 <		1	1.3	0.8	0.6	0.9	1.5				
473 1.3 0.8 0.6 1.3 1.2 1 3 2.4 1.5 1.5 474 0.6 0.8 0.7 0.4 0.9 1.1 0.7 0.5 1.2 0.6 475 0.8 0.7 1 0.6 0.9 1 1 1.3 1.5 1.3 476 0.8 0.7 1.1 0.5 0.9 1.4 1.8 1.1 1.7 3 477 1.2 0.8 0.5 0.7 1.2 0.6 1.3 1.9 1 0.5 478 1.2 0.6 0.5 0.6 0.9 0.8 0.5 2 0.6 0.5 479 0.8 0.7 0.6 0.5 0.8 1.4 2.5 1.1 2.7 1.1 480 1.3 0 1 0.5 0.6 1.6 1.2 0.4 3 0.3 481 1.7 1.3		1.2	1.5	0.9	0.9	0.8	1.3	2.4	0.8	2.2	3.2
474 0.6 0.8 0.7 0.4 0.9 1.1 0.7 0.5 1.2 0.6 475 0.8 0.7 1 0.6 0.9 1 1 1.3 1.5 1.3 476 0.8 0.7 1.1 0.5 0.9 1.4 1.8 1.1 1.7 3 477 1.2 0.8 0.5 0.7 1.2 0.6 1.3 1.9 1 0.5 478 1.2 0.6 0.5 0.6 0.9 0.8 0.5 2 0.6 0.5 479 0.8 0.7 0.6 0.5 0.8 1.4 2.5 1.1 2.7 1.1 480 1.3 0 1 0.5 0.6 1.6 1.2 0.4 3 0.3 481 1.7 1.3 1.7 1.1 1.4 1.4 3.2 3 4 3.3	472	0.8	0.7	0.9	0.5	1.5	1.2		2.3	2.5	1.5
475 0.8 0.7 1 0.6 0.9 1 1 1.3 1.5 1.3 476 0.8 0.7 1.1 0.5 0.9 1.4 1.8 1.1 1.7 3 477 1.2 0.8 0.5 0.7 1.2 0.6 1.3 1.9 1 0.5 478 1.2 0.6 0.5 0.6 0.9 0.8 0.5 2 0.6 0.5 479 0.8 0.7 0.6 0.5 0.8 1.4 2.5 1.1 2.7 1.1 480 1.3 0 1 0.5 0.6 1.6 1.2 0.4 3 0.3 481 1.7 1.3 1.7 1.1 1.4 1.4 3.2 3 4 3.3		1.3	0.8	0.6	1.3	1.2	1			1.5	1.5
476 0.8 0.7 1.1 0.5 0.9 1.4 1.8 1.1 1.7 3 477 1.2 0.8 0.5 0.7 1.2 0.6 1.3 1.9 1 0.5 478 1.2 0.6 0.5 0.6 0.9 0.8 0.5 2 0.6 0.5 479 0.8 0.7 0.6 0.5 0.8 1.4 2.5 1.1 2.7 1.1 480 1.3 0 1 0.5 0.6 1.6 1.2 0.4 3 0.3 481 1.7 1.3 1.7 1.1 1.4 1.4 3.2 3 4 3.3		0.6	0.8	0.7	0.4	0.9	1.1	0.7			0.6
477 1.2 0.8 0.5 0.7 1.2 0.6 1.3 1.9 1 0.5 478 1.2 0.6 0.5 0.6 0.9 0.8 0.5 2 0.6 0.5 479 0.8 0.7 0.6 0.5 0.8 1.4 2.5 1.1 2.7 1.1 480 1.3 0 1 0.5 0.6 1.6 1.2 0.4 3 0.3 481 1.7 1.3 1.7 1.1 1.4 1.4 3.2 3 4 3.3		0.8	0.7	1	0.6	0.9	1			1.5	
478 1.2 0.6 0.5 0.6 0.9 0.8 0.5 2 0.6 0.5 479 0.8 0.7 0.6 0.5 0.8 1.4 2.5 1.1 2.7 1.1 480 1.3 0 1 0.5 0.6 1.6 1.2 0.4 3 0.3 481 1.7 1.3 1.7 1.1 1.4 1.4 3.2 3 4 3.3		0.8	0.7	1.1	0.5	0.9	1.4	1.8	1.1	1.7	3
479 0.8 0.7 0.6 0.5 0.8 1.4 2.5 1.1 2.7 1.1 480 1.3 0 1 0.5 0.6 1.6 1.2 0.4 3 0.3 481 1.7 1.3 1.7 1.1 1.4 1.4 3.2 3 4 3.3	477	1.2	0.8	0.5	0.7	1.2	0.6	1.3		1	0.5
480 1.3 0 1 0.5 0.6 1.6 1.2 0.4 3 0.3 481 1.7 1.3 1.7 1.1 1.4 1.4 3.2 3 4 3.3	478	1.2	0.6	0.5	0.6	0.9	0.8	0.5	2	0.6	0.5
481 1.7 1.3 1.7 1.1 1.4 1.4 3.2 3 4 3.3	479	0.8	0.7	0.6	0.5	0.8	1.4	2.5	1.1		1.1
	480	1.3	0	1	0.5	0.6	1.6	1.2	0.4		0.3
482 1.4 1.4 1.4 0.5 1.4 1.8 4 3 0.9 3.5	481	1.7	1.3	1.7	1.1	1.4	1.4	3.2		4	3.3
	482	1.4	1.4	1.4	0.5	1.4	1.8	4	3	0.9	3.5

483	1.6	1.1	1.4	0.6	1.4	2.1	2.9	3.8	3.7	0.9
484	1.2	1	1.5	0.9	1.8	2.1	2.6	3	3	2.6
485	1.6	1.2	1.3	1.1	1.3	2	4	3.2	3	3
486	1.5	1.8	1.3	1.2	1.6	0.3	2.7	3.1	2	0.4
487	1.4	1.5	1.5	0.9	1.7	2.4	3.4	3.4	2.5	3.6
488	1.5	1.8	1.2	0.3	1.5	2.1	4.2	2.5	3.5	0
489	1.3	1.1	1.1	1.2	1.3	1.6	2.4	3.4	0.4	1.8
490	1.4	1.1	0.7	1.2	1.3	1.9	3	2.8	3.7	1.9
491	1.5	1.2	1.4	1	1	1.7	2.9	3.5	2.5	3.5
492	1.3	1.7	1.5	1.1	0.8	2	3.4	2.8	2.3	2.4
493	1.2	0.7	0.8	0.7	0.5	1.3	3.3	1.8	3.5	2.3
494	1.2	1.3	0.8	1	1.4	2	3.3	2.9	3.9	3.1
495	1	0.4	0.9	1	1.2	2	3.2	2.1	2.7	0
496	1.3	0.4	0.6	0.8	1.1	2	2.8	1.2	2.9	3.2
497	1.4	0.7	1.2	0.5	1.5	2.1	3.5	2.6	1.9	0.5
498	1.3	0.6	0.6	0.6	1	2.1	2.8	3.5	3	0.3
499	1.4	0.5	0.9	0.6	1	1.8	4.4	2.5	3.5	4.2
500	1.2	0.5	0.6	0.9	0.6	1.4	3.2	2.8	2	3.2
501	1	1.1	0.8	0.7	1.4	1.3	3.4	3.5	0.6	4.4
502	1	1	0.5	0.3	0.3	0.3	3.5	1.8	2.2	4.2
503	1.2	1.4	0.7	0.4	0.9	2	2.5	1.8	2.2	3.2
504	0.7	0.8	1	1	0.9	2	2.2	2	0.5	4.4
505	0.9	1.3	0.6	0.5	0.4	1.5	3.3	2.8	0.3	1.6
506	1.1	0.7	1	0.5	0.5	1.7	2.5	2	3.2	3.2
507	1.9	1.1	0.6	0.4	0.5	2	3	4.3	2.8	3
508	1	1.3	0.6	0.4	1.1	2	3.1	3.2	2.6	3.3
509	1.2	0.9	0.8	0.5	1	1.6	2.8	1.3	1.3	4.3
510	1.3	0.6	0.9	0.6	1.4	1.2	0.3	0.7	3.3	4
511	1.3	1	0.8	0.7	1	0.5	2.5	1.8	2.5	2.9
512	0.9	0.5	0.6	0.9	1	0.8	2.3	1	1.3	2.2
513	1	0.8	0.7	0.9	0.4	0.3	1	0.9	3.3	2.5
514	1	0.8	0.8	0.8	0.6	1.2	1.5	0.8	1.2	2
515	1	1	0.9	1	0.5	1.7	2.3	1.5	3.3	2.2
516	1.3	1	0.6	1.3	0.7	1	0.8	0.9	0.3	2.7
517	0.7	1.2	0.8	0.6	0.9	0.9	0.7	0.4	0.5	2
518	0.9	1.2	0.5	1.4	0.9	0.6	0.5	0.6	1.2	0.4
519	0.6	1.2	0.5	1.2	0.8	0.5	1.2	0.4	1.2	1
520	0.2	0.5	0.8	0.5	0.5	0.6	1.3	0.5	0.5	0.6
521	1.6	0.7	1.7	0.9	0.6	2.7	1	4.9	2.3	4.1
522	1.6	1.3	1.8	1.9	1.3	2.8	1.3	3	1.8	3.6
523	1.5	0.8	1.9	1.3	0.9	2.2	3.2	3.8	2.8	3.6
524	1.5	1.9	1.8	0.6	1.7	1.8	2.5	4.3	1.8	2.6
525 526	1.4	1.6	1.6	1.1	1.3	2	0.7 2.3	3.8	0.9	2.6 3.6
526	1.4	1.5	1.5	1.1	0.8	1.4	2.3	2.9 0.8	1.3	2.1
527	0.8	0.6	1.6	1	1.2	1.7	3.3	2.7	2.4	2.1
528	0.9	1.5	1.7 1.8	1.4 0.8	1.4 1.8	1.6	1.5	1.8	3.3	4.1
530	1.4					1.7	2.8	2.6	2.9	3.5
531	1.1	1.5	1.6	0.8	1.3	1.4	0.4	3.2	3.7	3.9
551	1.2	1.1	1.1	1	1.4	1.0	0.4	3.2	3.1	3.9

532	1.6	1	2.2	0.7	1.2	1.3	0.7	3.3	3.2	2.4
533	1.4	1	1.7	1.4	1.4	1.5	0.8	3.5	2.3	2.5
534	0.9	0.6	1.2	1.4	0.8	2	1	3.4	2.4	2.5
535	1.2	1.1	1.4	0.5	1.2	1	2.2	3.2	2.3	3.2
536	0.5	0.9	1.6	0.9	0.7	1.7	2.1	3.5	2.8	2.1
537	0.9	1.2	1	0.8	1.4	2.6	3.4	3.5	2.5	0.4
538	1	1.3	1.5	0.8	1.1	0.4	1.3	3.5	1.9	2.8
539	1.4	1.2	1.3	0.7	1.7	0.8	2.4	2.6	3	2.6
540	1	1.3	1.8	0.9	1.2	1.8	2.1	2.7	4.2	2.7
541	0.8	1	1	1	0.8	2.4	0.8	3.2	3.2	2.1
542	0.9	0.8	1.4	0.7	0.9	2.6	2.9	3.4	2.3	2.3
543	1.1	1.2	1.6	0.3	0.8	1	3	0.9	2.2	1.7
544	1.2	1	0.7	0.8	1	0.6	2.4	1.7	2.5	1
545	0.9	1.2	1.4	0.7	0.9	1.4	2.5	1.3	1	2.7
546	1.1	0.7	1.3	1.2	0.5	1.8	3.1	1.4	2.6	2.5
547	1	0.7	1.1	1	0.9	1.5	3.6	3	1.9	2.5
548	0.8	0.8	1.1	0.9	1.1	1.5	1.8	3	3	3
549	1.1	0.5	1.3	0.5	1	1.3	2.5	4	2.4	0.3
550	0.9	1.3	0.8	1.1	0.7	0.8	1.6	3.5	3.5	0.4
551	1	0.8	1.3	0.4	1	0.9	2.9	2.7	2.8	1
552	1.1	0.7	1.6	1.1	0.7	0.5	2.8	1.8	3.7	1.5
553	1	0.4	1.1	1	0.7	0.3	2.5	1.2	2.9	1
554	0.7	1.2	1.2	1	0.6	0.4	3.4	2.3	3	2
555	1.4	0.8	1	1	0.5	1	3.2	0.8	2	0.4
556	0.7	1	0.9	0.6	0.5	0.4	2.7	0.3	2.7	2
557	0.6	0.6	1	0.7	0.9	1.5	2.8	1.4	2.7	2
558	0.7	0.6	0.8	1.1	0.7	1.5	1.1	0.4	3.8	2.8
559	0.5	0.5	1	0.7	0.7	2	2.5	1.2	2.4	3.5
560	1	1.1	1.1	0.8	0.3	1.3	2.4	0.5	0.3	3.5
561	0.6	1.1	1.7	0.9	1	2.2	3	3.6	4	2.8
562	0.4	0.9	1.5	1.9	1.2	1.3	3	2.9	4	2.8
563	1	0.9	1.5	1.3	0.4	1.5	3	3.6	3.5	3.2
564	0.4	1.8	1.3	1.5	0.7	2	3.2	2.5	3.5	3
565	0.8	1.8	1.3	1.1	0.5	1.9	3.5	3.7	3	2.5
566	0.5	1.4	1.6	0.8	0.6	1.9	3.3	3.3	2.5	3.5
567	0.8	1.4	1.4	1	1.1	2.2	3.9	3.9	4.3	3.2
568	1.3	1.4	1.8	0.8	1.4	1	1.6	2.8	3.3	4.3
569	0.5	1.2	1.6	0.7	0.8	1.8	3.8	3.9	3	4.4
570	0.5	1.5	1.3	1.5	0.6	1.4	2.6	3	2.4	2.8
571	1.1	1	1.5	1.4	0.7	1.7	3.3	0.8	2	3.4
572	1.1	0.9	1	1.4	0.6	1.9	2.6	1.4	3	3.2
573	0.6	1.5	0.9	1	0.6	1.8	2.5	0.3	4.2	3
574	1.3	1.2	1.9	0.3	0.6	1.6	2	0.9	3	3.3
575	0.6	0.5	1.4	1	0.6	1.6	1.5	0.8	3.2	4.2
576	0.9	0.4	1.8	1	0.8	1.6	3.9	1.4	2.2	3.5
577	0.9	0.5	1.2	0.7	1.1	1.9	3	3.4	2.8	3.8
578	1	0.7	1.2	0.8	0.6	0.9	4.2	3.3	3.2	3.2
579	0.4	1.1	1.8	1.6	1.5	1.9	2.9	2.8	3.5	0.4
580	0.8	1.6	0.8	1	1.2	1.9	2.7	2.2	3	4.1

581	1	0.5	0.9	0.9	0.8	1.7	3.5	3.7	1.7	2.2
582	0.3	0.6	1.3	1.4	1.3	1.4	2.6	2.5	3.3	2.8
583	0.7	1.2	1.2	1.2	1.4	1.7	3.1	2.9	2.7	3
584	1	0.7	0.7	0	0.6	1.9	1.8	3.6	1.8	2.9
585	0.5	0.5	1.6	0.5	0.5	1.5	2.8	2.8	1.4	3.2
586	0.5	0.9	1.1	1	0.8	1.7	3.4	3.5	3	2.6
587	0.5	1.2	1.5	0.8	1.1	0.3	3.1	3	2.6	0.3
588	0.8	1	1	1	1.6	1.3	3.5	1	2	2
589	0.8	0.3	0.6	1.5	1.3	1	1.1	2.5	2.5	0.7
590	0.4	0.6	1	1.3	1.8	0.9	1.5	4	1.3	1.5
591	0.7	0.4	0.7	1.1	1.6	2.6	0.5	1.1	3.2	0.6
592	0.5	0.6	0.8	0.5	1.4	0.6	0	1.4	1.9	2.5
593	0.6	1.2	0.7	0.6	0.5	1.4	0.4	1.6	1	3.3
594	1.2	0.9	1.3	0.8	1.2	1.2	1.3	1	2.4	0.6
595	0.8	1.3	1	0.8	1.6	1.7	2.5	0.3	0.9	3
596	0.8	1	1	0.8	2	1.8	1.6	2	1.3	1.1
597	0.5	1.1	1.1	0.5	1.2	0.5	0	2.8	0.6	0.9
598	0.7	1.5	0.8	0.6	1.9	1	1.8	1.9	1.4	0.3
599	0.5	1.1	0.9	1	1.7	1	0.7	0.8	0.3	1.3
600	0.5	1.2	1.4	0.9	0	1.5	1.7	1.2	0.5	1.3

Table 1.2 Radical length (cm) of germination of fenugreek seeds of lunar days effects at $Ph\bar{a}lguna~M\bar{a}sah$

Durmukhināmasamvatsaraḥ uttarāyaṇam śiśiraṛtvaḥ phālguṇamāsaḥ

		imusum		Śuklap		•	• 1	<u> </u>		•
Sl. No.	C	PSP	PBP	CSP	CBP	С	PSP	PBP	CSP	CBP
			Pratipat				1	Dvitīyā	ā	
1	0.7	1.6	0.5	1.4	1.1	1.3	0.4	0.6	0.7	1.7
2	0.7	0.7	0.5	2.2	0.3	0.9	0.7	0.6	0.4	0.8
3	0.9	0.5	0.5	1.5	0	1.3	0.6	0.6	1.1	1.4
4	0.8	0.9	1.3	0.4	0.8	0.7	0.5	0.8	0.9	0.8
5	0.3	1.1	1	1.7	1.3	0.5	0.9	0.9	0	1.3
6	0.8	0.3	0.5	1.6	1.7	0.3	1	1	0.8	1.2
7	0.9	1.1	0.5	1.3	1.4	0.9	1.1	0.7	0.5	1.6
8	0.7	1.5	0.3	0.9	1.5	1.4	0.5	0.9	1.5	1.3
9	0.7	0.6	0.9	1.2	1.4	0.9	1.3	1.2	1.5	2.4
10	0.9	1.2	0.4	0.9	1.5	1.3	0.7	1.5	1.6	1.7
11	0.8	0	1.2	0.9	1.5	1.4	1.6	1.5	1.4	1.6
12	0.9	1.6	1	1.2	1.4	0.6	1.1	1.6	0.9	0.4
13	0.6	0.5	0.4	0.9	1.1	1.2	1.8	2	1	0.8
14	1	1	1.9	0.9	0.9	0.9	1.8	1.1	0.3	0.4
15	0.9	1.3	0.4	1	1.5	1.2	1.5	1.6	0.4	0.7
16	0.6	0	0.8	1.4	1	1	1.2	1.2	0.5	0.3
17	0.7	1.6	1.1	0.7	1.2	0.9	1.7	1.7	0.5	0.5
18	0.9	1.7	0.9	1	1.8	1.5	0.7	2	0.4	0.6
19	0.8	1	1.1	1.2	0.8	1.1	1.4	1.4	1.2	1.2
20	0.5	1	0.6	1.4	1.1	1.1	0.5	1.3	1.3	1.4
21	0.7	1.1	0.6	1.5	1.5	1	1.4	1.4	1.2	0.8
22	0.8	1	0.8	0.7	1.2	1.2	1.6	2	1.3	1.4
23	0.7	0.8	0.5	1.1	1	1.1	1.2	1.8	0.8	1.7
24	0.9	0.8	0.5	1.3	0.9	1.4	1.4	1.5	0.5	0.9
25	1.1	1.8	1.5	1.6	1.3	0.7	1.7	1	0.6	2.2
26	0.6	0.9	0.8	0.7	1.8	0.4	1.2	1.7	0.8	1.4
27	0.6	1.1	0.6	1.2	0.5	0.5	1.2	1.4	1.5	1
28	0.8	0.9	0.8	1	0.9	0.7	1.3	1.6	0.6	1.9
29	0.9	0.7	0.8	1.3	0.9	1.2	1.7	1.3	1	1.2
30	0.6	0.7	1.2	1.5	1.5	1.1	1.3	1.9	0.8	0.5
31	0.8	1.2	1.6	1.3	1.1	1.2	1.4	1.4	0.6	1.7
32	0.9	0.4	1	1.3	0.7	0.7	1.4	1.6	0.9	1.4
33	1.1	1.7	0.4	0.7	1.4	1.2	1.3	1.1	1.4	1.9
34	0.7	0.7	0.6	1.3	2	1.9	1.4	1.4	0.6	0.7
35	0.7	0.8	0.9	1.1	1.1	1.3	1.7	1.6	0.6	1.5
36	0.7	0.9	0.7	1.1	1.8	1.4	1.4	1.5	0.6	1.4
37	0.7	0.5	0.9	1.1	1.5	0.9	0.7	1.2	0.5	0.9
38	0.6	1.8	1.3	1	1.6	1	1.3	1	0.4	1.4
39	1	0.6	0.9	1.1	0.5	1	1.3	1.7	0.5	1.2
40	0.6	0.7	0.5	0.5	0.7	1.5	1	0.6	0.5	0.5
			Tṛtīyā				(Caturth	!ī	

1	0.9	0.6	0.9	1.2	1.1	0.4	1.1	0.7	0.4	1.6
2	0.9	0.8	0.8	1.2	1.2	0.8	0.5	0.9	0.5	0.9
3	0.6	0.5	1.2	0.9	0.9	0.7	0.5	1.2	0.5	0.4
4	0.6	0.7	2	1	0.9	0.5	0	1	0	0.8
5	0.6	1.3	1.3	1.6	0.7	0.9	0.5	0.7	0.5	0.7
6	0.5	0.7	2	1.4	1	0.8	0.6	0.9	0.6	0.4
7	0.7	1.2	1.4	0.9	1.2	1.1	0.5	1.2	0.6	0.6
8	0.8	0.6	1.2	1.7	0.9	1	0.4	1.9	1.8	0.7
9	0.5	1.4	1.3	0.7	0.5	1.7	0.9	0.7	1	2.1
10	0.5	1.4	1.3	0.7	1.8	1	0.8	1.2	0.4	1.4
11	0.4	0.9	0.7	0.8	0.7	0.7	0.7	0.6	0.7	1.4
12	0.6	1.4	0.8	1.6	0.8	0.5	0.5	0.5	0.4	0.7
13	0.5	0.9	0.6	0.7	0.9	1	1.1	0.2	0.6	2.1
14	0.6	1.5	0.6	0.6	1.7	1.1	1.4	0.6	1.2	0.9
15	0.9	1.6	0.4	0.8	1.9	0.8	0.5	0.6	1.9	1.6
16	0.6	0.7	0.4	0.6	1.8	1.5	1	0.5	1.7	1.9
17	0.4	0.9	0.6	0.5	1.2	1.2	1.6	0.6	1.4	1.3
18	0.6	1.5	0	0.7	1.1	1.3	1.6	0.6	1.2	1
19	0.5	1	1	0.7	0.7	0.5	1.5	1.8	1.2	0.6
20	0.6	0.8	0.5	0.9	0.5	0.5	1.8	1.8	0.6	1.3
21	0.5	1	0.6	0.6	0.8	0.6	1.8	1.5	1.6	1.1
22	0.9	0.5	0.5	1.2	1.7	1.1	0.9	1.6	1	1.2
23	0.3	0.6	0.9	1.2	1.2	0.4	0.9	1.6	1.5	1.3
24	0.4	0.8	1.3	0.9	1.4	0.5	1.1	1.7	1.2	0.7
25	0.7	0.6	1.7	1.4	1.7	0.7	1.4	0.5	1.4	1.7
26	0.7	0.9	1.1	1.3	1	0.7	1.2	0.9	1.2	1
27	0.9	0.4	0.8	1.8	1.5	0.7	1.1	1.3	0.8	1.1
28	0.6	1.1	1.7	1.1	1.6	0.8	1.1	1.7	1	0.9
29	1.3	1.4	1	0.6	1.4	0.8	1.1	1	0.4	1.3
30	0.9	1	2.4	1.2	0.9	0.7	0.7	1.2	1.1	0.6
31	0.7	1.4	1.4	1.4	0.8	0.4	0.8	1.1	1.1	1
32	1.1	1.4	1.5	1.7	0.8	0.6	0.9	1	0.9	0.8
33	0.4	0.6	1.4	1.5	0.6	0.6	1	1.3	1.3	0.6
34	0.6	0.5	1.2	1.8	0.9	0.8	1.1	1.3	0.9	1.1
35	0.9	1.7	1.1	1.5	0.8	0.9	1	0.7	1.3	0.7
36	0.7	1.3	1.8	1.1	1	0.8	0.9	1	0.7	0.4
37	0.9	1.4	0.8	1.2	0.7	1	0.7	1	0.5	0.9
38	1	1.6	0.8	1.3	0.6	0.5	1.6	0.9	1.1	1.9
39	0.5	1.2	0.8	1.4	0.8	1.1	1.6	1.7	0.5	1.2
40	0.9	1.5	1.4	1.2	0.5	0.9	1.1	1.2	0.6	1.1
			Pañcamī	Ī			Şaşţhi	and Sa	vtamī	
1	0.4	0.5	2.6	2.1	2.6	2	1.9	1.6	1.6	0.8
2	0.4	1.6	1.4	1.7	2.3	1.6	1.2	0.9	1.1	0.7
3	0.4	1.4	1.4	1.6	2.3	0.9	1.6	0.4	1.6	0.7
4	0.6	1.8	1.7	1.1	1.5	0.7	0.9	0.9	0.6	0.7
5	0.4	1.5	1.5	1.3	1.6	1.4	0.8	1.1	1.4	0.5
6	0.4	1.6	1.4	1.2	1.6	1.7	1.3	1.4	1.2	0.9
7	0.4	1.7	1.5	1.1	1.8	1	1.5	0.7	1.2	1.2
	U. T	1./	1.5	1.1	1.0	1	1.5	0.7	1.4	1.4

8	0.4	1.5	1.1	1.8	1.1	1.3	1.5	1.3	1.8	0.5
9	0.5	0.8	1.7	0.8	1.7	1.3	1.3	1.8	1.1	1.1
10	1	1.1	0.6	1.5	1.1	1.1	1	0.7	1	0.7
11	0.7	1.7	1.6	1.6	1.4	0.5	1	0.9	0.7	0.6
12	0.4	0.6	2	1.3	1.6	0.7	0.9	1.2	1.9	0.6
13	0.5	1.3	1.5	1.3	1.4	1.3	1.3	1.1	1.8	0.7
14	0.4	1.4	0.6	0.8	0.8	0.6	1.8	0.7	0.8	0.7
15	0.5	1.6	0.6	1.6	0.7	1.1	1	0.9	0.5	0.4
16	0.7	0.7	0.8	0.7	0.5	1.4	1.2	1.1	0.7	0.5
17	0.2	1.7	1	0.4	0.6	1.4	1.1	0.6	1.1	0.5
18	1	1.3	1	0.5	0.6	0.8	1	1	1.1	1.4
19	0.7	0.6	0.8	0.5	0.6	1.4	0.9	1.4	1.2	0.9
20	1.1	0	0.9	0.5	0.6	1.1	0.8	1.9	0.8	0.4
21	0.5	1	0.9	1.1	0.8	0.7	1.5	2.2	0.7	0.8
22	0.7	0.7	1.6	0.7	1.1	1.7	1.6	1.5	0.9	0.8
23	0.9	1.2	1.4	0.6	1.6	1.7	1.3	2	0.6	0.9
24	0.7	1.2	1.9	0.9	0.5	0.7	1.1	0.9	0.7	0.8
25	0.3	0.9	1	0.6	0.5	0.7	0.9	1.1	0.8	0.7
26	0.6	0.7	0.6	0.5	0.8	0.9	0.6	1.1	1	1
27	0.9	0.7	1.7	0.7	0.5	0.9	1.6	1.9	1.3	0.7
28	0.6	1	1.4	0.5	0.8	1	1.1	1.6	0.8	0.5
29	1.2	0.7	1.7	0.5	0.6	1.2	1.3	0.4	0.3	0.9
30	0.4	1.2	1.3	1.1	0.5	1.3	0.8	0.4	0.4	0.6
31	0.6	1.2	1	1.2	0.7	0.8	0.9	1.7	0.9	0.5
32	0.6	0.4	1.2	1	0.8	0.4	2.2	1.4	0.5	0.8
33	0.3	0.8	0.5	1.8	0.4	0.8	0.7	0.9	0.7	1.1
34	0.6	0.9	0.7	0.7	0.8	0.4	0.5	1.4	0.5	0.5
35	1.1	1.4	1.1	1.2	1.3	1.1	0.8	0.8	0.9	0.8
36	0.7	1.3	1.2	1.6	0.7	1.1	1.5	1.5	0.4	1.6
37	1	1.2	1	1.2	1.5	1.3	1.1	1 1	0.7	1.1
38	0.8	0.8	1	0.9	1.4	0.6	1	1.4	0.4	2.1
39	1.9	0.9	0.8	1.2	0.7	0.4	1.2	1	1.1	1.4
40	0.5	0.6	0.9	1.1	1.2	0.5	0.8	0.8	0.7	1.6
			Aṣṭamī					Navam	ī	
1	0.6	1.1	1	1.1	1.5	1.1	0.5	1.1	1.9	1.1
2	0.6	0.6	1.4	1.1	2	1.3	1.4	1.3	0.6	0.6
3	0.6	1	1.7	1.1	1.7	1.4	1.6	1.8	0.5	0.7
4	0.9	1.2	1.1	0.9	1.3	1.8	1.5	1.6	0.4	0.8
5	0.7	0.5	1.3	1.3	1.7	1.4	1.4	1.4	0.8	0.7
6	0.6	1.3	1.7	0.8	1.5	1.5	1.2	1.2	1.7	0.5
7	0.4	1.8	1.7	0.8	1.6	1.4	0.8	1.3	1.4	0.9
8	0.4	1.1	0.9	1.6	1.6	1.5	1.9	0.5	0.7	1.1
9	0.4	0.6	0.6	1.6	1.2	0.9	0.7	1.4	1.1	0.8
10	0.5	0.8	1.3	2	0.9	1	0.8	1.6	1.2	1.2
11	0.4	1.4	0.9	1.2	0.9	1.1	1.4	2	0.9	0.5
12	0.4	1.4	1.4	1.5	1.5	1.2	0.9	2	0.4	0.4
13	0.5	1.2	1.1	0.9	1	0.5	0.5	0.7	1.4	0.8
14	0.9	1	1.1	0.9	0.5	0.5	1.2	0.9	0.6	1.2

15	1.4	0.8	1.3	1	1	0.7	0.6	0.8	0.8	0.7
16	0.7	0.8	1.2	1.7	1.2	1.1	1.3	1	1.1	0.7
17	0.7	0.3	1.2	0.9	1.3	1.1	1.3	0.8	1.6	0.9
18	1.2	1	1.4	0.9	1.3	1.2	1.3	0.6	1.4	1.6
19	0.7	1.4	1.1	1.7	0.6	1.2	0.6	1.3	1.4	1.0
20	0.7	1.4	0.5	0.6	0.6	1.2	1.2	1.4	0.5	1.4
21	0.4	1.6	0.6	1	1	0.7	0.6	1.3	0.9	0.8
22	0.4	1.2	0.6	1.8	0.8	1.3	0.7	1.6	1.3	1.1
23	0.5	1.5	0.6	1.4	0.7	0.9	1	1.0	0.5	1.3
24	0.6	1.3	1.1	1.8	0.7	1.4	1.2	0.8	1	1.8
25	0.9	0.5	0.9	1.4	0.7	0.8	1	1.7	1.2	1.7
26	0.9	1	1.2	1	0.5	0.8	1.9	1.1	0.8	1
27	1.2	0.8	0.6	1.7	0.8	1.1	1.1	1	1.6	2
28	1	1	1.1	1.5	0.6	1	0.5	0.4	0.5	0.4
29	0.8	1	1	0.9	0.4	1	1.1	1.1	0.8	1.9
30	0.7	1.6	1.1	1.2	0.7	0.7	1.3	0.9	1	1.8
31	1.4	0.7	0.6	1.5	0.8	1.3	0.7	0.8	0.8	1.1
32	0.7	0.7	1.2	1.2	0.7	1.1	1.2	0.7	1	1.3
33	1.8	1.3	0.8	1.5	0.8	0.9	0.6	1	0.8	1.9
34	0.5	0.7	0.5	1.3	0.6	1	0.6	1	0.9	1.8
35	0.4	0.9	0.6	1.1	0.6	1	0.9	0.9	1.2	1
36	0.8	1.4	0.5	1.2	0.8	1.1	0.5	1.1	0.9	0.7
37	1.2	0.4	1	1	0.8	0.8	1	1.1	0.6	0.5
38	0.9	1.1	1.3	1.2	0.7	0.8	1.1	1.1	1	0.9
39	0.6	1.1	1.4	1.3	1	1	0.7	0.6	0.6	1.1
40	0.5	0.5	0.9	1.4	0.7	0.5	1.4	0.4	1.3	0.5
			Daśamī				I	Ekādaś	ī	
1	1.6	1.1	1.8	1.1	1.7	1.7	0.8	2	0.7	0.6
2	1.4	1.2	1.6	0.6	1.8	1.5	0.7	1.4	0.5	0.6
3	0.9	1.5	1.8	1	1.6	1.8	0.6	2	0.5	0.6
4	1.3	1.1	1.7	0.9	1.8	1.1	0.4	2.2	0.6	0.8
5	1.3	0.4	1.6	0.7	0.7	1.4	0.6	1.8	0.7	0.5
6	1.1	0.6	0.6	0.5	0.6	1	1	1.3	0.7	0.5
7	1.2	0.6	1.2	0.6	1.5	1.6	1	1.7	1	1.4
8	1.4	0.6	1.3	1	1.3	1.3	0.6	2	0.3	0.3
9	1.2	0.7	1.3	0.8	1.2	1.4	0.9	0.9	0.8	0.8
10	1.2	1	1.3	1.1	1.8	1.5	0.5	1.3	0.5	1.3
11	1.1	1.5	1.4	0.5	1.9	1.7	0.8	1.4	0.8	0.6
12	1.6	0.8	1.2	1.4	1.2	2	0.6	1.8	0.4	0.5
13	1.6	0.5	0.4	0.6	1.6	0.8	0.8	1.2	0.8	0.6
14	1.2	1.3	0.5	1.2	0.6	1.4	1	1.6	0.5	0.6
15	1.5	1.5	0.4	0.5	1	1.5	0	1.8	0	0.5
16	1.6	1.6	0.5	1	1	1.6	0.4	1.6	0.9	0.5
17	1.2	1.4	0.5	1.1	1	1.6	0.6	0.9	0.7	1.1
18	1.3	0.7	0.5	1.3	1 1	1.6	0.9	1.8	0.8	0.9
19	1.6	1.1	0.6	1.5	1.4	1.5	1.5	1.4	1.5	1
20	1.5	1.4	0.5	1.7	1.9	1.5	1.1	1.3	0.8	1.5
21	1.2	0.7	1.1	0.5	0.6	1.5	0.9	0.9	0.6	0.9

			1	1		1			1	
22	1.4	1.3	1.4	1.9	0.5	0.5	0.6	1.3	0.8	1.9
23	1.4	1.5	0.9	1.5	0.6	1.2	0.6	0.9	1	1.4
24	1.2	1.7	1.3	1.2	0.5	1.2	0.7	0.4	0.8	1.4
25	1.1	1.5	0.6	0.9	0.7	1.2	1	1.1	1.6	1.8
26	1.5	1.6	1.1	1.2	0.7	1.5	0.8	0.8	1.1	1.8
27	1.2	0.8	0.9	1.1	0.5	0.8	1.6	0.5	1.5	1.7
28	1.3	1.6	1	1	0.5	1	1.2	0.6	1.2	2.1
29	1.2	1.2	0.8	1.2	0.8	1.2	1.6	0.8	0.6	1.4
30	1.5	0.5	0.9	1.4	0.4	1.4	1.3	0.7	1.6	1.6
31	1	1.1	1	1.5	1.1	1.4	1.2	0.6	0.8	1.7
32	1.3	1.1	1.2	0.6	1.4	1.2	1.5	0.8	1.2	0.7
33	1.3	1	1	1.2	1	1.2	1	0.7	0.5	1.5
34	1.3	0.8	1.2	1	1.1	0.9	0.8	0.5	1.2	0.5
35	1	1.4	0.7	1.1	1	0.7	1.3	0.6	1.3	1.8
36	1	1	0.9	0.5	0.4	0.8	1.7	1.5	1.1	1
37	1.2	0.7	0.6	1.5	0.9	0.6	1.4	1.1	1.5	1.4
38	1.1	1.7	1.2	1	0.6	1.5	1.8	0.7	1.2	1.4
39	1.2	1.6	1	0	1.1	1.3	0.7	0.8	1.5	1.6
40	0.6	1.3	0.5	0	1	0.8	1.8	0.6	1.4	1.7
			Dvādaśī				T ₁	ayoda	śī	
1	1.5	2	1.7	1	1.8	1.6	1.1	1.5	0.5	1.6
2	1.6	2	1.4	1.2	1.8	1.3	1	1.5	0.6	1.5
3	1.1	1.4	1.6	1.9	1.4	1.7	1	2	0.5	1.3
4	1.6	1.5	1.4	1.2	1.5	1.1	0.7	1.4	0.5	1.4
5	1.5	1.8	2	1.3	1.1	0.9	0.8	1.2	0.7	1.2
6	1.5	1.9	1.2	1.1	1.5	1.4	0.5	1	0.7	1.5
7	1.2	0.9	1.4	1.3	1.3	1.3	1.4	1.3	0.5	1.4
8	1.2	1.6	1.6	1.2	1.4	1.1	1	1.6	0.3	1.4
9	1.6	1.1	1.4	1.5	1	1.1	0.9	1	0.9	1.7
10	1.6	1.4	1.6	1.4	1.2	0.9	0.8	1.3	0.4	1
11	1	1.6	1.6	1.2	1	1.4	0.8	0.9	0.6	1.2
12	1.4	1.3	1.6	1.4	0.8	1.3	1.5	1.1	0.9	0.7
13	1.2	1	1.8	1.2	0.7	1.2	1	1	0.6	1.4
14	1.3	1.5	1.1	1	1	1.4	0.6	1	1.5	0.8
15	1.3	1.4	1.5	1.5	0.7	0.8	0.8	1.2	0.6	1.2
16	1.3	1.2	0.9	1.6	0.7	1.2	1.5	1.1	0.5	1.1
17	1.1	1.4	0.9	1.1	0.5	1.1	1.3	0.5	0.8	1.2
18	1.3	1.3	1.9	1.1	0.5	1.2	1.3	1.3	0.5	1.4
19	1.3	1.2	1.2	1.4	1.1	0.9	0.8	0.7	0.5	1.5
20	1.1	1.1	1.4	1.2	1	1.2	1.2	1.6	1.4	1.4
21	1.2	1.2	1.4	1.1	0.6	1.5	1.2	0.6	1	0.8
22	1.4	1.5	1.1	1.3	0.3	1.2	1	0.4	0.6	1.2
23	1	1.7	0.9	0.9	0.7	1.3	1.3	0.6	1	0.5
24	1.3	1	0.7	1.3	0.6	1.2	0.5	0.7	0.9	0.5
25	0.9	1.2	0.8	1.2	1.2	0.7	1.6	1.4	1	0.5
26	1.3	0.7	1.2	1	1.6	0.3	1.5	0.7	0.8	0.9
27	1.3	0.9	0.8	0.8	0.9	0.8	0.9	0.8	0.6	0.8
28	1.4	1	1.7	1.1	0.6	1	1	0.5	0.5	1.1

29	0.8	1.1	1.2	1.3	0.7	1	1.8	0.6	0.7	1.1
30	1.1	0.9	1.2	1.1	0.7	1	1.3	0.8	0.7	0.9
31	1.6	1.2	1.2	1.1	0.8	1.2	1.5	0.8	0.0	0.9
32	1.7	0.8	0.7	0.8	0.8	0.8	0.7	0.9	0.5	1.5
33	1.7	1.1	0.7	0.6	0.6	1.3	0.7	0.6	1.3	1.2
34	1.5	0.7	0.9	0.5	1.2	0.6	0.8	0.7	0.4	0.9
35	1.3	1.1	0.9	0.5	0.5	0.8	0.7	1	0.4	0.9
36	0.9	1.1	0.7	0.5	0.6	0.8	0.7	1.1	0.5	0.9
37	1.1	1	0.3	0.8	0.8	1.2	0.7	0.5	0.7	1.2
38	1.1	0.6	1	0.5	0.4	1.2	0.6	0.5	0.6	0.9
39	0.9	0.6	0.7	1	1	0.8	0.7	0.6	0.5	0.8
40	1	0.7	1.3	0.5	1.8	1.3	0.7	1	0.5	0.6
70	1		aturada		1.0	1.5		_	l l	0.0
1	1.7				1.4	1.0		Pūrņim	1	0.6
1	1.7	1.3	1.7	1.1	1.4	1.6	0.7	1.7	0.9	0.6
2	1.4	1.4	1.4	0.5	1.4	1.6	1.3	1.8	1.9	1.3
3	1.6	1.1	1.4	0.6	1.4	1.5	0.8	1.9	1.3	0.9
4	1.2	1	1.5	0.9	1.8	1.5	1.9	1.8	0.6	1.7
5	1.6	1.2	1.3	1.1	1.3	1.4	1.6	1.6	1.1	1.3
6 7	1.5	1.8	1 5	1.2	1.6	1.4	1.5	1.5	1.1	0.8
8	1.4	1.5	1.5	0.9	1.7	0.8	0.6	1.6	1 1 4	1.2
9	1.5	1.8	1.2	0.3	1.5	0.9	1.5	1.7	1.4	1.4
10	1.3	1.1	1.1 0.7	1.2	1.3	1.4	1 5	1.8	0.8	1.8
10	1.4			1.2	1.3	1.1	1.5	1.6	0.8	1.3
12	1.3	1.2	1.4	1.1	0.8	1.6	1.1	1.1	0.7	1.4
13	1.3	0.7	0.8	0.7	0.8	1.0	1	1.7	1.4	1.4
14	1.2	1.3	0.8	1	1.4	0.9	0.6	1.7	1.4	0.8
15	1.2	0.4	0.8	1	1.4	1.2	1.1	1.4	0.5	1.2
16	1.3	0.4	0.6	0.8	1.1	0.5	0.9	1.6	0.9	0.7
17	1.4	0.7	1.2	0.5	1.5	0.9	1.2	1.0	0.8	1.4
18	1.3	0.6	0.6	0.6	1.3	1	1.3	1.5	0.8	1.1
19	1.4	0.5	0.9	0.6	1	1.4	1.2	1.3	0.7	1.7
20	1.2	0.5	0.6	0.9	0.6	1	1.3	1.8	0.9	1.2
21	1	1.1	0.8	0.7	1.4	0.8	1	1	1	0.8
22	1	1	0.5	0.3	0.3	0.9	0.8	1.4	0.7	0.9
23	1.2	1.4	0.7	0.4	0.9	1.1	1.2	1.6	0.3	0.8
24	0.7	0.8	1	1	0.9	1.2	1	0.7	0.8	1
25	0.9	1.3	0.6	0.5	0.4	0.9	1.2	1.4	0.7	0.9
26	1.1	0.7	1	0.5	0.5	1.1	0.7	1.3	1.2	0.5
27	1.9	1.1	0.6	0.4	0.5	1	0.7	1.1	1	0.9
28	1	1.3	0.6	0.4	1.1	0.8	0.8	1.1	0.9	1.1
29	1.2	0.9	0.8	0.5	1	1.1	0.5	1.3	0.5	1
30	1.3	0.6	0.9	0.6	1.4	0.9	1.3	0.8	1.1	0.7
31	1.3	1	0.8	0.7	1	1	0.8	1.3	0.4	1
32	0.9	0.5	0.6	0.9	1	1.1	0.7	1.6	1.1	0.7
33	1	0.8	0.7	0.9	0.4	1	0.4	1.1	1	0.7
34	1	0.8	0.8	0.8	0.6	0.7	1.2	1.2	1	0.6
35	1	1	0.9	1	0.5	1.4	0.8	1	1	0.5

Г	1	,	,		-					,
36	1.3	1	0.6	1.3	0.7	0.7	1	0.9	0.6	0.5
37	0.7	1.2	0.8	0.6	0.9	0.6	0.6	1	0.7	0.9
38	0.9	1.2	0.5	1.4	0.9	0.7	0.6	0.8	1.1	0.7
39	0.6	1.2	0.5	1.2	0.8	0.5	0.5	1	0.7	0.7
40	0.2	0.5	0.8	0.5	0.5	1	1.1	1.1	0.8	0.3
				Kṛṣṇa P	aksah					
Sl. No.	C	PSP	PBP	CSP	CBP	С	PSP	PBP	CSP	CBP
			Pratipat			-		Dvitīyā		
1	0.6	1.1	1.7	0.9	1	1.6	1.9	2	1.1	1.4
2	0.4	0.9	1.5	1.9	1.2	1.4	1.9	1.9	1.8	0.7
3	1	0.9	1.5	1.3	0.4	1.3	1.5	1.8	1.4	0.5
4	0.4	1.8	1.3	1.5	0.7	1.3	1.7	1.5	1.8	0.8
5	0.8	1.8	1.3	1.1	0.5	1.4	1.6	1.8	1.3	1.2
6	0.5	1.4	1.6	0.8	0.6	2.3	1.4	1.8	0.9	0.8
7	0.8	1.4	1.4	1	1.1	1	0.9	2	1.6	0.8
8	1.3	1.4	1.8	0.8	1.4	1.4	1.1	1.5	1.5	0.7
9	0.5	1.2	1.6	0.7	0.8	1.1	1.2	1.8	1.9	0.7
10	0.5	1.5	1.3	1.5	0.6	0.3	0.9	1.8	0.6	0.5
11	1.1	1	1.5	1.4	0.7	0.4	1.2	1.7	1.2	0.6
12	1.1	0.9	1	1.4	0.6	0.5	1.3	1.5	1.1	1.2
13	0.6	1.5	0.9	1	0.6	0.5	1	1.5	1.3	0.4
14	1.3	1.2	1.9	0.3	0.6	0.4	1.3	1.2	1.3	0.6
15	0.6	0.5	1.4	1	0.6	0.6	0.9	1.1	1.7	0.5
16	0.9	0.4	1.8	1	0.8	0.9	0.4	0.9	1.6	0.9
17	0.9	0.5	1.2	0.7	1.1	0.6	1.2	0.9	1.1	0.4
18	1	0.7	1.2	0.8	0.6	1	1.1	1.5	1.3	0.5
19	0.4	1.1	1.8	1.6	1.5	1	1.2	1.2	1.2	0.8
20	0.8	1.6	0.8	1	1.2	1.1	0.9	1.4	1.3	1.2
21	1	0.5	0.9	0.9	0.8	0.6	1.1	1.5	1.5	0.9
22	0.3	0.6	1.3	1.4	1.3	1.1	1	1.5	1.9	1.3
23	0.7	1.2	1.2	1.2	1.4	0.4	1.4	1.4	0.9	1.4
24	1	0.7	0.7	0	0.6	0.5	0.8	0.7	1.4	1.3
25	0.5	0.5	1.6	0.5	0.5	0.4	0.7	0.6	1	0.5
26	0.5	0.9	1.1	1	0.8	0.5	0.7	1.1	0.9	1.2
27	0.5	1.2	1.5	0.8	1.1	0.6	1.4	0.9	0.6	1.5
28	0.8	1	1	1	1.6	0.6	0.8	0	0.6	1
29	0.8	0.3	0.6	1.5	1.3	1.3	0.5	1	0.5	1.4
30	0.4	0.6	1	1.3	1.8	0.9	0.6	1.1	0.8	0.8
31	0.7	0.4	0.7	1.1	1.6	0.9	0.5	0.9	1	1.9
32	0.5	0.6	0.8	0.5	1.4	0.5	1.4	1.8	0.7	1.3
33	0.6	1.2	0.7	0.6	0.5	1.3	0.6	1.4	0.4	1
34	1.2	0.9	1.3	0.8	1.2	0.9	0.4	0.9	0.6	0.8
35	0.8	1.3	1	0.8	1.6	0.4	0.7	1	0.4	1.8
36	0.8	1	1	0.8	2	0.6	0.8	0.6	0.7	1.7
37	0.5	1.1	1.1	0.5	1.2	0.3	0.5	0.6	0.7	1.8
38	0.7	1.5	0.8	0.6	1.9	0.4	0.3	1.2	0.9	1.3
39	0.5	1.1	0.9	1	1.7	0.4	0.6	1	0.7	1.2
40	0.5	1.2	1.4	0.9	0	1.3	0.4	0.5	1.4	1.9

			Tṛtīyā				C	aturth	ī	
1	1.1	1	1.8	0.7	0.8	1.4	1.9	1.9	1.8	0.7
2	1.3	0.7	1.6	0.8	0.8	1.3	1.5	1.8	1.4	0.5
3	1	0.8	2	2	0.6	1.3	1.7	1.5	1.8	0.8
4	0.6	0.8	1.7	0.6	0.6	1.4	1.6	1.8	1.3	1.2
5	0.9	0.7	1.7	0.8	0.9	2.3	1.4	1.8	0.9	0.8
6	0.4	0.9	1.5	0.8	1	1	0.9	2	1.6	0.8
7	0.5	0.7	1.6	0.7	1.1	1.4	1.1	1.5	1.5	0.7
8	0.5	0.9	1.8	1.3	1.1	1.1	1.2	1.8	1.9	0.7
9	0.5	0.9	1	0.6	0.7	0.3	0.9	1.8	0.6	0.5
10	0.4	1.1	1.5	0.7	1.7	0.4	1.2	1.7	1.2	0.6
11	0.5	0.7	0.8	0.9	1.3	0.5	1.3	1.5	1.1	1.2
12	0.5	0.9	1.5	0.8	2.3	0.5	1	1.5	1.3	0.4
13	0.4	0.8	0.9	0.7	1.5	0.4	1.3	1.2	1.3	0.6
14	0.8	1.1	1.3	1.2	1.3	0.6	0.9	1.1	1.7	0.5
15	0.5	0.4	1	1.4	1.7	0.9	0.4	0.9	1.6	0.9
16	1	0.6	1.4	0.7	0.7	0.6	1.2	0.9	1.1	0.4
17	0.3	0.8	0.7	0.7	0.9	1	1.1	1.5	1.3	0.5
18	0.6	1	0.6	1.6	1	1	1.2	1.2	1.2	0.8
19	0.2	1	0.9	1.6	1	1.1	0.9	1.4	1.3	1.2
20	0.8	1.1	0.6	1.5	1	0.6	1.1	1.5	1.5	0.9
21	0.8	1.4	0.7	1.6	0.9	1.1	1	1.5	1.9	1.3
22	0.5	1.7	1.1	1.6	1.6	0.4	1.4	1.4	0.9	1.4
23	0.5	0.6	0.8	1.5	1.3	0.5	0.8	0.7	1.4	1.3
24	0.6	0.9	1.4	1.8	1.1	0.4	0.7	0.6	1	0.5
25	0.5	1	0.7	1.5	1.3	0.5	0.7	1.1	0.9	1.2
26	0.8	1.6	0.8	1.2	1.3	0.6	1.4	0.9	0.6	1.5
27	0.8	0.8	0.6	1.1	1	0.6	0.8	0	0.6	1
28	0.6	1.1	0.6	1.1	1	1.3	0.5	1	0.5	1.4
29	0.3	1.1	1.1	1.4	0.7	0.9	0.6	1.1	0.8	0.8
30	0.5	1.1	1	1.6	1	0.9	0.5	0.9	1	1.9
31	0.6	1.8	0.7	1.1	0.9	0.5	1.4	1.8	0.7	1.3
32	1.7	1.1	0.8	1.4	1	1.3	0.6	1.4	0.4	1
33	0.6	1.1	0.7	1.4	0.6	0.9	0.4	0.9	0.6	0.8
34	0.4	0.9	0.6	1.3	0.6	0.4	0.7	1	0.4	1.8
35	0.7	0.6	0.8	1.5	1.2	0.6	0.8	0.6	0.7	1.7
36	0.6	1.4	1 2	1.5	0.7	0.3	0.5	0.6	0.7	1.8
37	0.6	1.4	1.2	0.7	0.8	0.4	0.3	1.2	0.9	1.3
38	0.5	1.4	1 0.2	2	0.6	0.4	0.6	1	0.7	1.2
39 40	0.5	1.5	0.3	0.9	1.3	1.3	0.4	0.5	1.4	1.9
40	1.1		t	0.8	0.5	1.6		·	1.1	1.4
			Pañcamī		0.7			<u>Şaşthi</u>	1	
1	1.6	1.3	0.6	1.4	0.5	1.4	1.5	2	1.6	1.5
2	1.4	0.3	0.8	0.9	0.3	1.7	1.1	1.4	2	1.6
3	1.7	1.9	0.9	0.7	0.9	1.6	1.4	1.8	2	1.8
4	1.6	1.6	0.6	1.2	0.8	1.3	1.7	1.4	1.8	1.9
5	1.2	0.8	0.6	1.1	0.3	1 1	1.5	1.5	1.1	1.9
6	1.8	0.9	1.6	0.6	0.5	1.4	1.8	1.2	1.8	1.3

7	1.2	1.4	1	1.6	0.9	1.5	1.5	1.5	2.1	2
8	1.5	1.4	1.5	0.9	0.9	1.5	1.9	1.3	1.3	1.6
9	1.5	0.8	1.3	0.9	1.1	1.1	1.7	1.3	1.3	0.7
10	1.3	1.3	0.8	1.3	0.4	1.4	1.4	1.4	1.4	1.7
11	1.3	1.3	0.3	1.3	0.4	1.3	1.7	1.4	1.1	1.6
12	1.5	0.8	0.4	1.3	0.9	1.5	1.3	1.3	1.2	1.3
13	1.2	0.8	0.8	1.3	0.6	1.6	1.2	1.2	1.6	1.3
14	1.1	0.6	0.9	1.7	1.1	1.5	1.5	1.4	1.3	1.2
15	1.1	0.8	0.5	1.1	0.6	1.5	1.4	1.2	1.5	1.8
16	0.9	1.1	0.7	0.7	0.8	1.6	1.3	0.9	1	0.9
17	1.3	0.7	1.3	0.8	0.3	1.3	1.3	1.4	1.4	1.2
18	1	0.9	0.8	1.2	0.3	1.5	1.2	1.3	1.5	1.3
19	1.2	0.5	1.4	1.3	0	1.3	1	1.6	1.7	1.5
20	1	1.1	1	0.8	0.7	1.5	0.9	1.2	1.7	1.6
21	1.1	0.4	0.4	0.8	0.8	1.6	1.2	1.1	1.1	0
22	1.1	0.7	1	0.7	0.9	1.5	1.2	1.2	1.2	1.4
23	1	0.3	0.6	1	0.7	1.3	1.2	0.8	1.3	0.8
24	0	0.6	0.4	0.8	0.4	1.4	1	1.2	1.1	1.2
25	0.9	1	0.5	0.8	0.3	1	1.1	1.4	1.2	0.4
26	0.5	0.9	1	0.7	0.8	1.4	1.3	1.2	0.8	1
27	0.8	0.7	0.6	1.3	0.9	0.4	1.4	0.6	0.9	1.3
28	0.8	0.7	0.7	0.5	1	0.9	1.4	1.3	1.1	1.5
29	1.4	0.8	0.8	1	1	1.2	1.1	0.7	1	1.1
30	0.6	0.7	0.6	0.9	0.6	1.2	1.2	0.9	1	1.2
31	0.9	1.3	0.8	0.7	0.9	1.5	1.4	1.1	0.6	1.1
32	0.9	0.6	0.4	0.9	1.3	0.9	1.4	1	0.6	0.9
33	0.9	0.6	0.6	1.6	0.6	1.2	1.3	0.8	1.5	1.2
34	0.3	1	1.2	2	1.5	0.7	1	1	0.7	0.8
35	0.7	0.5	0.6	0.8	0.8	1.4	1.2	1.5	1.4	0.7
36	0.5	0.6	1.1	1.4	1.3	0.6	0.8	0.7	0.7	0.9
37	0.8	0.6	0.5	0.6	1.3	0.5	0.9	0.8	0.7	1
38	0.8	0.6	1	0.6	1	1.4	1	1	0.8	0.8
39	1.2	0.7	0.5	0.6	0.5	1.4	1 1	0.8	0.6	0.8
40	1.2	0.8	1	0.6	1.7	1.3	1.1	1	0.7	0.7
			Saptamī					aptamī		
1	1.1	0.9	0.4	2.3	0.6	1.6	1.7	1.7	1.6	1.5
2	1.6	1.7	0.9	1.6	0.6	1.5	1	1.4	1.3	1.4
3	1.3	1.4	1.2	1	0.5	1.5	1.2	1.3	1	0.6
4	1.5	1.8	0.6	1.4	0.7	1.4	1.2	0.6	1.4	0.6
5	0.8	1.3	1.3	0.9	0.6	1.3	1.4	1.3	1.3	1
6	1.3	1.5	1.1	0.9	0.7	1.2	1	1.6	1.9	1 7
7	1.4	1.7	0.8	1.5	0.6	1.5	1.6	1.2	0.9	1.5
8	1.3	1.3	0.6	1.2	1	1.4	1.3	1.1	1.4	1.4
9	1.4	1.1	0.7	1.1	1	1.2	1.5	1.1	1.2	0.9
10	1.1	1.5	0.5	1.2	0.7	1.5	1.3	0.8	0.8	1.1
11	1	1.4	0.8	1.5	0.8	1.6	1	1.1	1.1	0.8
12	0.8	1.5	0.4	1	0.5	0.8	0.8	0.9	1.1	0.6
13	1.2	1.4	1	0.9	1	1.1	1	1.1	0.9	0.7

1.4	4	0.0	0.0	0.6	0.7	1.1	1.0	0.0	1.0	0.7
14	1	0.8	0.9	0.6	0.7	1.4	1.3	0.9	1.3	0.7
15	1.3	0.7	0.7	1.1	0.6	0.5	1.3	0.3	0.9	0.7
16	0.8	0.7	0.7	1	0.7	1.1	0.7	0.8	0.7	0.8
17	1	1.4	0.7	1	1	0.8	0.6	1.1	0.8	0.8
18	1.5	0.9	0.6	0.8	0.9	0.9	1	0.6	0.6	0.6
19	0.8	1.2	0.9	0.6	0.8	1	0.5	0.8	1.1	1.1
20	0.8	1	0.9	0.9	0.7	1.2	0.6	1	0.8	1.3
21	0.7	0.8	0.7	0.9	0.8	1.3	1.2	0.6	0.8	0.8
22	1.4	0.5	0.7	1.3	0.5	1	2.2	0.8	1	0.6
23	1.1	0.6	0.6	1	1.1	0.8	0.5	0.8	1.2	0.7
24	0.5	0.7	1.1	1.2	0.8	0.5	0.9	0.9	0.8	0.8
25	0.8	0.9	0.8	0.7	1	0.9	1.4	0.9	0.8	1.1
26	0.8	0.5	1	0.7	1.2	1.2	0.5	0.7	1.2	0.9
27	1.2	0.9	0.7	0.9	0.9	0.7	0.6	0.8	0.6	0.9
28	0.8	0.9	0.7	0.6	0.6	0.8	0.9	0.7	0.7	0.8
29	0.7	0.8	0.9	1	1.2	0.8	0.5	0.5	1	0.8
30	0.3	1.1	1.4	0.8	1.5	1.1	0.9	0.5	0.8	0.6
31	1.1	0.9	1.9	0.6	1	0.7	0.5	0.7	1	0.7
32	0.9	1.2	1.1	0.7	1.6	0.7	0.5	0.9	0.8	0.6
33	0.7	0.8	1.3	0.8	0.6	0.4	0.6	1.1	1.1	0.7
34	0.6	0.9	0.8	0.6	0.9	0.4	1	0.6	0.6	0.7
35	0.8	1	0.6	1	1.1	0.9	0.6	1	0.6	0.7
36	0.5	1	0.9	0.8	0.8	1	0.8	0.9	0.7	0.7
37	1	1	1	1.4	0.5	0.3	1	0.5	0.5	0.8
38	1	0.8	0.9	1.3	1.5	0.6	1.3	0.7	0.9	0.9
39	1.2	0.9	0.9	0.9	1.5	0.5	1.1	0.6	1	1.2
40	1.2	0.6	1.3	0.9	1	0.5	0.6	0.9	1.2	1.1
			Aṣṭamī				1	Javam	ī	
1	1.4	2.1	0.9	1	2	0.8	1	2.2	0.5	1.5
2	1.6	1.6	2	2.1	1.6	0.6	0.5	1.6	1	0.5
3	1.4	1.5	2.2	1	1.4	0.8	1	1.8	0.4	0.7
4	1.8	1	2.1	1.3	1.6	1.5	0.8	1.6	0.6	0.4
5	1.3	1.5	1.6	1.4	1.3	1	0.8	1.9	0.5	0.6
6	1.7	2.2	2	1.6	0.9	1.3	1.4	1.7	0.6	0.5
7	1.7	2.1	1.3	1.2	1.1	0.9	1.1	1.5	0.7	0.6
8	1.2	1.9	1.7	1.9	1.1	1.2	1.2	1.8	0.7	0.7
9	1.6	1.3	1.6	1.6	1.1	0.7	1.3	1.3	0.7	0.6
10	1.8	1.6	1.7	1.6	1.1	0.7	1.1	1.1	0.6	0.6
11	1.9	1.6	1.5	0.9	1.2	0.5	1.4	0.8	0.4	0.6
12	1.1	1.5	1.5	1.2	0.9	0.6	1.2	0.8	0.6	0.5
13	1.1	2.1	1.8	1.2	0.8	0.4	1	1.1	0.5	0.9
14	1.4	0.9	1.7	1.6	1.7	0.7	1.6	1.2	0.5	0.9
15	1.3	1.4	1.6	1.3	0.9	0.6	1	0.7	0.6	2
16	1.6	0.9	1.8	1.3	0.7	0.5	0.9	0.6	0.6	1.1
17	1.1	1.2	1.4	1.5	0.8	0.5	1.7	0.9	0.7	1.1
18	1.5	1.7	1.2	1.8	1.1	0.4	0.5	0.8	0.8	1.4
19	1.5	1.5	1.3	1.9	1.2	1	1.2	0.8	0.8	1.1
20	1.6	1.4	1.4	1.5	1.4	0.5	1.3	0.6	1	1.4

21	1.6	1.0	1 /	1.3	0.7	0.4	0.6	0.7	0.8	1
22	1.6	1.9 0.9	1.4	1.3	0.7	0.4	0.6	0.7	0.8	1.3
23	2	1.2	2.4	1.1	1.7	0.4	0.0	0.7	0.7	0.7
24	1.5	1.2	1.6	0.9	1.7	0.7	0.9	1.1	0.7	0.7
25	1.3	1.3	1.0	0.9	0.9	0.3	0.7	1.3	0.9	1.2
26	1.2	1.2	1.4	0.8	0.9	0.7	0.7	0.9	1.1	1.2
27	1.3	0.9	1.4	1.8	1.1	0.0	0.9	0.9	0.8	1.2
28	1.2	1.9	1.4	1.0	0.8	0.7	1.7	0.6	0.7	0.5
29	0.8	1.2	1.1	1.1	1	0.5	1.1	1.1	1	0.5
30	1.7	0.7	1.1	1.1	1.1	0.9	1.1	0.7	0.8	0.7
31	1.3	1.4	1.4	0.9	0.7	0.3	0.6	1.2	0.8	0.7
32	1.6	1.4	0.9	0.6	1	1	0.9	0.9	0.9	0.6
33	1.3	1.3	0.8	1.6	0.6	1	0.7	0.7	0.7	0.7
34	1.4	0.6	1.4	1.2	0.0	0.7	0.8	1	0.7	0.6
35	1.1	0.9	0.7	1.2	1.2	0.5	1.3	0.9	1.3	1.2
36	1.1	0.8	1.1	0.8	0.6	0.6	1	1.1	1.3	0.8
37	1.4	1	0.7	1	1.2	0.7	1.1	1.1	1.3	0.7
38	1.3	0.6	1.1	1	0.6	0.8	1.9	0.4	0.8	0.5
39	1	1	1.3	1.1	1.1	1.1	0.8	1.1	1.4	1.1
40	0.9	1	1.1	1.4	0.6	1.4	1.4	0.7	0.9	0.5
			Daśamī					Ekādaś	l l	
1	1.4	1.8	2.1	1.7	1.5	1.6	1.1	1.2	1.1	1.8
2	1.8	1.5	1.6	1.6	0.8	1.3	1.8	2	1.3	2.2
3	1.3	1.5	1.6	1.7	0.3	1	1.6	1.4	1.3	1.8
4	1.3	1.5	1.6	1.3	1.2	1.2	1.6	2	1.4	1.1
5	1	1.7	1.3	0.5	0.9	1.5	1.2	1.4	1.8	0.9
6	1.7	1.5	1.8	1.2	1.3	1	1.4	1.4	1.4	1.2
7	1.2	1.1	1	1.4	0.8	1.2	1.4	1.1	1.3	0.4
8	1.1	1.3	1.4	1.1	1.2	1.1	1.4	1.1	0.7	0.7
9	1.4	1	2	1.5	1.3	1	1.8	1.5	1.3	1.1
10	1	1	1.4	1.1	1.1	1.1	1.5	1.1	0.8	0.9
11	1.6	1.4	1.3	1.2	1.1	0.9	1.4	1.1	1.3	1
12	1.2	1.8	1.6	1.5	1.4	1.3	1.4	0.9	0.7	0.7
13	1.3	0.7	1.5	1.3	1.5	1.4	1.9	0.9	1.3	0.7
14	1.2	1.2	1.7	1.2	0.9	0.7	1.1	0.8	0.3	0.3
15	1.1	0.7	1.1	0.6	1.2	1.2	1.2	0.9	0.6	0.7
16	1.1	1	1.4	1	0.5	1	1.1	1.5	0.6	0.8
17	1.4	0.9	1.3	1	0.6	1.2	0.8	0.6	0.5	0.7
18	1.2	1.1	1.2	1	0.6	0.9	0.8	1	1	0.5
19	0.9	0.5	0.7	1.1	1.3	0.4	0.6	0.7	0.9	0.6
20	1.1	1.1	1	0.6	0.6	0.8	0.9	1.3	1	0.5
21	1.3	1.4	1.3	0.6	0.9	1	1.3	0.6	0.6	0.4
22	1	1	1.5	0.7	0.9	0.7	0.9	0.5	0.6	0.6
23	1	0.8	1	0.6	0.5	0.8	1.2	0.6	0.7	0.3
24	1.2	1.4	0.9	1	1.2	1.1	1.2	0.5	0.7	0.3
25	1.4	0.8	1.1	0.7	0.6	1.2	1.1	0.4	0.8	1.4
26	0.9	0.8	0.8	0.9	0.5	1.3	0.6	0.3	0.7	0.8
27	1.4	0.9	1.1	0.9	0.4	0.8	1	0.9	0.7	0.4

28	1.1	0.7	0.7	1	0.6	1	0.8	0.3	0.8	0.6
29	0.8	0.8	1.1	0.7	0.6	0.6	1.1	0.8	0.6	0.7
30	0.9	0.9	1.1	0.9	0.7	1	0.6	0.8	0.4	0.6
31	0.7	0.9	0.6	0.5	0.9	0.8	0.9	0.7	0.6	1
32	1.4	0.8	1.1	0.9	0.5	0.6	0.7	1	0.8	0.7
33	1.2	0.5	0.9	0.8	0.4	0.3	0.6	0.4	0.6	1
34	1	0.9	1.1	0.9	0.4	1.1	0.6	0.7	0.5	1.4
35	0.6	0.7	0.7	0.7	1	0.9	0.6	1.2	0.7	1.1
36	1	0.6	1	1.1	0.9	1.2	1	1.2	0.6	0.6
37	0.7	1.1	1	0.9	0.5	1	1	0.4	0.6	0.5
38	0.8	0.8	0.8	0.5	1.1	0.7	1.1	0.8	0.7	0.7
39	1	0.8	0.6	1.3	0.4	0.6	1.2	0.5	0.6	1.1
40	0.5	0.5	1.2	0.7	0.5	0.8	0.6	0	0.9	0.8
		j	Dvādaśī				T ₁	rayoda	śī	
1	1.3	1.2	2.1	0.7	0.6	1.5	1.5	2.1	1.6	2.1
2	1.4	1	1.6	0.5	0.8	0	1.3	1.3	1.7	1.4
3	0.7	0.6	1.1	0.6	0.8	1	1.1	1.1	1.9	1
4	1	0.6	0.8	0.8	0.7	1.1	0.8	1.1	0.8	1.2
5	1.2	0.9	1	0.5	0.9	1	0.6	1	0.9	0.5
6	1.3	1.2	1.2	0.6	0.6	1.2	0.5	1.2	0.9	1.1
7	0.8	0.8	1.4	1.4	0.5	1.4	0.6	1.2	2.2	0.4
8	1.5	0.4	1.7	0.6	0.7	0.9	1.3	2	0.9	1.4
9	1.5	1	1	0.9	0.8	0.9	0.8	1.5	1.2	1
10	1.2	0.9	0.7	0.6	0.5	1.3	0.5	1.7	0.8	1.3
11	0.8	1.6	0.8	0.4	0.6	0.9	0.5	1	0.9	0.6
12	0.8	0.8	1.2	0.5	0.8	1	0.9	0.7	1.3	0.4
13	0.7	0.9	1	1.3	0.6	1	0.6	0.7	1.2	0.6
14	0.7	0.7	1.5	1.3	0.5	0.8	0.7	1.4	0.5	0.5
15	0.9	0.5	1.4	1.2	0.8	0.7	0.4	0.8	1.5	0.4
16	0.4	1	0.8	0.6	0.5	1.1	0.9	0.6	0.6	0.9
17	0.9	0.8	1.5	0.6	0.5	0.7	0.6	0.8	0.8	1
18	1.3	0.7	0.6	0.7	0.5	1.4	0.4	0.6	0.8	8.0
19	0.7	0.7	1.1	0.8	0.5	0.7	0.6	0.6	0.7	1.1
20	1	1.3	1	0.9	0.6	0.8	0.8	0.4	0.8	0.9
21	0.7	0.6	0.7	1.4	0.5	0.9	0.9	1.1	0.7	0.8
22	0.8	0.8	0.8	0.4	0.4	0.9	0.8	0	0.6	0.7
23	0.9	0.6	0.9	0.8	0.5	0.6	0.5	0.8	1.5	0.7
24	0.6	0.9	0.9	1.2	0.5	1	0.7	0.4	0.6	0.6
25	1.4	0.7	0.7	0.6	0.3	1	0.5	0.8	0.7	0.6
26	1.1	0.7	0.5	0.8	0.6	1.5	0.6	1	0.5	1
27	1.3	0.7	0.9	0.7	0.5	0.3	0.8	0.9	0.9	0.4
28	0.8	0.6	0.7	1.2	0.7	0.7	0.6	0.5	0.7	0.6
29	0.7	0.6	1.1	1	0.6	0.6	0.7	0.6	0	0.8
30	0.7	0.8	1.1	1	0.7	1	0.7	0.5	1.1	0.5
31	0.8	0.7	0.6	0.7	0.5	1	0.6	1.5	1.3	0.6
32	0.7	0.6	0.8	1.7	0.5	0.6	1.2	0.7	1	0.5
33	0.6	1	0.8	0.8	0.5	0.5	0.7	0.8	0.8	0.3
34	0.5	0.6	0.9	1.6	0.8	1	0.9	0.3	0.6	0.4

35	0.7	0.9	0.9	1.1	0.4	0.6	1.1	0.7	1.3	0.3
36	0.6	0.6	0.7	1.1	0.5	0.5	0.4	0.3	0.6	0.5
37	0.7	0.8	0.7	1.9	1.1	1	0.5	0.9	1.2	0.6
38	0.5	0.8	1	1.6	0.7	0.6	0.8	0.6	0.6	0.3
39	0.8	0.8	0.5	1.8	0.4	0.6	0.6	0.6	0.2	0.8
40	1	0.8	0.7	1.4	0.5	0.9	0.5	0.7	0.8	0.8
		\boldsymbol{C}	aturadas	śī			A_{I}	nāvasī	yā	
1	1.7	1.4	1.9	1.7	1.8	1.5	1.5	2.1	1.6	2.1
2	1.4	1.8	2.1	1.3	1.8	0	1.3	1.3	1.7	1.4
3	1.3	1.3	1.5	1.8	1.7	1	1.1	1.1	1.9	1
4	1.5	1.7	1	1.4	1.3	1.1	0.8	1.1	0.8	1.2
5	1.2	2.1	1.5	1.4	1.6	1	0.6	1	0.9	0.5
6	1.4	1.3	1.6	1.5	0.9	1.2	0.5	1.2	0.9	1.1
7	1.3	1.2	1.1	1.9	1.4	1.4	0.6	1.2	2.2	0.4
8	1.4	1.3	1.1	0.9	1.2	0.9	1.3	2	0.9	1.4
9	1.8	1.4	1	1.1	1.2	0.9	0.8	1.5	1.2	1
10	1.3	1.3	1.4	1.4	1	1.3	0.5	1.7	0.8	1.3
11	1	1.2	1.4	1.4	1.4	0.9	0.5	1	0.9	0.6
12	0.7	1.8	1.8	1.2	1.3	1	0.9	0.7	1.3	0.4
13	1.1	0.9	1.2	0.9	1.4	1	0.6	0.7	1.2	0.6
14	0.8	1.2	1.2	1.6	0.9	0.8	0.7	1.4	0.5	0.5
15	1.1	0.9	1.3	1.7	1.1	0.7	0.4	0.8	1.5	0.4
16	1.2	1.2	1.3	1.3	0.5	1.1	0.9	0.6	0.6	0.9
17	1.4	1	1.2	1.1	0.5	0.7	0.6	0.8	0.8	1
18	1.2	1.3	1.4	1.1	0.6	1.4	0.4	0.6	0.8	0.8
19	1.1	1	0.5	1.1	0.7	0.7	0.6	0.6	0.7	1.1
20	1.3	1	1.3	1.1	0.7	0.8	0.8	0.4	0.8	0.9
21	0.4	1.1	1.2	1.3	0.5	0.9	0.9	1.1	0.7	0.8
22	1.3	0.8	1	0.7	0.5	0.9	0.8	0	0.6	0.7
23	1	1.5	1.2	0.9	0.8	0.6	0.5	0.8	1.5	0.7
24	1	0.7	0.4	0.6	0.5	1	0.7	0.4	0.6	0.6
25	1.1	1.3	1.5	0.6	0.5	1	0.5	0.8	0.7	0.6
26	1.7	0.9	1.6	0.9	0.6	1.5	0.6	1	0.5	1
27	1.1	0.9	1.7	1	1	0.3	0.8	0.9	0.9	0.4
28	0.9	0	1.4	0.8	0.7	0.7	0.6	0.5	0.7	0.6
29	0.7	0.7	0.8	1	0.6	0.6	0.7	0.6	0	0.8
30	0.8	0.4	0.9	0.6	0.6	1	0.7	0.5	1.1	0.5
31	1	1.1	0.7	1.1	0.8	1	0.6	1.5	1.3	0.6
32	0.8	0.5	1.2	1.4	0.6	0.6	1.2	0.7	1	0.5
33	0.9	1.4	1	1.2	0.6	0.5	0.7	0.8	0.8	0.3
34	1.1	0.9	0.4	0.9	0.7	1	0.9	0.3	0.6	0.4
35	1	1.5	0.9	0.9	0.8	0.6	1.1	0.7	1.3	0.3
36	0.6	0.8	0.5	0.7	0.6	0.5	0.4	0.3	0.6	0.5
37	0.9	1	0.9	0.9	0.6	1	0.5	0.9	1.2	0.6
38	1.2	0.9	0.7	0.5	0.6	0.6	0.8	0.6	0.6	0.3
39	1	0	0.9	0.5	0.6	0.6	0.6	0.6	0.2	0.8
40	1.2	0.4	1	0.7	0.6	0.9	0.5	0.7	0.8	0.8

Table 1.3 Radical length (cm) of germination of green gram seeds of lunar days effects at $Caitra\ M\bar{a}sa$

Hevilambhināmasamvatsaraḥ uttarāyaṇam vasantaṛtvaḥ caitramāsaḥ

					vakşah		<u> </u>			
Sl. No.	C	PSP	PBP	CSP	CBP	C	PSP	PBP	CSP	CBP
		Pratip	at and I	Dvitīyā				Tṛtīyā	ī	
1	3.3	2.3	4.6	4.8	4.3	1.1	1.3	5.7	3	4.7
2	2.4	4	4.6	3.1	4.6	2	0.6	3.7	2.6	4.5
3	2.7	2.6	3.4	4.9	3.9	2	3.1	2.6	1.7	5.1
4	0.7	2.3	5.6	3.7	4.4	1.6	1.4	3.7	2.3	4.7
5	0.8	2.8	4.2	3.4	4.5	2.1	3.4	2.7	1.7	3.3
6	1.6	3.1	1.5	2.5	4	1.8	0.7	2.7	1.2	5.2
7	1.7	2	4.8	3.4	3.8	1.9	0.5	3.3	1.4	3.8
8	1.6	3.8	3.9	2.4	5.2	1.3	3.6	1.4	1.2	2
9	2	1.3	3.8	3.3	3.5	0.4	2.9	3.4	1.2	5
10	2.1	1.5	3	3.5	5.3	1.9	1.4	4.2	1.4	5.5
11	1.6	1.5	2.1	2.8	3.8	1.6	1.3	5.3	3.2	4.7
12	1.1	1.5	3.3	2.7	4.1	1.5	1.6	2.4	1	3.8
13	0.4	0.3	1.4	3.8	3.4	2.5	0.5	3	0.2	1.8
14	0.6	1.8	3.4	2.9	3.3	1.3	1.7	1.6	0.4	2.1
15	2	3.1	2.2	1.1	1.6	2	1.5	2.8	0.3	3.2
16	1.8	3.5	2.2	1.3	4.4	2.3	1.7	2.3	1.2	1.7
17	1.1	2.3	2.6	4.2	1.3	2.2	0.9	1.2	2.4	3.3
18	1.8	4.1	2.8	1.5	3.8	1.6	0.3	3.7	2	2.4
19	1.5	3.5	2.5	1.5	2.1	1.9	0.8	2	1.2	1.2
20	1.9	3.4	3.4	0	4.2	1.5	1.2	1.5	1.4	3.4
21	0.8	4.1	0.9	0.4	3.4	2	1.1	1	0.9	2.7
22	1	1.8	2.3	3.2	2.7	1.2	0.6	1.1	2.7	2.8
23	0.5	2.8	2.3	2.8	2.4	1.8	3.8	1.1	2.7	4
24	1.7	3	2	3.1	2.9	1.3	3.9	1.7	3.2	2.2
25	1.8	3.6	0.8	1.2	2.6	1.5	4.7	2	2	2
26	2.5	3.2	1.7	2.2	2.9	1	3	2.8	1.2	2.4
27	1.6	2.6	0.9	1.5	3.6	0.5	2.1	1.3	4.2	1.2
28	1.3	3.1	1.6	0.7	2.2	0.7	1.6	2.2	2.8	1.2
29	1.4	1.3	0.7	0.8	0.6	1.7	3.6	2	3.4	0.9
30	1.3	2.1	1.3	1.8	1.5	1	2	2.4	3	2.4
31	1.5	2.6	1.5	0.2	1.1	1.2	4.7	0.9	3.9	2.7
32	1	3	1.2	0.7	2.5	1.5	4	0.7	0.6	2.5
33	1	0.5	2.2	2.1	2	0.8	3.6	0.3	3.8	1.5
34	1.1	1.9	0.1	2	0.4	1.1	2.9	0.3	4	0.4
35	0.8	2.7	1	1.4	2.5	0.7	3.2	2.2	1.4	0.3
36	1.3	1.9	1.6	1.7	1.4	1	1.3	2.5	3	2.4
37	0.2	2.1	4.6	1.4	1.4	0.4	1.4	1.4	1	2.1
38	0.7	0.5	0	1.4	1.9	0.8	1.7	0.7	3.2	0.9
39	0.7	1.2	0.3	1.8	0.7	0.3	2.3	4.5	2.9	0.3
40	1	2.2	1.2	1.9	1.4	1	2.3	0.5	2.8	0.7
			Caturth	ī			Ì	Pañcan	ทเ	

1	2.6	3.1	1.4	4.7	4.7	0	3.9	4	3.5	3.3
2	3.1	3.8	5	2.9	3.2	0	2.7	3.1	2.3	4
3	2.7	4.5	4.3	4.9	4.4	0	3	3.2	3.7	3.2
4	3.3	3.9	3.8	3	4.6	1.7	2	3.1	2.5	3.4
5	3	2.6	5.5	3.5	5	1.4	2.8	2.6	3	3.6
6	2	3.4	5	2.3	4.3	0.9	3.9	2.5	3.2	2.6
7	3.1	3.3	3.9	4.1	3.5	1.7	3.2	2.8	2.8	2.6
8	3	4	2.2	2.6	3.7	2.5	2.9	3.6	2.3	3
9	2.8	4.8	2.6	3.5	5.1	1	3.4	3	3.3	3.6
10	2.8	4.3	3	3	3.2	1.9	3.4	2.5	3.4	2.6
11	2.1	3.5	4.5	2.5	4.2	1.9	2.2	3	3.8	2.7
12	2.1	1.9	3.9	3.2	3	2.7	2.8	0.5	3.2	4.2
13	1.9	2.5	3.6	3.7	4.8	2.3	3	2.6	2.8	4
14	1.5	2.1	3.3	2.6	4.1	0	3.1	3	1.7	3
15	2.4	1.4	5.2	3.8	2.7	2.5	2.7	2.5	3.4	3.2
16	2.3	2.6	3.3	3.2	2.9	2.1	2.2	3.2	3.2	3.2
17	1.7	3.1	4	3.1	3.5	2	3	3	2.8	3.6
18	2.5	2.6	3	2.3	4.4	1.4	0.5	2.4	2	1.6
19	1.8	1.6	3	2.8	3.3	2.1	2.4	2.8	3.1	0.4
20	3.1	2.7	2.8	3.4	3.2	2.2	3.5	3.7	3.1	3.1
21	1.3	2.8	2.1	2.2	3.4	0.4	2.5	2.2	3.2	3.8
22	1.8	0.8	3.8	1.7	1.6	1	2.8	1.3	2.3	3.9
23	1.3	1.2	3	3	0	2.4	3.6	3	2.8	2.3
24	1.6	2.1	3.2	0.8	2.7	1.9	3.4	2.5	3.4	3.3
25	0.8	3.8	2.1	1.7	3	2.3	2.8	2.3	1.4	2.9
26	2.4	2.7	2.4	1.4	3.3	1.6	1.8	3	2.7	3.5
27	2.2	1.8	4.4	2.2	2.3	1.7	3.5	1.4	2.5	3.9
28	1.7	1	2.1	1.2	1.9	2.5	1.2	4	0.8	2.9
29	1.6	2.5	3.8	2.8	3.6	2.2	0.6	0.5	2.6	3.4
30	2.2	2.1	1.9	2.7	1.9	1.7	2.8	1.3	2.8	3.6
31	1.3	1.9	0.4	4.1	1.6	2	0	1.9	1.3	3.7
32	2.2	1.5	2.4	2.6	0.2	2.1	1.8	2.5	0.3	0.4
33	0.8	1	2	3.9	2	1.6	0.8	2.5	0	1.8
34	1.9	1.4	1	1.2	0.8	2.6	2.7	2.8	0	3
35	1.4	1.3	1.6	2.7	0.8	1.3	2.5	2.7	2.6	3
36	0.8	2	0.9	1	1.6	1.7	3.3	1.4	1.9	2.8
37	1.4	1.4	2.3	0.8	1.1	1.7	0.5	0.7	0.9	1.3
38	1.5	0.4	1.2	0.7	3.3	1.7	1.8	0.7	1.8	0.3
39	1.6	2	1.1	0.7	0.4	1.8	2.9	2	0.7	0.5
40	1.2	0.7	1	0	0	0.5	3.1	0.5	0.5	0.7
			Ṣaṣṭhi					Saptan	นเ	
1	2.4	1.7	3.1	1	0.4	2.6	4.5	2.8	3.4	2.9
2	2.4	1.6	2.6	2	0.3	1.8	2	3.2	3.4	2.9
3	2.6	3.2	4.2	2.8	0.5	2.4	2.2	3.2	3.3	2.5
4	1.8	2.1	2.9	2.0	0.7	1.3	2.1	4	3.3	2.9
5	1.9	2.8	2.5	2.3	1.6	0.5	2.6	3.6	3.2	2.3
6	1.5	0.5	2.9	0.7	2.2	1.7	2.0	3.2	2.5	0.3
7	2.4	0.6	3.1	0.7	2.2	2	0.4	0.5	4.5	1
/	۷.4	0.0	3.1	0.5	4.4		0.4	0.5	4.5	1

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8	1.3	2.3	3.8	1.1	4.4	2.3	0	4	2.5	3
9	1.5	3.3	3.5	1	2.7	2.3	2.8	3.5	1.1	3
10	2.8	1.9	3.3	0.4	3.4	2.1	3.5	3.4	3	1.4
11	2	2.6	0.5	2.9	1.7	1.8	2.4	2.7	2.7	4.2
12	1.9	1.3	1.2	2	0.9	0.9	2.5	3.4	2.8	0.5
13	1.6	2.8	0.9	2.5	2.6	0.7	3.5	2.7	2.6	3.7
14	1.4	3.6	1.1	1	0.4	1.3	1.3	0	0	0.6
15	2	3.8	3.4	0.2	3	1.5	2.5	2.5	1	0.3
16	1.6	0.5	1.9	0.9	3	2.5	3	2.2	3.6	0.7
17	1.4	0	3.8	2.5	4.4	2	4	2.4	2.9	4.4
18	1.7	0.4	0	0.7	2.7	1.5	2.5	3	4.4	5
19	1.2	1.8	1.6	0	5	0.6	2.2	1.7	2.6	3.5
20	0.8	3.2	4.3	0.5	3.2	2.4	2.5	0.5	2.5	0.3
21	1.3	1	0.5	0.3	3.1	0.5	1.3	0.7	3.5	1
22	1	3.3	1.7	1.1	0.5	1.4	1.2	0.5	3	2.6
23	1.5	0.7	3.5	0.9	3.6	2	2.7	4.3	3.7	2.2
24	0.8	0	3.8	2.7	2.6	1.3	2.8	3.5	1.8	0.4
25	0.5	0.5	2.2	0.5	0.8	1.7	1.1	2.9	1.8	1.2
26	1.8	1.3	3	0.7	0.3	1.5	0.4	3.9	2.3	0.4
27	1.6	0	4.6	2.5	0.9	0.4	1.3	3.1	0.5	2.3
28	0.3	1.6	3.2	2.7	1.5	1.8	2.3	0.4	2.7	2.9
29	0.5	3.2	2.8	4.4	2.2	1.5	1.4	2.3	1.3	0.3
30	0.5	3.6	3.7	2.1	2.2	0.8	0.3	3.2	0.9	0.9
31	0.8	0	2.6	0.9	4.8	0.9	2.8	0.4	1.5	0.5
32	0.9	3.5	3.8	2.3	4.8	1.4	2.4	3.2	4	0.4
33	0.8	1.1	0.6	3.9	0.5	1.6	1.7	0.3	2.1	0.5
34	0.3	4.9	4.7	1	1.5	1.5	1.3	4	3.3	2.7
35	0.7	2.6	2.5	2	3.5	1.1	1.8	2.7	1.3	2.9
36	1.6	3	2.3	2.5	0.4	2	3.3	2.2	2.3	1.5
37	0.7	3.6	2.9	1.1	0.4	1.1	2	3.5	0.6	1.4
38	0.5	2.8	1.2	3.5	2.8	0.3	2	2.3	0.7	0.9
39	1.3	2.8	3.9	2.6	0.4	1.7	1.3	3	0.5	0.3
40	0	4.4	0.5	3.4	3.3	0.7	0.5	4.4	0.6	0.5
			Aṣṭamī					Navan	11	
1	1	1.8	2.6	3.5	3.1	1.8	2.4	2.4	2.2	2
2	2	1.2	3.7	2.2	3.5	2	1.5	2.5	2.4	3.5
3	3	2	2.3	2.3	3.6	1.6	1.9	3.1	2.9	3.2
4	4	3.1	3	0.8	2.5	1.9	1	2.7	1.9	2.5
5	5	1.7	2.2	2.8	3	2.4	0.9	1.5	3	3
6	6	1.8	2.8	3	2.9	1.9	2.4	1.6	1.7	3.8
7	7	2	3.1	2.8	3.4	1.9	1.2	2.9	0.9	2.9
8	8	1.9	3.1	2.6	2	1.9	1.8	2.3	0.5	3.3
9	9	3	3.2	2.6	3.1	1.9	2.9	2.8	2.4	3.5
10	10	1.6	2.8	2.1	3.2	1.8	3	3.3	0.8	2.6
11	11	1.8	2.0	2.9	2.2	1.9	2.3	0.3	1.2	4.3
12	12	1.2	2.3	3	2.9	1.6	0.9	0.3	0.3	3.6
13	13	2.5	2.8	0.9	3	1.6	1.7	2.5	0.7	3.2
14	14	2.3	2.5	3.9	2.8	1.7	2.7	2.5	2.2	2.7
17	17	2.5	۵.5	3.7	2.0	1./	۷٠/	2.3		2.1

								1		
15	15	2	1.4	2.2	4	1.4	0.3	2.5	2.2	2.8
16	16	1.9	2.6	2.5	3.2	1.5	2.2	2.6	0.4	3.3
17	17	2.1	3.8	2.4	3.4	2	2.5	3.6	2.3	1.5
18	18	2.3	3.2	1.3	3.2	2.2	3.2	2.8	1.9	2.5
19	19	1.1	2.3	1.5	3.2	1.2	1.9	1.6	2.3	1.8
20	20	1.9	1.4	2.6	2.8	1.8	0.3	2	2.2	2.3
21	21	1.8	0.9	2.9	3.3	2.1	2.5	2	2.3	1.5
22	22	1.7	2	2.9	2.9	2.1	3.5	2.2	2.5	2
23	23	2.1	3.1	3	3	1	2.7	3	2.6	2.3
24	24	0.5	1.6	3	2.7	1	2.4	0.7	2.5	3.4
25	25	2.2	1.2	3.2	2.3	0.3	1.5	2	2.2	3.1
26	26	0	1.5	2.7	3.2	2.2	2	1.5	2.9	2.5
27	27	2	1.4	2	2.3	2.3	2.9	1.6	2.4	3
28	28	2.5	0.8	2	1.5	1.3	2.7	3	2.7	3
29	29	1.6	1.7	2.3	1.7	1.6	2.3	2	2.8	0.7
30	30	0.8	0.6	5	1.5	2.5	2.2	3.2	2.8	2.3
31	31	2	0.8	3	0.4	2	4	2.8	3	1.8
32	32	0.5	0.4	3.2	0.9	2.2	3.2	2.9	2.7	2.7
33	33	1.4	0.8	2.5	3.5	0.5	2.6	1.3	2.3	1.6
34	34	1.1	1.3	1.6	0.3	1.3	3.4	2.6	4.2	0.4
35	35	0.3	0.3	1.4	2.6	1.7	2.5	3	3.1	0.5
36	36	0	1	1.9	0.3	2.2	2	2.9	3	1.2
37	37	0.8	1.2	3.7	1.3	1.4	3	0.3	3	2.5
38	38	1.9	0.4	0.7	1	0.8	3	0.4	2.4	0.8
39	39	1.9	0.3	1.1	1.4	0.7	4	2.4	3	0.4
40	40	1.9	0.2	2.9	0.7	0.2	2.9	3.3	3.6	0.5
			Daśamī	7				Ekādas	<u> </u>	
1	2	3	3.5	2.5	2	2.2	3.8	3.1	3	4.1
2	2	2.1	2.5	3	3	2.2	2.3	3.1	2.3	1.8
3	2.8	3	3.2	2.3	3.2	2.5	3	2.5	2.3	3.5
4	2.2	1	2.5	3	2.7	1.4	2.4	3.1	2.5	3.3
5	1.5	2.8	2.6	3.4	3	0.9	2.7	2.3	2.7	3.5
6	2.5	2.6	2.7	2.6	3.2	1.7	3.5	2.5	3	3.2
7	1.2	2.8	3.2	2.7	2.5	1.4	2.8	3.5	3.1	3.8
8	1.2	2.5	2.7	2.7	3.5	2.2	2.6	2.7	3.3	3.8
9	1.3	3.3	3.3	3.2	3.4	2.1	2.0	2.6	2.9	2.3
10	1.8	2.6	3.3	3.4	2.1	1.9	0.5	3.1	2.5	2.3
11	1.7	1.8	2.4	2.9	3.1	1.7	2	2.5	2.5	2.5
12	2.3	2.1	1.9	3	3.1	1.6	2.5	3.3	3	0.5
13	1.3	0.3	1.7	2.4	3.2	1.4	1.4	2.7	2.6	3
14	1.5	2.1	2.3	3.4	3.9	1.4	1.4	3.5	3	2.2
15	1.3	1.7	2.3	2.2	0.9	2.4	3.6	3.3	2.6	2.2
16	1.4	2.8	2.6	2.2	3	1.4	2.9	1.8	3	3.7
17	1.4	1.5	3	3	2.5	2	1.6	1.6	1.1	3.1
18	2.1	2.4	1.1	2.4	2.5	2	2.1		2	3.4
19	2.1				3.7	1.7		2.8	2	
		2.5	0.8	2.3			0.5	3		3.2
20	1.2	1.6	2.7	2.5	3.2	1.7	2.6	3	2.6	2.1
21	2	2.3	1.7	1.6	2.8	1.9	2.5	1.5	2.5	3.4

22	2.3	2.2	1.7	1.9	2.2	1	2.6	2.1	0.9	3
23	2	0.6	1.7	2.4	3.5	1.7	3	3.7	2.5	3.7
24	1.3	4	2.4	2.8	2.2	1.9	2	2.4	1.7	3.2
25	1.3	2.7	3.7	3.4	1	2	2.9	2.5	2.4	3.2
26	1.5	2.6	0.9	2.5	1.5	2.1	2.3	2.6	2.7	2.5
27	1.3	2	2	2.5	3	1.8	2.3	2.1	2.5	1.8
28	1	2.6	2	3	0.8	1.5	2	1.9	2.2	3.3
29	1.1	2.5	2	1.9	0.3	2	1.5	2.9	0.6	2
30	2.1	2.8	0.4	2.4	1.7	1.7	2.4	2.6	1.5	2.7
31	1.3	0.7	0.7	3.4	0.8	1.4	2.3	2.4	1.6	3.2
32	1.3	0.5	2.2	2.5	0.5	1.8	2.8	3	0.6	2.6
33	1.7	1.7	2.6	2.5	2.6	1	2.4	1.8	0.4	2
34	0.8	2.3	2.7	3.6	0.4	1.7	0.3	4	0.3	0.7
35	1.5	1.7	3.1	3	1.5	2.8	2.3	3.5	2	2.1
36	1.5	2.9	2.3	2.8	3	1.8	2	3	1.4	1.1
37	1.9	3.1	2.5	2.6	0.9	1.3	0.3	3.2	0.3	3.7
38	1.2	1.3	2.5	0.3	2.1	0.9	0.8	2.2	0.3	2.5
39	0.7	2.6	1.8	0.9	3.5	0.5	2.2	2.3	0.4	2
40	0.9	0.5	2.3	2.2	2.5	0.5	0.5	1.2	1.1	1.5
			Dvādašī	ī			T	rayoda	าร์เิ	
1	2.3	2.8	1.8	4.8	1.5	1.3	2.6	3.4	5.8	4.2
2	2.4	3	1.1	4	2.5	2.5	2.8	3	3.2	3.4
3	0.6	2.7	0.7	4.6	0.7	2	2.9	2.9	2.7	3
4	1.2	3	1	3.8	2.1	2.7	2.6	3.6	2.5	4.3
5	2	1.7	1.3	3.7	1.2	2.2	2.5	3.7	2.5	3.3
6	0.3	3.5	0.4	3.1	3.2	3.3	2.2	3	2.7	2.9
7	2.2	2.7	1.7	3.5	0.7	1.7	1.1	3	2.7	2.7
8	2.2	3.3	3.2	3	2.2	2.1	2.8	2.9	3	2.8
9	2	0.7	1.7	3.9	0.7	2.3	2.4	2.5	3.5	3.2
10	2.4	2	2.4	2.5	1.5	1.8	1.4	3.2	2.5	1.5
11	2.2	1.4	3	2.9	1.6	2.2	0.8	0.3	0.3	4.5
12	2.3	1.2	2.8	3.8	1.5	1.9	1	3.2	2.9	2.8
13	3	0.8	2.5	2.8	1.5	1.7	3.5	2.5	2.8	3.4
14	0.8	1.1	2.7	3.2	1	0.8	3.3	3	2.4	2.8
15	1.9	1.4	2.7	2.8	1.3	2.2	3.2	2	2.3	3.2
16	1.9	0.6	2.5	3.3	0.6	2.5	3	2.7	2.6	3.1
17	1.9	0.5	1.5	4	0.3	2.2	2.7	1.7	3	4.2
18	2.4	1.5	3.3	3.8	0.4	2	3.1	2.3	3.3	2
19	2.1	0.8	2.9	2.9	0.6	1.5	2.9	2.5	2.5	3.2
20	2	0.4	2.5	3	0.6	1.6	2.7	2.7	3.2	1
21	2.2	1	2.5	2.9	1.4	1	2.9	2.4	2.5	2.5
22	0.5	3.7	2.8	1	2.2	1.9	2	2.7	1.9	2.5
23	1.1	2.5	2.7	1.8	3.2	1.9	2.7	3.6	2	2.9
24	2.1	3.5	3.2	2.1	2.5	2	2.2	2.2	3.3	2.3
25	2.5	2.9	3.7	2.3	3	1.3	2.8	2.2	2.3	2.5
26	1.5	3	2.8	2	4.2	2.4	3	1.3	3	2.6
27	2.3	3.1	1	1	2.5	2	2.8	2.5	2	2.5
28	0.8	2.7	4.7	2.5	3	1.6	2.7	2.4	2.5	3

29	0.7	3.1	2.4	3.7	4.8	1.6	2.5	1.5	3.2	1.3
30	0.5	2	3.6	3.5	3.2	1.5	2.8	2.7	1.5	2
31	0.3	3	3.5	3.2	3.7	1.3	2.4	0.8	2.2	3.2
32	1.5	3.4	3.3	2.2	2.2	1.2	3.3	2.3	2.5	1.5
33	0.8	3.7	3	3	3.6	1	3	2.4	1.5	1.5
34	0.7	2.5	3.9	3.3	3	1.1	0.7	0.5	1.2	0.6
35	2	3.6	4.1	2.2	3.1	1	1	1.3	1.5	1.3
36	1.5	3.2	4.3	3	2.5	1.4	1.8	1.1	1.7	3
37	0.9	3.4	3.5	3.5	3.6	0.6	1.3	1.9	1	0.5
38	1.8	2	2.7	0.8	3.5	0.8	0.5	2	0.6	0.5
39	1.2	2.2	1	2.5	3	1.4	2.5	1.1	2.7	1.1
40	0.5	0.6	0.7	0.5	3.9	1.6	1.2	0.4	3	0.3
		(Caturada	śī.				Pūrņim	ıā	
1	1.4	3.2	3	4	3.3	2.7	1	4.9	2.3	4.1
2	1.8	4	3	0.9	3.5	2.8	1.3	3	1.8	3.6
3	2.1	2.9	3.8	3.7	0.9	2.2	3.2	3.8	2.8	3.6
4	2.1	2.6	3.0	3.7	2.6	1.8	2.5	4.3	1.8	2.6
5	2.1	4	3.2	3	3	2	0.7	3.8	0.9	2.6
6	0.3	2.7	3.1	2	0.4	1.4	2.3	2.9	1.3	3.6
7	2.4	3.4	3.4	2.5	3.6	1.7	2.7	0.8	2.4	2.1
8	2.1	4.2	2.5	3.5	0	1.6	3.3	2.7	2.3	2.3
9	1.6	2.4	3.4	0.4	1.8	1.7	1.5	1.8	3.3	4.1
10	1.9	3	2.8	3.7	1.9	1.4	2.8	2.6	2.9	3.5
11	1.7	2.9	3.5	2.5	3.5	1.8	0.4	3.2	3.7	3.9
12	2	3.4	2.8	2.3	2.4	1.3	0.7	3.3	3.2	2.4
13	1.3	3.3	1.8	3.5	2.3	1.5	0.8	3.5	2.3	2.5
14	2	3.3	2.9	3.9	3.1	2	1	3.4	2.4	2.5
15	2	3.2	2.1	2.7	0	1	2.2	3.2	2.3	3.2
16	2	2.8	1.2	2.9	3.2	1.7	2.1	3.5	2.8	2.1
17	2.1	3.5	2.6	1.9	0.5	2.6	3.4	3.5	2.5	0.4
18	2.1	2.8	3.5	3	0.3	0.4	1.3	3.5	1.9	2.8
19	1.8	4.4	2.5	3.5	4.2	0.8	2.4	2.6	3	2.6
20	1.4	3.2	2.8	2	3.2	1.8	2.1	2.7	4.2	2.7
21	1.3	3.4	3.5	0.6	4.4	2.4	0.8	3.2	3.2	2.1
22	0.3	3.5	1.8	2.2	4.2	2.6	2.9	3.4	2.3	2.3
23	2	2.5	1.8	2.2	3.2	1	3	0.9	2.2	1.7
24	2	2.2	2	0.5	4.4	0.6	2.4	1.7	2.5	1
25	1.5	3.3	2.8	0.3	1.6	1.4	2.5	1.3	1	2.7
26	1.7	2.5	2	3.2	3.2	1.8	3.1	1.4	2.6	2.5
27	2	3	4.3	2.8	3	1.5	3.6	3	1.9	2.5
28	2	3.1	3.2	2.6	3.3	1.5	1.8	3	3	3
29	1.6	2.8	1.3	1.3	4.3	1.3	2.5	4	2.4	0.3
30	1.2	0.3	0.7	3.3	4	0.8	1.6	3.5	3.5	0.4
31	0.5	2.5	1.8	2.5	2.9	0.9	2.9	2.7	2.8	1
32	0.8	2.3	1	1.3	2.2	0.5	2.8	1.8	3.7	1.5
33	0.3	1	0.9	3.3	2.5	0.3	2.5	1.2	2.9	1
34	1.2	1.5	0.8	1.2	2	0.4	3.4	2.3	3	2
35	1.7	2.3	1.5	3.3	2.2	1	3.2	0.8	2	0.4
	1./	2.5	1.5	5.5	2.2	1	5.2	0.0		0.7

36	1	0.8	0.9	0.3	2.7	0.4	2.7	0.3	2.7	2
37	0.9	0.7	0.4	0.5	2.7	1.5	2.8	1.4	2.7	2
38	0.6	0.7	0.4	1.2	0.4	1.5	1.1	0.4	3.8	2.8
39	0.5	1.2	0.4	1.2	1	2	2.5	1.2	2.4	3.5
40	0.6	1.3	0.5	0.5	0.6	1.3	2.4	0.5	0.3	3.5
40	0.0	1.5	0.5	l .	Pakṣaḥ		2.7	0.5	0.5	3.3
Cl No	C	PSP	PBP	CSP	CBP	С	PSP	PBP	CSP	CBP
Sl. No.	C			l .	CDP	C		l		CDP
			Pratipa					Dvitīy		
1	2.2	3	3.6	4	2.8	2	2.7	2.2	3.5	4.2
2	1.3	3	2.9	4	2.8	1.7	3.1	2.5	3.2	4.2
3	1.5	3	3.6	3.5	3.2	1.5	2.7	2.4	2.9	3.2
4	2	3.2	2.5	3.5	3	1.9	2.2	2	2.5	2.9
5	1.9	3.5	3.7	3	2.5	2	2.8	3.5	2.5	3.3
6	1.9	3.3	3.3	2.5	3.5	2.2	3	3.2	2.1	4
7	2.2	3.9	3.9	4.3	3.2	2	2	2	3.2	3.3
8	1	1.6	2.8	3.3	4.3	0.7	0.9	1.1	1	2.5
9	1.8	3.8	3.9	3	4.4	1.6	2.9	2.5	3.6	3.4
10	1.4	2.6	3	2.4	2.8	1.6	3.1	2.6	3.7	3.9
11	1.7	3.3	0.8	2	3.4	1.7	0.9	2.5	3.9	2.6
12	1.9	2.6	1.4	3	3.2	2	2.5	2.5	2.5	3.8
13	1.8	2.5	0.3	4.2	3	2	2.1	2	3.5	2.7
14	1.6	2	0.9	3	3.3	1.8	2	3.3	3.4	2.2
15	1.6	1.5	0.8	3.2	4.2	1.5	0.3	1.9	3.6	2.9
16	1.6	3.9	1.4	2.2	3.5	2.1	2.5	2.8	2.9	2.2
17	1.9	3	3.4	2.8	3.8	1.5	2.5	3.5	3.4	4.5
18	0.9	4.2	3.3	3.2	3.2	1.8	3.5	4.3	3.1	2.8
19	1.9	2.9	2.8	3.5	0.4	1.8	2.6	2.3	3.6	2.8
20	1.9	2.7	2.2	3	4.1	1.7	2.2	2.4	2.4	4.4
21	1.7	3.5	3.7	1.7	2.2	1.6	2.2	3.5	3	3.5
22	1.4	2.6	2.5	3.3	2.8	1.1	3.3	2.4	3.5	1.1
23	1.7	3.1	2.9	2.7	3	0.9	2.5	2.8	1.4	3.2
24	1.9	1.8	3.6	1.8	2.9	1.4	2.5	1.5	2.6	2 2 5
25	1.5	2.8	2.8	1.4	3.2	1.7	2.8	1.2	1.9	3.5
26	1.7	3.4	3.5	3	2.6	1.8	3	2.5	1.6	2.5
27 28	0.3	3.1	3	2.6	0.3	0.4	2.8	2.7	3	1.9
	1.3	3.5					3	2.7	2.3	2.4
29 30	0.9	1.1	2.5	2.5	0.7	0.4	2.6	1.5	2.7	3.6 2.3
31 32	2.6 0.6	0.5	1.1	3.2	0.6 2.5	1.5	3.2	0.5	0.6	0.4
33	1.4			1.9	3.3	$\frac{2}{2}$	1.7	1		3.2
33	1.4	0.4	1.6	2.4	0.6	1.5	1.7	2.5	1.9	0.3
35	1.7	2.5	0.3	0.9	3	2	1.8	0.9	0.8	0.5
36	1.7	1.6	2	1.3	1.1	1.5		1.5	0.8	0.3
37	0.5	0	2.8	0.6	0.9	1.3	0.6	1.3	1.4	0.7
38	1	1.8	1.9	1.4	0.9	1.1	1.5	1.4	1.7	1.1
39	1	0.7	0.8	0.3	1.3	0.8	1.3	0.7	1.7	0.3
40	1.5	1.7	1.2	0.5	1.3	0.8	0.7	0.7	0.5	1.5
40	1.3	1./	1.4	0.5	1.3	0.9	U./	0.0	0.5	1.3

			Tṛtīyā		Caturthī					
1	2.4	2.6	4	0.8	4.2	2.4	2.8	3.2	2.1	4.3
2	1.2	0.4	3.4	0.6	3.5	2	2.7	2.4	3.7	4.3
3	2	0	2.5	1	4	1.1	2.6	3.9	4.5	3.4
4	2.3	0.9	2.4	1.6	3.3	2.3	3.1	2.6	3.5	3.3
5	1.6	2.5	3.3	2.3	2.5	2.2	3.5	1.9	3.7	2.9
6	2.2	2.6	2.8	0.4	2.6	1.5	2.3	3.2	2.8	4.7
7	1.6	1.3	3	0	2.5	2.3	2	3.2	2.3	3.1
8	2	1.8	3.7	1.1	3.9	1.2	2.7	3.1	2.7	3.1
9	2	2.2	3	1.5	3	1.6	2.2	2.6	2.8	3
10	1.7	0.6	2.1	1.5	4.3	1.4	2.6	3.2	2.8	3.6
11	1.5	0.8	2.6	3.3	3.1	1.1	1.8	2.7	2.3	3.2
12	1.6	2	3.2	0.4	3.5	1	2.7	2.8	2.2	3.5
13	1.4	1.3	2.2	0.4	3.8	1.5	2	2.2	3.1	4.5
14	1.5	1.5	3	3.2	3.7	1.6	2.5	2.7	3.5	3.2
15	2.5	1.1	3.2	2.5	3.2	2	2.6	2.7	2.8	3.7
16	2.3	1	2.6	1.7	3.7	0.4	2.5	3.5	2	3.1
17	1.8	0.5	2.5	3.5	2.6	1.5	3	4	3.4	2.2
18	2.3	1.5	1	3	3.3	1.7	3	2.1	1.5	3.4
19	1.8	0.4	2.2	2.5	3	0.7	2.5	2	2.1	3.2
20	0.3	1.4	2	2.5	2.3	1.6	1.7	3	2.5	3.4
21	1.9	0.8	1.3	2.5	2.2	1.5	1.8	2.8	1.7	3.1
22	1.8	2.5	0.8	3.5	3.7	0.8	3	1.8	2.5	2.5
23	2	2.2	1.3	1.8	3.2	1.5	2.4	3.1	0.7	3
24	1.6	2.5	0.7	2.3	2.1	1.5	2.2	2.2	2.2	2.8
25	2.2	2	2.2	1	3.4	1.6	2.5	2.3	3.3	2.7
26	1.7	3.2	3.6	2.8	2.4	1.9	1.7	2.4	3.7	1.9
27	1.2	0.5	2.5	2.5	2.5	1.5	1.1	1.5	3.6	3.5
28	0.9	2.9	2	2.6	2.7	2.2	0.5	2.8	3.4	1.3
29	0.4	2.7	3	2.5	2.1	1.8	0.8	2	2.4	3.1
30	1.4	2.1	2.9	3.4	1.3	1.4	3	1.7	3	4.6
31	1.5	2.5	2.3	2.3	2.5	0.9	1.6	1.9	2.4	2
32	1.7	3.5	2.7	3.8	1.5	2	1.6	0.5	2.2	2.7
33	0.3	2.8	3.1	1.9	0.3	1.2	1.7	1.2	2.4	1.4
34	1.3	2.7	2.7	3.3	1.5	0.6	2	0.5	2.2	1.1
35	2	2.6	2.7	3.3	0.8	1.7	1.5	0.6	0.6	0.4
36	0.7	3.3	3	3.5	0.4	0.7	1.9	1.4	0.3	0.8
37	1	3.8	0.7	2.8	0.4	0.5	0.9	0.9	1.6	0.7
38	1.3	2.8	2.2	3.3	2.4	2	0.5	0.4	2.1	0.4
39	1.1	2.8	0.7	3.1	0.8	1.2	1.8	0.6	0.6	1
40	0.2	3	0.5	3.8	0.9	0.7	1	0.9	0.5	0.9
			Pañcam					Şaşţhı	i	
1	2	4	3.6	3.2	3.6	2.1	0.6	3.1	0.7	3.7
2	2	3.1	2.8	2.3	3.3	1.1	1.6	3	0.5	3.5
3	2.3	3.4	3.5	3.3	3.5	1.5	0.7	2.4	1.3	4.1
4	2	4	3	2.7	3.4	2	1.5	1.8	1	2.4
5	2.3	2.3	2.6	2.9	3.4	1.8	2.3	3.6	1.7	2.6
6	1.9	2.8	2.2	3.3	3	2	0.5	2.3	0.7	4.4

				1			1		1	
7	1.5	2.5	2.5	2.6	2.1	2.2	0.9	2.5	2.3	3.8
8	2	2.9	2.1	2.9	3.4	1.9	1.1	2.6	1.5	2.8
9	2.3	2.9	3.5	2.9	2.6	1.4	0.3	2.6	1.8	1.5
10	1.9	2.5	3	2.5	3.5	1.5	0.3	2.5	0.5	3.6
11	2	0.7	4.4	2.7	2.5	1.5	2	3	0.4	3.1
12	2	2.5	4.2	2.7	2.9	1.2	0.9	3.5	3	2.2
13	2	1.6	2.7	2.2	4.1	2.6	2.4	3.2	2.8	2.6
14	1.1	3.7	2.2	2.6	2.7	1.2	1.5	3	2.1	2.6
15	1.3	2.9	3	2.5	2.2	2	0.9	3.4	0.4	1.8
16	1.5	2.3	3.5	0.6	3	1.3	0.3	2	2.3	3.5
17	1	2.8	2.9	3.7	3	1.6	1.4	2.5	2.6	3.7
18	2.6	1.3	2.4	3.4	0.7	1.9	1.2	2.4	2.5	2.7
19	0.5	2.4	2.7	0.5	2.5	1.2	1.8	1	2.3	4.2
20	1.7	1.5	2.5	1.9	2	0.4	2.9	1.3	0.6	2.6
21	1.6	2.5	1.7	2.9	3.5	1.7	2	0.4	3	1.4
22	1.3	2	2	3	2.8	1.6	3	2.3	2.5	0.5
23	1.3	2.5	2.3	2.5	2.2	0.4	2.9	2.9	1.7	1.8
24	1.5	2.4	1.4	2	4	2	2.4	2	2.8	0.5
25	1.5	3.5	1.9	3.2	2.5	1.5	2.1	0.8	3.2	2.8
26	0.7	1.4	3	1	2.7	0.8	2.6	1.1	1	1.3
27	0.8	1.5	3	1.7	2.6	1	3.1	1.8	1.7	2.3
28	1.2	2	2.2	2.6	3.2	0.9	2.2	0.3	2.8	2
29	0.7	0.4	2.5	2.6	2	1.3	2	0.5	1.7	0.9
30	0.7	0.3	1.1	2.6	1.2	0.6	0.5	0.5	3.1	1
31	1.1	0.7	0.4	2.8	0.4	0.5	3.5	2	3	1.5
32	0.6	1.5	1.1	0.7	2	0.5	2	3.9	1.4	2.6
33	0.4	1.2	0.4	2.4	0.6	1.6	2.1	0.4	0	1.1
34	1.2	1.2	1.3	2.9	0.8	1.2	2.6	0.5	4.1	1.8
35	0.7	1.5	1.2	1.1	0.3	0.7	2.5	1	3	0.4
36	0.3	0.4	0.6	0.7	0.4	1.7	2.3	0.9	3.3	0.3
37	0.5	1.3	1.2	2.2	0.6	0.9	2.5	1.4	2.3	0.9
38	0.7	0.8	0.3	0.3	1.1	2	2	0.9	2.8	0
39	0.5	0.7	0.4	1.3	0.4	0.6	2.4	0.3	2.2	0.4
40	0.6	0.7	1.2	1.4	0.3	0.3	2.8	0.8	3.5	1.5
			Saptam	-			•	Așțam	. <u>ī</u>	
1	1.8	4	2.5	3.3	4	2.2	4.9	4.5	4.4	5.2
2	1.9	3.9	2.4	3.2	3.5	1.5	2.4	3.6	3.2	6.1
3	2	3.5	2.4	2.5	3.6	3	2.4	3.4	3.5	3.1
4	1.9	1.7	2.2	2.8	3.3	1.7	2.5	3.5	3.5	2.7
5	1.9	2.8	3.9	3.5	3.3	1.7	2.6	3.1	2.4	2.8
6	2.2	2.4	3.9	2	3.3	2.6	3	2.6	1.7	3.5
7	2.2	1.8	3.9	3	3.3	1.6	3	3.9	2	5.5
8	2.5	2	3.1	3.5	2.9	1.6	4.6	3.5	2.2	4.5
9	1.7	2.5	3.4	3.4	2.9	2.1	3.5	2.5	2.7	4.3
10	1.7	3.3	2.6	2.3	2.7	2.1	2.1	3.2	2.7	3.7
	2									
11		2.1	3	2	3.3	2.8	2.3	3.6	3.4	2.7
12	2.1	2.5	2.8	1.3	3.2	2.2	2	3.7	3.7	2.5
13	1.7	1.8	2.8	1.9	4.2	1.1	0.7	5.5	2.8	3.6

		,	1	,			1		,	,
14	1.5	1.4	3.8	2.5	0.3	2.2	0.6	3.5	3	3.5
15	1.4	3.5	3.6	3	3.5	1.8	4.7	1.8	2.5	2.7
16	1.8	2.5	2.3	3	3.5	2.3	1	1.8	1.4	2.1
17	1.5	2	3	3	2.5	1.7	1.7	1.5	4.2	3
18	1.6	2.5	2.9	2.5	2.6	1.9	0.9	3.8	2.7	2
19	2.3	3.5	1.9	1	2.9	2	0.4	2	3	1.1
20	2.5	2.5	3.6	2.5	4.1	1.7	4.3	2.5	2.5	1.6
21	0.4	3	1.8	2.1	2.5	1.5	3.7	2.5	2.2	0.5
22	0.4	2.7	2.5	2.3	3.2	1.5	3.8	3.5	3.5	1.5
23	1.9	1.3	3.5	2	0.6	2	2.5	2.5	4.5	0.9
24	1.5	1.7	1.9	2.6	0.6	2.1	3.4	4	2.5	3.2
25	0.8	1.4	1.2	2.5	0.7	1.6	4	3.2	2	2.4
26	2.4	1.9	2	3	3.5	1.6	2.1	3.5	2.5	2.7
27	2.1	1.5	0.3	2.8	1.5	0.7	3.2	1.7	2.1	4.2
28	0.5	0.6	1.4	2.1	0.7	2.3	2.7	2.2	1.7	2
29	2	1.4	1.5	0	2.7	1.2	2.5	1.9	2.1	1
30	0.6	0.5	0.5	1	1.1	0.9	1.2	1.2	2	0.7
31	0.3	0.7	0.3	1.5	0.3	1	1.8	1.2	1.5	0.4
32	1.9	1	0.8	0.7	0.6	1.6	1.7	0.5	3.5	0.4
33	0.7	0.6	0.5	0.4	2.9	1.2	0.8	1.1	0.7	0.4
34	0.4	0.6	1.4	1.3	1.8	1.3	0.5	3	2.5	0.6
35	0.8	0.6	0.5	1.7	0.8	0.9	3	0.4	2.1	1.5
36	0.3	1.3	1.4	1.8	2.8	1.8	0.5	0.8	2.2	1.5
37	0.4	1.2	0.8	0.4	3.3	0.4	0.5	0.4	1.5	1
38	0.5	0.8	1.7	1.5	2.3	0.8	1	1.8	0.6	0.8
39	0.3	1.5	1.3	0.5	3	0.9	1.5	0.5	2.1	1.5
40	1.6	0.5	0.3	0.5	2.3	0.4	0	0.6	0.5	0.5
			Navamī				I	Daśam	l	
1	2.3	4.2	4.5	0.6	4.3	2.6	2.8	3.5	4.5	3
1 2	2.3	3.2	3.7	0.6	3.5	2.0	1.1	4.7	4.3	3.2
3	2.8	2.8	3.5	1.2	3.7	1.7	2.4	3.6	2 1	3.7
5	2.7	0.4	4	1.6	5.5	2.3	1.3	4.3	3.1	2.9
_	3	2.9	4.3	2	3.3	1.2	2.5	4.5	2.6	3.5
7	2.4	3.3	4.6 5.2	1.1	3.2	1.8	3.3	2.5	1.4 2.5	4.7
,				1.6	3.7	2.5	2.9	2.5		3.5
8	2.1	1.3	2.6	3.2	4	1 0	3.4	2.7	3.3	4.5
9	1.2	2.2	2.3	1.6	4.1	1.8	4.2	3.7	3.2	2.6
10	1.7	2.8	2.8	1.3	2.6	2.3	2.7	3.5	2.8	3
11	3.1	2	4.5	0.9	2.5	2.2	3.1	2.3	3.6	3
12	3.2	0.7	4.9	1.6	2.8	3.4	0.7	2.7	3.2	4.1
13	1.5	2.1	3.4	3.1	4	2.6	2.6	2.5	2.5	3.1
14	2.3	2	3.2	2	2.3	1.3	2	2	1.5	2.2
15	0.4	1.1	1.9	1.5	3.2	2.7	1.3	2.2	2	3.2
16	1.4	1.3	2.9	3	3.5	1.8	3.1	3.4	2	2.5
17	2	0.7	5.5	2.9	2.7	0.7	4.2	1.4	2.5	2.7
18	2	0.7	3.7	2.2	2.7	0.7	2.6	3.4	3.5	3.8
19	2.1	1	1.8	3.5	2.2	2	2.3	3.2	3.5	2.7
20	2.4	0.5	1.5	1.5	3.5	1	2.9	3	2.2	1.3

							_			
21	1	0.4	0.5	0.7	0.7	2.9	2	2.5	2.1	2.5
22	0.4	3.1	3	3.2	2.3	2	1.6	3.5	0.9	2.6
23	1.8	2	1.9	1.4	2.9	3.5	1.7	1.9	0.6	0.5
24	0.9	3.5	2.3	0.8	4	2.7	0.6	2.6	1.1	1.9
25	2.1	3.7	0.4	2	1.5	2	2.8	1.4	0.9	0.4
26	2.6	2	4.8	2.3	2	1.5	2.2	2.6	2.7	0.3
27	1.8	2.5	3.5	5.3	3	2.7	0.9	3.2	2.5	0.4
28	0.9	3.5	1	2	0.3	2.3	0.5	1.5	2	0.3
29	0.3	4.7	3.2	3	0.3	1.4	3.6	1	0.9	1
30	1.3	0.5	4.7	2.8	0.6	1.8	2	1.8	0.6	0.4
31	1.4	2.5	3.3	3.4	1.6	1.9	2	1	1.8	1
32	0.4	3.7	2.8	3.1	1.6	1	1.8	0.5	1.1	0.4
33	0.4	3.4	3.7	1.9	1.8	1.6	1.9	0.3	2	1.2
34	1.2	4.2	3	3.5	2.2	2	2.6	1.7	0.8	1
35	0.9	4.6	2	4.2	0.4	1.3	1.7	3	0.9	0.4
36	2	2.5	2.8	3.2	2.6	2.4	1.5	2	1.6	1.7
37	0.6	2.8	1.7	2.3	0.3	1.5	1.5	1.5	0.9	1.6
38	0.7	0.8	2	2.5	0.7	1.7	1.6	1.4	2.5	1.4
39	1	1.8	1.4	3.5	0.4	0.5	2.6	1.4	1.1	1.7
40	1.2	1.8	1.5	3.7	0.6	2.4	1.7	1	2	0.8
			Ekādaśī			Dvādašī				
1	3.5	2.7	3.1	3	4.5	3	3.6	1.7	3.7	1.5
2	2.5	1.5	4.3	3.5	3.9	1	3.6	1.6	4.5	1.2
3	3.5	3.5	2.1	2.8	4.2	2.5	3.7	1.5	3.9	0.3
4	2.5	4.3	3.9	2.8	2.8	2.6	4.7	1.5	2.5	0.5
5	2.2	1	5.2	3	3.6	2.7	3.5	1.7	4.6	1.5
6	2.6	2.9	2.8	2.7	3.5	3.7	2.2	2.8	4.0	1.3
7	2.5	2.4	4	3.1	4.2	38	4	2.5	3.3	0.4
8	1.8	2.4	3.1	3.4	3.9	1.9	3.5	1.2	3.5	0.7
9	1.7	4.2	2.6	3.4	3.5	2	4.4	2.5	3.3	2.8
10	2.1	2.5	2.5	2.8	4.9	2.3	1	0.6	4.5	2.8
11	2.1	2.4	4.7	3.5	4.5	$\frac{2.3}{0.7}$	2	3.5	3	2.6
12	2.9	0.8	2.5	3.5	2.5	1.5	2.6	2.8	6.2	1.8
13	1.2	- 1	4.5	3.8	3.9	2.4	2.5	2.5	4.5	1.9
14	1.2	3	2	3.0	4.3	3	4.4	2.8	3	0.8
15	2.7	3	2.4	2.6	2.5	1.5	3.5	2.6	3.5	1.6
16	2.7	3.3	3.2	2.5	3.5	1.9	1.9	3.8	3.5	2.2
17	2	2.9	1.5	1.9	2.5	3	2.3	3.3	2.5	0.9
18	2.7	3.3	3.6	3.3	2.3	2.5	2.3	3.3	2.5	1.6
19	2.7	2.5	3.5	2.3	1.6	2.7	3	3.1	3	2.9
20	0.8	3.3	3.3	1	2.3	1.9	2.2	3.1	3	3.8
21	2	3.6	2.1	2.5	3.8	2	1.8	3.5	4.5	1
22	2.2	2.7	1.7	2.3	1	1.2	2.3	1.6	0.8	3.1
23	1.9	1.1	3.1	3	2	1.8	3.9	4	0.8	3.5
24	1.9	3.5	3.1	3.5		0.7	1.5	3.2	0.3	3.3
25	1.7		1.7		2.8	2.5	3	3.8	0.3	4.3
		1.9		1.2	1.4					
26	1.4	0.3	1.1	2.2	2.7	2.4	1.4	3.7	2.5	3.5
27	1.5	3.9	2.7	1	2.2	0.7	2.5	3.1	4.2	3.5

28	1	1.8	3.6	1.9	0.8	0.7	3	4	2.3	2.5
29	2	2	2.3	3.7	0.8	3	0.8	3.5	1.3	4
30	1	2.7	1.6	2.6	1	0.6	0.5	3.7	1	4.2
31	2.5	0.5	3.2	3	0.4	0.7	2.4	3.9	0.8	4.3
32	0.6	2.5	2	1.2	0.5	2	0	3.2	1.3	3.2
33	1.7	1.5	2.8	2.2	0.8	2	0.5	4.8	1.8	2.9
34	0.7	1.7	1.9	1.8	1.8	2.8	0.8	4.3	2.5	4.2
35	1.4	0.5	6	2.6	1	0.8	0.8	7.1	2.3	4.2
36	1	1	0.7	3.2	1.5	1.5	1.5	0	2.5	3.5
37	1.3	2	3	0.3	0.8	1.4	0.5	3.7	2	3.8
38	0.8	1.2	3	1.6	0.5	0.3	1	3.4	2.3	3.7
39	1.4	0.8	4.1	0.4	0.8	1.3	2.4	3.8	2.5	5.5
40	1.6	0.7	1.5	0.7	1.8	0.4	1	4.5	2.5	4.2
		7	Trayodas	śī			\boldsymbol{C}	aturad	aśī	
1	2.4	5	5.2	4.8	3.8	2	4.3	1.3	4	3.3
2	2	2.7	4	3	3.5	2	3.5	0.8	4.4	5.6
3	1.9	3	6.9	2.7	4.6	2.5	3	1.1	3.6	2.6
4	1.8	4.5	4.8	3.2	3.5	3	3.2	1.6	3	4
5	4	2	3.5	2.6	3.3	2	2.5	1	3.6	3.5
6	2	5.5	3.5	3.4	1.4	2	2.5	1.5	5.2	3.2
7	2	3.1	3.4	2	0.7	1.7	3.5	1.6	3.2	2.5
8	3.1	3.7	2.3	4	4.5	1.1	3.2	2.8	4.6	3.2
9	2.7	4.2	3.6	3.5	3.8	2	3.2	0.9	2.1	5.8
10	2.7	3.9	2	2.7	3	2.1	4.1	0.5	4.1	4.6
11	0.7	2.6	3.8	4	4.1	1.6	2	3.5	3	3.2
12	1.7	2.2	3.9	2.7	4.1	1.1	2.5	2	3.3	2.5
13	2.5	4.3	2.7	3	1.7	1.3	2.8	2.1	2	1.1
14	1.8	0.4	3.8	2.4	2.2	2.2	2.5	1.7	2.8	3.1
15	2.7	3.7	4	3	4.1	2	2.5	1.3	3	2.6
16	1.7	2.5	3.3	5.2	4.7	1.8	1.7	3.1	3.6	2.5
17	1.3	2.5	0.8	3.5	3.5	0.8	2.9	1.2	4.1	0.5
18	2	3.2	3.7	3	5.2	2	3.1	1.3	2.7	1.3
19	2	2.1	4.2	2.7	0.7	2	2.2	3.1	2.3	3
20	1.9	2.8	2.2	1.4	1.8	1.8	1.5	3.5	2.5	3
21	2	3.3	3.3	2.3	4.3	1.7	1.1	1.3	3.1	2.5
22	2.1	3.4	2.5	5.5	4.5	2.1	1.1	3.6	4.3	1
23	1.5	3.7	2.3	1.5	4.6	1.8	3.1	0.8	1.2	2.8
24	0.7	2.5	3.2	2	4.3	0.9	2.8	2	1.5	0.8
25	1.2	0.3	2.5	2.6	3.5	1.7	2.4	2	2.6	2.5
26	1.2	2.8	3.9	1.9	3.6	1.2	2.1	2.3	1.7	2.6
27	1.6	3	2.8	1.2	3.2	0.6	2.3	3.5	2.1	3
28	1.6	1.6	3.9	1.5	2.5	1	2.4	0.3	0.3	2.6
29	1.4	2.4	2.2	2.6	2.6	1.1	3	2	1.5	1
30	2.7	2.4	1.7	2.3	3	2.2	0.6	3.5	2.1	1.5
31	2.2	1	1.2	0.9	2.5	0.9	0.6	4.2	2.4	2
32	1.1	1	0.4	2.7	2.8	1.7	1.2	2.6	3	2.3
33	1.2	0.7	0.3	1.3	0.9	1.8	2.6	2.7	2.7	2
34	2.7	1.2	0.6	0.8	1	1.8	0.8	1.4	0.8	1.5

	1								1	
35	0.5	1.2	0.2	0.8	1	1.4	1.9	0.9	3.2	0.6
36	0.7	1	0.5	0.4	2	1	3	1.8	1.2	2
37	0.8	1.7	0.8	0.7	0.6	0.3	1.8	1.8	1	1.2
38	0.9	1.6	1.9	0.8	1.1	0.4	1.8	0.3	0.8	0.3
39	0.5	2.2	2	1	0.5	0.4	0.8	1.3	0.7	0.8
40	1.7	3.7	3.5	0.9	1	0.4	2.5	1	0	0.3
					Amāva	ısyā				
1		1.5		0.5		2.7		0.5		3.6
2		3		1.9		2.6		1.3		2.5
3		1.6		1.1		3.2		2.5		3.2
4		2.7		1		3.1		2.5		3.5
5		2.5		1.1		4		1.5		2.7
6		1.7		1.3		3.2		1		4.2
7		2.4		0.8		3.5		3.7		2.8
8		2.5		1.1		2.5		3		4.5
9		1.3		0.5		3		0.5		2.5
10		2.1		1.5		2.4		1.2		4
11		2.4		1.4		2.1		2.3		3.3
12		0.9		1		3.5		2.2		3.8
13		2		2.2		1.8		1.7		3.4
14		2		2		5		2.4		3.2
15		2.1		1.6		3.5		3.5		3.8
16		1.5		0.7		4		3.5		3.9
17		1.7		2.3		3.7		3.1		2.5
18 19		1.1 1.9		2.8		2.5		1.7		3.5
20		1.9		2.8		2.3		3.5		2.8
21		2		0.9		2.5		1.1		3.5
22		2.2		2.1		3.5		3.1		3.2
23		1.9		1.1		2.1		2.7		2.7
24		2.3		1.7		3.2		2.9		2.9
25		1.7		1.7		2.7		2.8		2.3
26		1.8		3		2.3		3.5		2.5
27		1.5		2.7		2.5		2		3.7
28		1		2.4		3		2.9		2.7
29		2.4		4.5		2.3		1		2.7
30		1.4		3.3		2.2		2.3		1.6
31		1		2.9		0.9		3.5		2.5
32		0.9		1.7		2.5		3.4		3.4
33		1		2.5		2.5		4.3		1.9
34		2.3		3.9		0.9		4.2		2
35		1.3		2.9		1.5		3.5		4
36		1.7		2.8		1.6		3		1
37		1.1		3.2		1.3		2.8		3
38		1		2.5		0.9		3.1		2.4
39		2.2		3		1.3		3.5		1.3
40		1.2		3.2		1		4		1.5

Appendix 2 Table 2.1 Laboratory materials

Sl. No.	Photos	Particular	Size
1	HOTAIR OVEN	Hot Air Oven	
2	DISTILLED WATER NY COMMENT IN THE C	Distilled Water	5 liter
3		Magnetic Compass	
4	10 APPROVE FOX.	Beaker	50 ml
5		Scale	30 cm

6	THERMO/HYGRO/CLOCK	Hygrometer	
7		Scissor	
8		Filter Paper	
9		Petri Disc	
10		Balance	

Table 2.2 Details of treatment

Sl. No.	Picture	Particular	Size	Materials
1		Plywood Small Pyramid	13.5 cm × 13.5 cm × 10.5 cm	Plywood
2		Plywood Big Pyramid	20 cm × 20 cm × 15.5 cm	Plywood
3		Copper Small Pyramid	13.5 cm × 13.5 cm × 10.5 cm	Copper
4		Copper Big Pyramid	20 cm × 20 cm × 15.5 cm	Copper