

# SCIENCE SHORE

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ONLINE QUARTERLY MAGAZINE

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SCIENCE ARTICLES

SHORT STORIES & ARTICLES

POETRY

HOBBY & ART

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**SCIENTIFIC  
ARTICLES**



# SERIES 5 - ISRO - MANNED SPACEFLIGHT

GITA BHARATH

India so far has reached the Moon and Mars with extremely cost-efficient missions.

The Gaganyaan mission – India's first manned space flight – aims to carry three crew members to an orbit about 400km above the earth for five to seven days, and get them back safely. According to the Indian Space Research Organisation (ISRO) annual report and a webinar, the tech is being developed specifically for the mission. Being developed by the Hindustan Aeronautics Limited, the Gaganyaan crew module will be the first indigenous spacecraft to take Indian astronauts into space and return them safely to Earth.

The crew module will be a conical structure with a height of 3m and a diameter of 3.5m. It will house three crewmembers, their seats, electronics for aviation, and Environmental Control and Life Support Systems (ECLSS) meant to maintain the pressure, temperature, humidity, and composition.

"Design, analysis and documentation are done by ISRO while hardware for Gaganyaan is fabricated and supplied by hundreds of industries across the country", an ISRO official told P T I. The objective of the Gaganyaan program is to demonstrate the capability to send humans to low earth orbit onboard an Indian launch vehicle and bring them back to earth safely.

If completed India will become the fourth nation to conduct independent human spaceflight after the Soviet Union/Russia, United States and China. After conducting the first crewed spaceflights, the agency intends to start a space station program, crewed lunar landings, and crewed interplanetary missions in the long term.

Four Indian officers, who were selected to become astronauts to crew Gaganyaan into orbit, have completed their one-year training course in Russia's Zvyozdny Gorodok city near Moscow. Earlier, the ISRO officials had said that after receiving training in Russia, these astronauts will now receive module-specific training in India. They will be trained in crew and service modules designed by ISRO.

Scientists at the Indian Space Research Organisation (ISRO) are hard at work to get all the systems in place, including a human-rated launch vehicle, crew and service modules, a crew escape system, and the Environment Control and Life Support Systems (ECLSS), to meet the launch timeline of the Gaganyaan mission slated for late 2022 or early 2023, according to people familiar with the matter at the space station. Being developed by the Hindustan Aeronautics Limited, the Gaganyaan crew module will be the first indigenous spacecraft to take Indian astronauts into space and return them safely to Earth.



The four gagannauts, who had returned to India from Russia in April this year after completing their over one-year specialized astronaut training for the country's maiden Gaganyaan mission, will go back to Moscow again after fitting of their customized spacesuits which are being stitched there.

In another milestone linked to the Gaganyaan mission, had on August 28, 2021, ISRO successfully conducted the first hot test of the system demonstration model of the Gaganyaan service module propulsion system for a duration of 450 seconds at its test facility Mahendragiri, Tamil Nadu. The system performance met the test objectives and there was a close match with the pre-test predictions. A series of hot tests have been planned to simulate various mission conditions as well as off-nominal conditions.

ISRO plans to launch its first unmanned Gaganyaan mission next year but the date for the final manned mission has not been decided yet as the pandemic has affected all mission-specific deadlines.

#### Other developments:-

Over the last 3 years, ISRO has initiated 46 technological endeavors such as Quantum communication, space-debris mitigation technologies like self-eating rockets, self-vanishing satellites and robotic arms to catch space debris.

ISRO has also created a 'Vision 2030', based on ideas received from its scientists and engineers. This includes "General purpose Humanoid robots, in-situ propellant production for interplanetary exploration, planetary rock sampling, intelligent space vehicle, robotic arm in space, spider rover, AI enabled spacecraft". Some of these are in implanting stages and some being tested in labs.

The spin-offs from such technological products are also expected to be of great utility to the country and its rapidly-growing advanced requirements.

For the first time in its space exploration mission, an evasive measure was carried out recently to avoid the collision between Chandrayaan-2 Orbiter and US' Lunar Reconnaissance Orbiter (LRO), said Indian Space Research Organisation (ISRO). According to ISRO, Chandrayaan-2 Orbiter and National Aeronautics and Space Administration's (NASA) LRA were predicted to come very close to each other on October 20, 2021, near the Lunar north pole. After consultation with NASA, Chandrayaan-2 Orbiter was moved away on Oct 18, 2021, by the ISRO team.

With inputs from Business Standard, The Hindu, Times of India and India TV

# IMPACT OF COVID-19 IN INDIA AND ROLE OF INDIAN TRADITIONAL MEDICINE AS THERAPEUTICS: A REVIEW

MATHANGI D

## ABSTRACT

At present, there are many clinical trials in the process to study several other potential therapies for COVID-19. Usage of traditional medicine is often restricted and not much preferred in treating many diseases in this modern era. The reason stated “unscientific and nonevidence”. Time has come to analyze the science behind the traditional herbs and research on the implementation techniques to treat the contemporary diseases. Through this review, we have discussed the details on the probable antiviral traditional medicines of India and their effects in the treatment and rehabilitation of Covid-19.

Keywords: COVID-19, traditional medicine, antiviral, treatment.

## INTRODUCTION

COVID-19 that is spreading across countries, which is known to be originated from Wuhan is a massive pandemic. The report from the World Health Organization cited that there are over 116,670,105 confirmed cases, 2,592,085 deaths, 92,282,109 recovered. [March 06, 2021]. As found by researchers “Coronaviruses are a family of large (ranging from 27–32 kilobase), enveloped, signal-strand positive-sense RNA viruses, which have characteristic club-like spikes on their surface” (Walls *et al.*, 2020). Contact and aerosol transmission are the ways by which this virus is getting transmitted.

Traditional vs. Modern medicine has always been a perennial debate. The fight for survival, the adoration for health has made people to look for a traditional solution. Being one of the oldest civilizations, the traditional medicine of India treats the root cause of disease and not just the symptoms. At present, there is a huge demand for the Indian herbal products across the country. Modern medicinal treatment has many side effects which might affect other vital parts of the body that may give raise to further complications. In India, more than 70% of modern drugs are obtained from natural products.

## SIDDHA MEDICINE FOR COVID-19 TREATMENT

Siddha is one of the ancient traditional medicine systems originated in South India which incorporates the extensive use of herbs, (Eg : *Zingiber officinale* - Rhizome), inorganic substances (metals, salts, minerals) and animal products (Eg: Nathaiparpam , commonly known as fresh water snail, used for the treatment of piles) for maintaining a healthy life (Table 1).

Siddha System of Medicine (SSM) has diverse and extensive use of natural resources for the prevention and management of co morbid conditions, epidemic or pandemic diseases.

TABLE - 1

Some of the Siddha medicines used for the management of COVID-19

S.NO	SIDDHA DRUGS	PHARMACOLOGICAL ACTIVITY	REFERENCE
1.	<i>Adathodai</i> Manapagu	Antipyretic, anti-inflammatory, antioxidant, antiviral, and hepatoprotective activity	Singh SK <i>et al.</i> , 2017
2.	Kabasura kudineer	Antipyretic, expectorant, antispasmodic, anti-asthmatic, antiviral, antioxidant, and immunomodulatory activity.	Thillaivannan S <i>et al.</i> , 2015
3.	Thontha sura kudineer	Antiviral, anti-inflammatory, anti-asthmatic, hepatoprotective, and immunomodulatory activity.	Chen JX <i>et al.</i> , 2009
4.	Vajra kandi kudineer	Antiviral, anti-asthmatic, antioxidant, immunomodulatory activity.	Saravana SP <i>et al.</i> , 2020
5.	Visha sura kudineer	Antipyretic, antiviral, anti-inflammatory, anti-asthmatic, antiviral, antioxidant, hepatoprotective and immunomodulatory activity.	Shailaja R <i>et al.</i> , 2017
6.	Nilavembu kudineer	Antipyretic, antiviral, anti-inflammatory, anti-asthmatic, antiviral, antioxidant, neuroprotective, hepatoprotective.	Rubeena M <i>et al.</i> , 2018

## EFFECTS OF NATURAL HERBS AND PRODUCTS ON COVID-19 - CURCUMIN

Studies have shown hypercytokinaemia and hyperinflammatory response in some patients with COVID-19. COVID-19 patients' condition has become intensified resulting in increase in the production of pro-inflammatory cytokines due to the administration of curcumin (turmeric) ( Shimizu *et al.*, 2011).

## CINCHONA SP.

Baroni *et al.* (2007) examined the antiviral effect of quinine and one of the most desired drugs for COVID -19 treatment was quinine sulphate. It was concluded that antimalarial drugs have some advantages against the viral infection. Another study reveals that Quinine inhibit viruses by production of cytokine IFN-  $\alpha$ , which is an Immune-stimulator or inhibits the TNF-  $\alpha$ , which is an immunosuppressant (Maruyama *et al.*, 1994). Apart from their benefits, regular consumption of this is not advised as it might lead to several harmful effects in the body.

## LICORICE ROOTS

Yang *et al.* (2020) examined and stated that "Licorice root may provide symptomatic relief to COVID-19 patients experiencing breathlessness because of its expectorant and antitussive actions".

## APPROACH OF AYURVEDA FOR COVID-19 PROPHYLAXIS: RASAYANAS AS IMMUNOMODULATORS

The use of herbs in the form of Rasayana is known to act as immunomodulators and helps in immune homeostasis restoration. Based on data from studies conducted, plants namely Ashwagandha (*Withania somnifera*), Amalaki (*Phyllanthus embelica*), Shatavari (*Asparagus racemosus*), Guduchi (*Tinospora cordifolia*), exhibit immunomodulating potential (Balasubramani SP *et al.*,2011).

## MEDICATED WATER

Most widely used whole spices in our day-to- day cooking are added to boiling water and used as effective medication. They may comprise of *Cyperus rotundus* (coco-grass), *Zingiber officinale* (ginger), *Hemides musindicus* (Indian sarsaparilla)roots, *Cuminum cyminum* (CuminSeeds), *Coriandrum sativum* (Coriander), *Acacia catechu*(black catch) barks and *Cinnamomum verum* (Cinnamon).

## HERBAL FACE MASKS

Rahman *et al.* (2020) had made masks comprising of phytochemicals from plants, fibres (cotton), which could filter the virus. Another study reports limitations for these masks as they

are based on particulate, fluid resistant, bacterial filtration capacities. Furthermore investigations are necessary to get a complete prototype.

#### FUTURE PROSPECTS:

It is an inevitable situation to speed up the development of antiviral drugs that are cost -effective and has minimal after effects to treat COVID -19 patients. Major difficulty in drug targeting is, mutation of the virus during replication is very rapid. We should consider several aspects when estimating the antiviral activity such as extraction methods, parts of plants to be used, different combination of herbs, appropriate season for collection of plant materials, active substances present etc.

Additional research needs to be carried out to control the spread and to treat patients. This is a wake-up call for the Government to focus on retrieving the traditional medical practices. They can allocate more funds for research and studies to improvise the use of traditional medicine in treating the disease.

#### CONCLUSION:

It was evident that even modern medicine was ineffective in treating COVID-19 patients initially. A completely new mutation resulted in testing times for modern medicine, but we believe the answer lies with traditional herbs. As a part of emergency response Indian government experimented the combination of Traditional and Modern Medicine in treatment of COVID -19. Further research on natural herbs and their products will be promising.

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# MAKING CHAIRS USING DISCARDED TYRES

PRINCE R BRIGHT

We all have seen worn out tyres being thrown away and these pollute our environment in many ways. So to prevent, I thought of reusing these tyres. In all our houses we have chairs and stools but we have to spend money for buying them. There is a way of making one with waste materials without spending money. We can make chairs and stools with discarded tyres. The making is very much simple.

Now to make one we need the following things:

- (1) 2 discarded tyres.
- (2) 250g of plastic/nylon rope. [Rope: Rs 200/kg]
- (3) Four 1.5inch long nut and bolt.
- (4) A drilling machine/an iron rod.

Making:

First wash the tyres properly and place each one on top of the other. The better one of the two worn out tyres should be placed at the top and take a long straight rod and place it on the side of the tyres and see if they are arranged straight. Take a drawing equipment and mark on the tyres according to the Figure-1. Then take each tyre and according to the markings draw another line from one marking to the other as shown in Figure-2. Then drill two holes using an iron rod or drilling machine on the dividing line so that we can bolt the tyres but remember to drill holes according to the position so that when you bolt, the holes will be aligned correctly one below the other. Then bolt them together. Take the drawing material (chalk will be efficient) and mark 4 points correctly on the opposite sides of the tyre as shown in Figure-3. Then like the four markings, mark 32 holes and see if the markings are correct.

We can start to drill holes according to the markings. It would be easier to drill holes with a drilling machine, but if you only have an iron rod then heat it and slightly press it against the marked area of the tyre. We need to be careful [the iron rod must be 3 feet long because if it is short, while heating it would be hard to hold the rod].

After drilling the holes take the rope through one hole and pull the rope at the end and tie a knot so that it would be stuck. From left/right, count 9 holes and insert the rope through 9th hole so that we will get 8 holes in between. Fill up every hole after covering 16 holes on both sides. Start from the other 8 holes as shown in Figure - 4.

Remember while joining the rope from hole to hole each time, tighten the rope as much as you can because the more tighter it becomes, it will be more comfortable. At last you can paint it in any colour you like. The more tyres you connect, the height of the chair will increase. Chairs made with discarded tyres mean we are preventing environmental pollution.



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**Figure:1**



**Figure: 2**

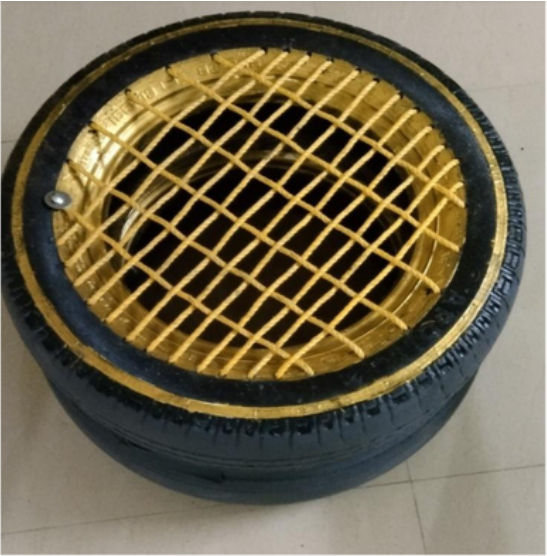


**Figure: 3**

**Figure: 4**







# QUIZ

AARTHI.M , ANANTHAKRISHNAN C.N, G. AVANTI, G. GAUTAM, SNEHA PRABHU AND G. YASHICA

**Quick Mind Bogglers. Just try them!**

**1. The process of loosening of the soil is called:**

- a) Tilling
- b) Harvesting
- c) Spraying
- d) Weeding

**2. Rabi crops are harvested in:**

- a) January
- b) March
- c) October
- d) September

**3. Supply of water to crops at appropriate intervals is called:**

- a) Cultivation
- b) Irrigation
- c) Harvesting
- d) Sowing

**4. The status of algae in the aquatic food chain is:**

- a) Consumers
- b) Producers
- c) Host
- d) Small in size

**5. This preservative is also called “Sour-wine”?**

- a) Salt
- b) Sugar
- c) Vinegar
- d) citric acid

**6. Dry Ice is known as**

- a) Absence of moisture in CO<sub>2</sub>
- b) CO<sub>2</sub> in the state of gases converted into solid CO<sub>2</sub> directly
- c) CO<sub>2</sub> without water
- d) Solid CO<sub>2</sub> converted directly into gaseous CO<sub>2</sub>

**7. Brass is separated by**

- a) Chemical process
- b) Physical process
- c) Physical process followed by chemical process
- d) Filtration

**8. Which among the following is exclusively marine?**

- a) Porifera
- b) Echinodermata
- c) Mollusca
- d) Pisces

**9. There are four biosphere reserves included in the world network of Biosphere reserves (within the body of UNESCO'S man and biosphere programme). Out of four mentioned below, pick the odd one out.**

- a) Nilgiris in Karnataka, Kerala, Tamilnadu
- b) Nanda Devi in Uttarakhand
- c) Sunderbans in West Bengal
- d) Manas in Assam

**10. The idiom "hang in there" means:**

- a) Hanging on in a place
- b) Singing
- c) Not to give up
- d) Meeting friends.

**11. The value of radix in binary and decimal number systems respectively are:**

- a) 2 & 8
- b) 8 & 2
- c) 16 & 10
- d) 2 & 10

**12. Express A6F in octal.**

- a) 50018
- b) 52108
- c) 51578
- d) 55888

**13. How many bytes does UTF-32 take to represent a symbol?**

- a) 16
- b) 32
- c) 4
- d) 8

**14. If  $l = 3$ , name the orbital. How many values of  $m$  will it have?**

- a) d (orbital); 3 (values)
- b) d (orbital); 7 (values)
- c) s (orbital); 5 (values)
- d) f (orbital); 7 (values)

**15. Electronic configuration of Cr is:(Cr=26)**

- a) [Ar]4s23d6
- b) [Ar]4s23d4
- c) [Ar]4s13d5
- d) [Ar]4s13d3

**16. Which one of the following processes is the main task for the computer in mapping the Geographical Data?**

- a) Data Storage
- b) Data Visualization
- c) Data Retrieving and Drawing
- d) Data Collection

**17. Given the following emails fields, which of the email addresses with "SWAMI" be able to see when he receives the message?**

To... ram@test.com

Cc... raja@test.com; rama@test.com

Bcc... swami@test.com; rama@test.com

- a) ram@test.com
- b) ram@test.com; raja@test.com; ravi@test.com
- c) ram@test.com; rama@test.com
- d) ram@test.com; rama@test.com; raj@test.com; ravi@test.com

**18. Which of the following enables us to send the same letter to different in MS Word?**

- a) Mail Join
- b) Mail Copy
- c) Mail Merge
- d) Mail Insert

**19. The Octal Number System consists of the following symbols \_\_\_\_ .**

- a) 0 – 7
- b) 0 – 9
- c) 0 – 9 , A – F
- d) 0 – 8

**20. Which one of the following is different from other members?**

- a) Google
- b) Windows
- c) Linux
- d) Mac

**21. Which of the following is not a Civil Right?**

- a) Right to Life
- b) Right to Marriage
- c) Right to Education
- d) Right to Divorce

**22. An ideal fluid is?**

- a) one which obeys Ohm's Law
- b) frictionless and incompressible
- c) one that has more shear stress
- d) compressible

**23. Forces are called concurrent when their lines of action meet in**

- a) one point
- b) two points
- c) plane
- d) perpendicular planes
- e) different planes.

**24.** Which of these is a neurological disorder?

- a) Hashimoto syndrome
- b) Alzheimer disease
- c) Alopecia

**25.** Exposure to sunlight helps a person improve his health because

- a) resistance power increases
- b) the infrared light kills bacteria in the body
- c) the ultraviolet rays convert skin oil into Vitamin D
- d) the pigment cells in the skin get stimulated and produce a healthy tan

**26.** India opted for mixed economy in

- a) Industrial policy of 1948
- b) Second five-year plan
- c) None of the above

**27.** Special drawing rights (SDR) was introduced by

- a) RBI
- b) IMF
- c) SBI

**28.** The concept of consumer's surplus is associated with

- a) Robbins
- b) Alfred Marshall
- c) Adam Smith

**29.** In Which of the following countries the first stock exchange opened

- a) India
- b) Netherland
- c) U.S

**30. The curve which has combination of any two similar goods and give equal satisfaction to consumer.**

- a) Demand curve
- b) Iso -quant curve
- c) Indifference curve

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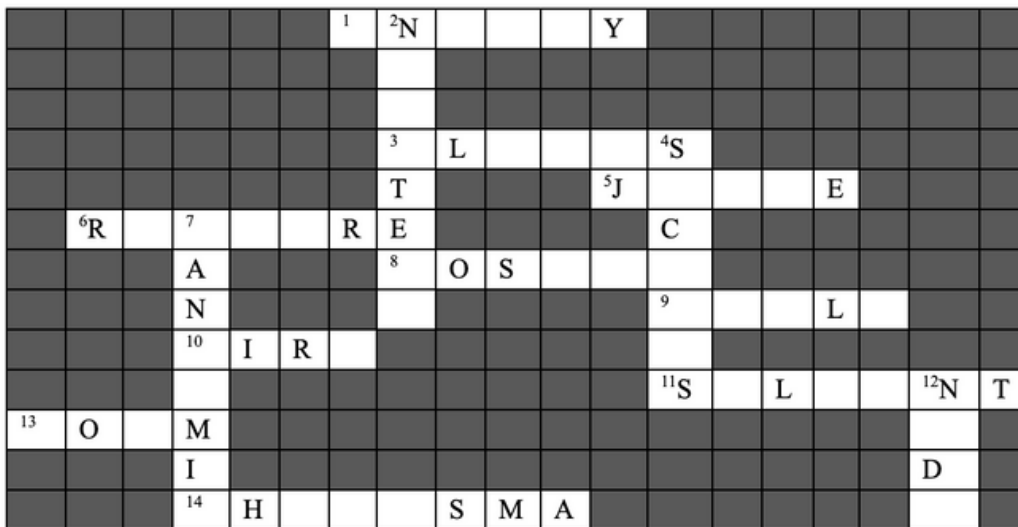
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Q: 26-30 Aarthi.M

Answers (See page no: 27)

# CROSSWORD PUZZLE

D. RUPPESHWARI & Dr. THIRUPURASUNDARI C J



## ACROSS

1. Quick burst of calories
3. Added in pizzas
5. Do not go by appearance. Don't \_\_\_\_\_ a book by its cover.
6. Explode or crack
8. A type of energy-spiritual
9. This virus can cause internal organ bleeding, hemorrhagic fever
10. Tiny worthless particle that might irritate
11. Noteworthy characteristics
13. Being prompt and punctual. The Early bird catches the \_\_\_\_\_ .
14. Can influence

## DOWN

2. Related to sensors-tiny particles
4. We all yearn for it
7. A common word of late. Wide-spread
12. A protrusion (in botany, new life starts here)

Answers: (See page no: 46)



# SCIENCE PUNS

Dr. THIRUPURASUNDARI C J

1. My hormone joke never allows you to mourn, it makes you happy always. In its absence, you are left forlorn.
2. DNA's thick pal, Pol 1, is a friend in need during breakups.
3. The nucleoid and ribosomes enjoy a romantic space in prokaryotes.
4. No stick, no ink, no paper, no long conversations, yet I dance to the tune of my guide (blueprint). What a control!!
5. Nucleus has many doors through which nucleic acid and proteins explore.
6. The chloroplast which absorbs light is always piled up, is never light!
7. DNA's fun is undone without its winding-dancing partner histone.
8. My microscope plight is on and off bright, she is in delight due to my sight.
9. Fruits and flowers are in flying colors as their best buddy the chromoplast is always with them.
10. The nucleoplasm always peeps out to sight the curves of the Golgi. Complex task though!



**SHORT  
STORIES  
&  
ARTICLES**

# THE CHANGING TIMES

ARUNDHATI MUKHERJEE

Life after Twenty Twenty is not the same as before. The pandemic has changed the scenario in all facets of life. We are in an age of disruption in all fields from business, to technological innovation to our daily life of digitalization, and also our evolution as an awakened being. Among all these chaos an order is emerging slowly, unnoticed . The world is more connected, we are feeling and experiencing the value of shared responsibility. The web of life is distracted. But the pandemic taught us one very important lesson. The lesson of butterfly effect. The emergence of corona virus was not limited to one country. It spread globally and the ripple effect could be experienced and felt in all walks of life. Business models redefined. Education system renewed, revisited, reprogrammed, work culture in industry changed for adaptation, as reskilling, reviewing, redefining work space, mindset and revisiting our goals became inevitable.

Overall we are all set to stabilise ourselves in the New Normal.As an emerging world realized and felt that we are all jewels in the Indras Net, the web of life, intricately connected to each other. Our thoughts, our actions are small vibrations that we emit in the universal space and it affects the universal mind, the consciousness and others as we are but parts of one whole. The oneness of being has to be felt and realized and our children should be taught, so that they become responsible. Each one has our role to play in nature, and take responsibility to create a space of wellbeing and harmony. Each one of us has to be responsible towards our physical environment, to keep it green as well as our mental environment to be in peace as we all have a shared responsibility towards our environment. Our inner environment affects our outer environment. Our inner environment of thought, emotion, egoistic notion are nothing but waves in motion, having certain energies. We are but energy bodies as we know from the science and quantum physics of the wave particle duality.

Each object in the universe be it plant, animal, human being, inanimate objects like rocks, car etc have wave signatures that is unique to each. Our wave signature is the average of the vibrations of our cells, organs, thoughts, emotions, egoistic selves and our inner soul, true self. We are energy bodies and vibrate at frequencies of different levels. This vibration is affected when we interact with outer environment, people, place, objects. Similarly our vibration affects the people with whom we interact. We attract people and circumstances in our life who resonate with our frequencies. Thus we create our physical reality.The world we see today is our creation, created from the thoughts,emotion,vision of each of us collectively. So we are all cocreators in this life, affecting the life of each other. Thus we have the shared responsibility to better our life and the life of others.

When we vibrate at higher frequencies we feel the oneness, the bliss and inclusiveness. When we vibrate at lower frequencies our mind shrinks, we feel depressed, sad, separated, individualistic and we want and have tendency to escape from life. The choice is ours to choose from innumerable possibilities. To create our physical reality, a life of joy and happiness. Creative pursuits like art, painting, poetry, music, literature, science, makes us vibrate at higher frequencies. Our association is very important. Our association can uplift us or destroy us. Spiritual well being by being rooted to our true self, our inner being, by yoga, meditation, breath exercises, Pranayama, charges our energy bodies and make us vibrate at higher frequencies. We feel the energy of love, vigour, vitality. We excel in our outside world, as we manifest our creative potentiality.

We are in a phase of 4th Industrial revolution, and also in the cusp of changing climate obligation. We have done enough harm to our environment by meeting and growing our energy needs from non-renewable sources of coal, oil, gas thus increasing the carbon footprint. The World Climate Summit COP 26 at Glasgow in November, reviewed the goals set by ratification of 195 countries, to keep the global temperature rise well below 2 degree Celsius and strive for 1.5 degree Celsius and to achieve Net Zero target of Carbon Foot print by 2050. But for that the shared responsibility lies with each one of us. Our top scientists, industrialists are working towards bringing more renewables, like solar power, wind power, hydro and as well as the latest future fuel green hydrogen, to achieve the target of Net Zero by 2050 and India by 2070, by reducing the carbon footprint. We as individuals can contribute in small scale by growing some green plants in our neighbourhood, in our gardens, in our balconies. We can make our green home with potted plants to beautify our home as well purify the air. The green plants have regenerative frequencies which positively affect our body, mind and spirit. We are revitalized being in nature , being in green environment. So lets understand our shared responsibility for a green, clean environment.

So we see that our small actions affect the global environment, be it physical or be it the global consciousness. So raise your vibration, with wealth of positive thoughts, cordial warm, relationship, creative pursuits and action, being in company of nature, associating with creative people, thus attracting people and circumstances in our life who raise our level of consciousness to higher echelons. Redefine your goal in changing times, reskill, revitalize and move on. Change is the way of life. Nothing is permanent. The river flows, it does not turn back, it breaks boulders being flexible and flowing and merges with ocean which is its goal. Be like water flexible and strong, accept challenges, overcome, be in a perpetual state of flow, we are each but waves in ocean. Rise and fall, emerge, submerge. Feel the crests, feel the troughs, flow on, move forward, emerge and submerge in the ocean of consciousness. Embrace change in changing times with smile in lips and heart strong, be flexible adapt and adopt, be all set to a New World, be cocreators of a wonderful, peaceful, green, clean Earth, to enjoy the sojourn and leave a wealth of happiness for future generation.

# PHONE PAY

HEMA RAVI

During my customary veggies shopping the other day as I did not have adequate change to tender, the vegetable vendor quipped-' please do G pay ma'am!' He gave me a smirk when I exclaimed I did not believe in electronic transfers and that I prefer cash dealings, at least for the day to day transactions. I guess I am part of that minuscule number who still vouch for the conventional mode of payments.

In today's technology-driven world, mobile phones act as wallets for purchasing goods and services through online portals. The world is recognizing fast the comfort of clinching financial transactions digitally and securely, which saves a lot of time, effort and resources. Shopping without carrying physical money increases the comfort and security of the buyer. Firstly, it expedites transactions without much hassle. For instance, having to pay bills by the end of the month used to be a nightmare until half a decade ago, as individuals had to be physically present at the authorized offices, whereas in the present times, a single click does the task in seconds. Not just this, there is no need to carry and tender the exact change, or wait for the change from the clerk. And such transactions can be done 24 X 7, not necessarily at specific 'working' hours.

Nevertheless, a few challenges are faced by customers who rely upon gadgets to pay bills. Uncertainty in the internet connection, technical difficulties can have a toll on the shopping experience. For example, when the customer waits at the billing counter with a low battery phone, it can increase tension and restlessness, making the shopping experience uneasy. Moreover, complex procedures cannot be effortlessly handled by all kinds of customers that includes the technologically challenged ones.

Furthermore, inadequate security features in certain countries result in consumers falling prey to cyber bullies. For instance, a recent news item carried information about a politician's daughter in India, who was duped of several thousands while attempting to clinch an online sale. Lastly, theft of mobile phones can result in data-theft by online hackers.

Digital wallets have gained increasing prominence in recent years because of the comfort in operations. Interestingly, small business persons that include the local vegetable vendor and grocer have acquainted themselves with payment modes, hence, it is definite that these wallets would reach more corners of the country and will soon embrace all and sundry in its fold.

# STAYING MOTIVATED!

KOWSALYA R ARAVIND

Sometimes you may find yourself directionless and overwhelmed, be it when you are job-hunting or trying to achieve your dream body. Don't let the bump hit your morale. If you want to change something, be the change. Agreed that it is hard to stay motivated when you see no results or nothing seems to work your way but keep it going.

Start with the basics: The drive to achieve your goals is impacted by how much you want to see yourself there, what do you expect and what do you gain when you reach where you want to. Do your research and set a clear plan to get yourself on track. Close your eyes and visualize where you want to be. It is important to change your old habits to see a new you. This may in turn help you cope with challenges and look for new opportunities. A motivated you would see a problem in a new light and therefore achieve goals.

Think about the goal and how you want to work it out. Start with a small, specific, easily achievable goal in a short period of time, or break your goals into smaller ones with reminders. Ask for help from friends and family you can rely on to encourage you. Work with people who have similar goals to keep yourself motivated.

To stay motivated, write down your goals, with reminders and look at them every day. Keep telling yourself that you can do it or you will try. Try joining support groups that offer effective motivation. Gift or reward yourself when you have reached a step towards your goal.

Remain focussed by reviewing, reworking, and following your progress regularly. This will motivate you to move towards the goal with a new zeal and will boost your confidence. Continue to set new goals for you to move a step closer to your ultimate. Try learning new skills that would be useful in the long run or help you reach where you want to be. Positive self-talk or reading self-help books are some habits that you can inculcate. Surround yourself with people with a positive attitude. Exercise or enrol in a physical activity that you have always wanted to learn. You may volunteer for a local social cause that inspires you.

When you feel that you are losing momentum, review and make changes to your goals. You can break them further into simpler steps. Remind yourself why you want to be where you want to be. Think of people who you have known who showed resilience, perseverance and have achieved their goals over a period of time. Think of your goals and relate to their personal experiences. Be grateful for where you are today. Recollect your past insecurities and uncertainties, and how you have overcome them. Be kind and don't go too hard on yourself.

And sometimes, it is a break that you really need. Relax and get back when you are ready with a fresh and motivated body, mind, and soul.

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# RUBBER ENGINEERING WITH FIBRES

K.S.LOGANATHAN

Rubbers, both natural and synthetic, are elastic materials that recover to almost their original shape after the complete release of the applied force. They have the all-round ability to be used in extension, compression, shear, torsion or a combination of these forces. A typical rubber vulcanisate is a three-dimensional flexible polymeric matrix that is cross-linked by chemical bonds in which a variety of compounding ingredients, such as the reinforcing agents carbon black and silica, are incorporated.

Rubbers are usually, but not always, bonded with or fabricated into composite articles with steel, glass or fibre reinforcement for use in tyres, conveyor belts, hoses, etc. Special preparation methods are required for processing various fibres such as cotton, rayon, nylon, polyester, glass, aramid and steel cords for incorporation into rubber articles.

Organic fibres are mainly composed of longitudinally oriented linear macromolecules. Steel wires, drawn from high-carbon steel cords and twisted into strands after brass plating are also used. It is usual in the case of uni-directional plies to stack them in a symmetrical arrangement set at angles of zero degrees, plus alpha, minus alpha and 90 degrees in the axial direction to form composites such as tyres and spiral-wound hoses. The fibre architecture may be varied by textile processing methods such as twisting, weaving, braiding and spiralling. These have different effects on load-bearing capacity, shape retention, energy storage and durability of the rubber products such as conveyor belting. Due to the vast differences in molecular reactivity, polarity and unsaturation of the fibre and matrix components, adhesion (the strength of the rubber-textile bond) can only be achieved by careful preparation of the textile with a coating or flexible adhesive layer and embedding in rubber before vulcanisation.

Strength, stiffness and toughness are the qualities needed for the use of rubbers in various products such as tyres, power transmission, conveyor belting and hose. In many products, the carcass composed of the reinforcing textile is durable such that a process of re-treading can replace the worn-out rubber portions, typically extending the rubber product life to withstand over seven million flexing cycles in operation at large deflections.

To know more about the subject, view the following links:

<https://www.youtube.com/watch?v=he-Xn3iGl4M>

<https://www.youtube.com/watch?v=sE23xFtuj68>

<https://www.youtube.com/watch?v=ZEiJbBIDT6Y&t=5609s>



# **“DO NOT WAIT, TO CELEBRATE YOURSELF...”**

MADHUMATHI. H

*Dear young girls/ women out there! Don't stick to 'Age is just a number', please. It is true, but not always. (This is for all genders indeed, but girls/women need to hear this often.)*

*Age, is also time, energy, health, responsibilities, phases of life... Not just a number!*

*Never lose sight of yourself, trapped in the mundane 'to do' tasks, forgetting or ignoring your dreams and passion. Start right NOW, the moment you find your calling. You never know what awaits, on the other side of 30,40, 50+... with added and unexpected responsibilities and situations in life.*

*It is not smooth and easy for all. Each one's strength to juggle challenges, differ.*

*Sometimes, you won't even find time to close the umpteen tabs open on your mind; often, you can't! You might be too tired, numb, to even tick the task you have already done, and stare at it as if it still needs a plan for execution.*

*Do not live a life, filled with 'What ifs', and 'If onlys'...Just do what you love NOW, and stop worrying, "what will others say/think?!"*

*But let me reiterate, as a reminder to self, and to all the souls who have a zest for life, who need a reassurance - even if you think you are a late bloomer, do what you love, NOW! Art, passion, dreams, are never about age. All you need is the thirst, to do! Ignore the inconsiderate society, the nit-pickers...Your heart, and soul doesn't have an age! Do what you love. Fly. Soar. Explore. It's YOUR LIFE! One beautiful life.*

*Stay away from people who misuse your love and kindness, who drain your time, and energy, and from those who lack integrity.*

*Only YOU can love yourself, in the most beautiful way! Celebrate the IMPORTANT YOU.*

It's not *selfish* to  
love yourself, take care  
of yourself, and  
to make your  
happiness a priority.  
It's necessary.



MANDY HALE

GH



# NIGHT WATCHMAN

T S MANOHAR

My aged mother, a passive observant of matches on the television darted in a question.

"Who is a night watchman?" For once, not deciding to brush her away, I took pains to explain to her. "It is a strategy employed by the batting side to substitute a lower order player in place of a higher order batsman when a wicket falls a few overs before the close of play. Typically this night watchman with lesser batting prowess is expected to play out time. The batting side doesn't mind losing his wicket instead of the regular batsman" I said.

My wife over hearing this interjected, "he is a sort of a "bakra" a sacrificial goat, eh?"

"You are closer to that. We don't regret losing his wicket", I said, acknowledging her quick interpretation for once!

Intent to flummox me she asked, "What if he gets out immediately. Will they send another "Bakra"?"

"Indeed it did happen in the recent Indo-Srilankan test, you see. The night watchman was out of the first ball necessitating sending another night watchman. Lo behold ! the second one too perished very soon and a regular batsman had to walk in to fill the breach!"

Empowered through my interaction and emboldened they said in unison, "So these night watchmen failed to "perform" their "duty", isn't it?"

To whet their appetite and satiate their interest, I continued, "Sometimes, the night watchman not only stays firm and plays out time but outscores others and wins the match for his side also! Jason Gillespie of Australia, not much of a batsman at all, coming in as a night watchman notched up a double hundred the next day and remained unbeaten too! Bangladesh batting thereafter lost the match miserably. Gillespie won the man of the match and 'hung up his boots' soon thereafter, retiring on a high!. A successful night watchman indeed ! A few others have done that as well". I put paid to their further enquiries and curiosity.

You can extend the 'night watchman' concept to everyday walk of life too. I always reserve my branded foot wear to the best occasions and wear the cheaper one for the rest. You see, mix up of foot wear or losing it is not uncommon in a function where you have enter barefooted inside the hall.

That's exactly what happened the other day. Since the roads were slushy due overnight rain, I chose to wear the cheaper sandals for the yoga series demonstration. I left the pair outside the venue and busied myself with the program. Much after the curtains coming down on the event, I ventured to locate my sandals. Someone had inadvertently swapped his branded

footwear for my cheap look alike pair.

Back home, I told my wife, I lost my night watchman, but got a day watchman!

This time around she was foxed by my 'googly' and took her some time to unravel the puzzle!

*Answers to Quiz  
on Page 11*

1.a, 2.b, 3.b, 4.b, 5.c  
6.d, 7.a, 8.b, 9.d, 10.c  
11.d, 12.c, 13.c, 14.b, 15.c  
16.c, 17.b, 18.c, 19.a, 20.a  
11.c, 22. b, 23. a, 24.b, 25.c  
26. a, 27. b, 28.b, 29. b, 30. c

# HEALTHY LIFE RESOLUTIONS

NALINI JANARDHANAN

One more new year is here after a stressful and sad phase of Corona pandemic. Most of us make new year resolutions in the month of January every year but unfortunately we fail to keep up them. We know that most of the health problems and diseases like obesity, heart attack, hypertension, cancer, diabetes, stroke, arthritis, high Cholesterol level etc seen in modern life today, are related to changes in our life style and unhealthy eating habits. So this year, why don't we make resolutions to keep ourselves healthy?

## EXERCISE

For keeping ourselves fit and healthy, regular exercise is a must. Be active and move around instead of sitting for a long time. Various health problems can develop due to sedentary lifestyle. Running, jogging, swimming, playing games, brisk walking, dancing, cycling-all these are good for health. Walking is a good exercise for elderly people. It is better to consult your doctor before starting any heavy exercises especially if you have any health issues.

## SLEEP

Sleep deprivation can adversely affect our immune system just like in diseases and stress. Lack of proper sleep can be associated with many diseases and health problems like heart attack, diabetes, anxiety, overeating, hypertension, obesity etc. So we must get adequate sleep of 6-8 hours at night. A short afternoon nap also can make you feel fresh.

## DIET

Diet is most important in keeping us healthy.

### 1) Avoid fried food items and fast food

Heavy consumption of cola type of carbonated drinks, fried food items and fast food may lead to obesity and associated health problems like high cholesterol, heart problems, diabetes etc. So we must avoid them.

### 2) Eat more fiber and healthy fats

Fiber helps in reducing cholesterol and prevents overeating and constipation. Fiber is required for the smooth movement of faeces through large intestine. A high fiber diet reduces the risk of cancer, diabetes and heart diseases. So include more nuts, seeds, grains, cereals and fruits in your diet.

Reduce the intake of dalda and other unhealthy fats. Excessive consumption of oil is not good for health. We must consume healthy fats and oils like Coconut oil, Safflower oil, Sunflower oil, Olive oil, Groundnut oil etc.

### 3) Eat good quality proteins

Eggs, fish, chicken, dairy products (milk, curds, cheese etc) soya products, nuts, seeds, legumes and sprouts contain good quality proteins. But excessive intake of proteins can be harmful to kidneys.

### 4) Eat nutritious diet

A well balanced nutritious diet containing carbohydrates, proteins, fats, vitamins, minerals is good for health and development of immunity to prevent diseases. Include fruits, raw vegetables (in salad form) and green leafy vegetables in your diet. Eat less salt, sugar and processed food items.

### 5) Drink water

Adequate intake of water is required for the smooth functioning of kidneys and digestive system. We must drink at least 8-10 glasses of water daily. But those with kidney diseases need to restrict their water intake as per their doctor's advice.

## EXPOSURE TO SUNLIGHT

Calcium and vitamin D are essential to keep our bones healthy. Include foods rich in calcium in our diet. Exposure to sunlight helps in synthesis of Vitamin D in our body. Elderly people should take supplements of calcium and Vitamin D as per doctor's advice.

## STOP BAD HABITS

Smoking, drinking alcohol and addiction to drugs are injurious to health. So avoid these bad habits.

## MEDITATION

Stress related health problems like Hypertension, anxiety etc can be reduced by meditation. Relaxation and meditation helps in stress relief and keeps your mind calm and relaxed. Meditate for at least 5-10 minutes a day.

## HEALTHY RELATIONSHIPS

Sharing quality time happily with your family and friends helps in keeping your mind stress

free and healthy. Making friends and joining a group of likeminded people keep us happy and improves our outlook towards life. Elderly people will also be benefited by this, as social interaction can help them in fighting depression, loneliness, grief, anxiety and isolation. So let us make resolutions for a healthy life this year. Start living a little differently, a little happier, better and healthier... Keep smiling and live a happy life!

WISH YOU ALL A VERY HAPPY NEWYEAR 2022!

# A BOND UNBREAKABLE

NEHA S CHAKRAVARTHY

For someone like Siya waking up during the early hours of daybreak could be a pain. It was the second week of the month and her brother was to fly down to Mumbai from the Swiss for his holidays.

It was an unsaid rule in their family to pick Rohan from the airport every time he comes home and Siya absolutely hated this practice especially when she is forced to be up before the sun. But it was her brother for whom she doesn't bother about ruining her 'Sunday schedule' of not leaving the bed from sleep till noon.

Siya watched Rohan talking animatedly to his parents about his workplace and colleagues. 'Those guys are very much like me, cool and jovial', he said with glee evident in his eyes. For a second, Rohan bothered to look at his little sister. She, with a frown, was munching the pringles he bought exclusively for her.

He at an instant remembered the time when she cried for days because he left home for work abroad. She was too young then but an ambitious well-natured miss. It was too much for her to adapt to the truth that her brother would no longer be able to drive her to school, take her out to the local park every week or get her a 'makeup ice cream' after a fight. Getting accustomed to it seemed as difficult as scoring a perfect ten in her maths grade!

In the four hours since Rohan was at home, it did not occur to Rohan to initiate a small talk with Siya. Suddenly Rohan shot up from the couch; heading to her, perched beside her with a warm smile.

'Hello, Bhaiya', she chirped, extending the tin of pringles to him. 'You look upset', Rohan said, winding his arm around her shoulder. 'What's the matter?' Siya blinked her eyes and murmured 'I couldn't get you the HMT.'

From their mother, when Rohan heard that his baby sister was saving up all her pocket money and is extra conscious about her monetary consumption to buy him a watch (especially HMT) which to him will be of great importance; it was news to him!

But what caused him utter surprise was that she couldn't make it up to it. 'That's ok. I know how much you would have worked upon that and I am happy at all for it. Thank you Siya,' he pulled her into his embrace.

'Gita didi's daughter had to undergo minor surgery for her eyesight. So I asked Amma if I could help her with the money I saved, and she agreed!' Siya said.



It wasn't the first time he was turned tongue-tied by her. But this day was different. Rohan saw it in her - the heart to help. It was no little thing for a fourteen-year-old Siya to fund the housemaid's daughter's treatment to cure her of the ailment with the most that she could!

'I knew you would be happy if I did this Bhaiya, aren't you?'

'Very much Siya!', he said. She was emotionally, mentally matured and the brother was cent per cent glad about that.

'But I have something else.' Her doe eyes shone as she jogged to her room. Inside her tender palms, she carried a rakhi. 'This is for you! Happy Raksha Bandhan... in advance,' she said and tied it delicately around his wrist.

More than how she chose the particular coloured thread knowing red was his favourite and decorating it with pearls and beads, Rohan was turned teary-eyed at the words she carved on its wooden portion, 'To the best brother.'

# **SERIES - 1**

## **SUBCONSCIOUS OBSERVATION BELIEF SYSTEM (SOBS) - SUBSTANCE OF A THOUGHT**

ORBINDU GANGA

Each passing moment, the flow of thoughts drive colourful and intriguing images before us. Such images have an ephemeral shelf life. Most of the images momentarily stay giving way for many of their counterparts to flow. Some drive many subsets unintentionally making the mind chock-a-block. The varied emotional outburst is punctuated with the frequency and subsets of thought driving one to react in extremities.

The inception of thought is conspicuous and the whole flow is never defined. They leave traces before getting disappeared. The traces are cumbersome to be observed and identified to draw a proper conclusion of their life cycles. Thoughts being transitory give blurred layers of understanding. The substance of thought is fragmented; its flow is subjected to the inception of the thought and the circumstantial flow of occurrence. The fragments never give rise to another fragment instead the subsets of the earlier formed re-emerge as a beta version connecting with the fragments. The emotional processing involved is from the information of the fragments and the subsets which are giving a complex entity influence the mind to react.

When a smile flowers, the connected subsets having the events related to smiles emerge, giving an emotional liberation of bliss. The flow is the same when sadness smears, the events related to sadness merge in the form of many subsets, making one in extreme pain. Emotional anxiety is high in pain than when one is in bliss because the events related to pain are more and the influence they have is more pronounced. Bliss is seen to be rare as the belief system accumulates more shades of burden suppressing the smallest events with bliss to be non-existential.

Subconscious Observation Belief System (SOBS) believes in smoothening the flow of thought. A thought originates and flows without any influence. A thought breathes without any condition or a flow, it doesn't have a pre-set journey to follow. SOBS doesn't influence the journey of thought. The flow of the thought is never coercion to change the journey by SOBS but drives the mind to be in a state of stillness and flow. SOBS let the aura surrounding the thoughts not influence the thought process. The aura ricochets the thought to flow in its direction when they try to influence the mind. The aura created by SOBS in the mind cease many subsets against forming a complex entity. By stopping another subset to be connected with the fragments, the thought doesn't have a greater influence on the emotional aspect of the mind. SOBS make the mind flow in a direction away from the thought of many subsets to think. The influence of the thought to think deeper on insignificant aspects gives stress and strain to the mind and body which is negated by SOBS. The thinking mind is never stopped but the mind creating negative vibes are been ceased by the aura created by the SOBS.

Subconscious Observation Belief System drives a belief system where the functional thoughts help the form in creating a thinking mind and let the non-functional fragments be ceased before many subsets re-emerge influencing the belief system to thwart. The substance of the thought is drafted in a media to be coupled and driven to a flow of lesser significance so that the elements involved in the thought become non-functional, never to become a subset for the future fragments to be connected back as a substrate to form a greater complex entity.

# THE IMPORTANCE OF EDUCATING CHILDREN ON PREPARING PRESENTATIONS

PARVATHI RAM

Bold, clear, and confident communication skills are some of the most vital skills to be followed all through our lives. These skills make us better people to be remembered and respected by everybody.

Educating children on the above skills at an early stage makes a high impact on them. Grooming children on the above helps them to gain confidence and overcome shyness, stage fear etc.

Children on gaining the above skills shall be able to shine in school, also climb the corporate ladder quickly and easily, as these are the most wanted skills expected from candidates when entering the corporate sector. On developing the above skills, they not only seek jobs but also provide jobs.

Skills such as presentation and speech should not only be conducted during school hours but also during holidays. Varied topics can be given to children as part of their holiday homework and informed to present the same when school reopens. Parents are requested to understand the importance of the above skills and should motivate and guide the children.

Today's children are tomorrow's leaders for the upcoming future leaders of the nation. We shall concentrate more on improving their oratorical and presentation skills beyond bookish knowledge.

Hence I request the Educational institutions to include the above skills as an integral part of the curriculum and take steps wholeheartedly and vigorously to produce inspiring, motivating, and life-changing speakers.

Speakers are made and not born and educational institutions can also take pride in bringing out the best speakers to the world.

# DECODING VALUES

POOJA SINHA

It was my daughter, Rhea's 18th birthday. I and my husband Nikhil, were excited, elated and so nostalgic. There was a great deal of enjoyment, reminiscing and a program arranged by my parents today evening.

All our eyes were fixed on the screen and the heart touching videos and clippings beautifully done up by us. The photos took me down memory lane and I was lost in thought.

*Rhea at 5 years:*

We had shifted into an apartment complex and within a month were a part of the lively atmosphere & community festivals organised by the committee members. I and Nikhil had arranged for a part time nanny who helped out when we both were at work.

My parents stayed in the same city and my father often came home reciting stories, incidents and hilarious anecdotes. On Sundays we would all be glued to the television screen watching Cds of the Ramayan. My father loved explaining the teachings advocated and applicable in real life. He always said that these stories explained, how to decode life and live in a good and healthy manner.

Today he was explaining that truth always wins no matter how powerful evil is. Rhea was sitting wide eyed and rapt in her grandmother's lap and listening intently to my father.

Monday morning had been a long and fulfilling day at work despite a few glitches, but that went with the territory. I was now eager to just go home and relax with my family. I entered my home, my daughter, Rhea came running to greet me. As soon as I lifted her all my worries of the day just slipped away.

The ringing of the doorbell put another smile to my face. Nikhil was bringing pizza today and I was eager to unwind and relax. I opened the door with a smile and saw instead of my husband, a stranger, standing holding a thermos. He said, "he was our new neighbour and he had just shifted about 2 days back." I vaguely recalled seeing a movers and packers van in our campus. I smiled and introduced myself as Shefali. He said, "he was Rishi and had come to Delhi on a transfer." His electrician hadn't shown up today and so he asked, "if he could get a thermos of tea or hot water." I readily agreed and while he sat in the drawing room, I made a pot of tea. Namrata had by then made friends with him and was eagerly showing him her colouring book. He seemed at ease and after thanking me for the tea, left.

At around 10pm the three of us went for a walk and along the route chatted with multiple friends and neighbours. After an hour, as we approached our door, we were surprised to see that it was ajar. I vaguely remembered locking it but wasn't sure. Nikhil entered and almost

fell backward when someone shoved him roughly. Two men wearing masks had sacks full of stolen goods. I was about to scream for help but one of the men placed a hand over my mouth. He roughly dragged me into the house and started tying both me and Nikhil on the chairs. Rhea had woken up and was now sucking her thumb looking scared.

Just then one of the men slipped and fell, his mask slipped a bit and Rhea shouted saying that it was Rishi Uncle. I was shocked but saw that he had the same tattoo I had seen on Rishi's arm, when I had handed him the thermos earlier. I whispered the events of the evening to Nikhil and he too was shocked.

After a frenzied search the thieves locked us in the house and ran away with most of our electronic goods and cash. We managed to untie ourselves and unlocked Rhea from my bedroom. She was crying and her whole face had turned red. I just grabbed hold of her and hugged her tightly, relieved to know she wasn't hurt in any way.

We then called up the police and they helped in partially solving the turn of events. We were surprised to know that the man named Rishi had entered on false pretences. No one had as yet bought the flat opposite us. The movers and packers had come with new neighbours staying on the 16th floor. The whole experience made us all jittery and we packed our bags and shifted in with my parents.

6 months later:

It felt so blissful relaxing at the beach. The food was awesome and our constant banter made the time fly.

Once back in our room, Nikhil said, "he would attend the conference taking place in another hotel and might return by 11pm." I bid him adieu and slept soundly with Namrata. At about 6 pm we both entered a shop selling swim wear for children. The Sales assistant looked vaguely familiar and though I tried placing him I couldn't. As he returned the change, I noticed his wrist had a familiar tattoo! Oh my God, I thought, this was Rishi, the burglar! The police were called and they managed to interrogate the salesman. At first, he denied any wrong doing but after 4 hours of grilling he admitted that he was Rishi and said they were a part of a gang that had the same shark tattoos engraved and would conduct burglaries on various houses. "They would generally burgle those guests who came to stay at the Peach Candy Resort. The database had addresses and they had gang members pose as people who have just moved in.

The papers next day were full of my role in nabbing the culprits. A cash reward was given by the Mayor and I became a celebrity overnight. But the best gift was being recognised as a heroine by my daughter. All's well that ends well.

My parents were in the habit of connecting real life experiences with the teachings by prominent speakers, wise men and women, through books, mythological tales etc. My father often quoted the teachings by Lord Shiva- of never committing sin through words and actions. He also took pains in explaining about the advantages of keeping good company. He told Rhea, had Rishi the burglar, had good friends he would have managed to earn a decent living instead of cheating and stealing things. He even recounted how in the Ramayan, Queen Kaikeyi had been brainwashed into believing that sending Ram for 14 years of exile would be good. Had she surrounded herself with a good circle of advisors and people she would never have had such negative and poisonous thoughts in her head for Rama, who she loved so much. My father was happy with the way I dealt with the situation and proud of Rhea as well. He had invited us for the weekend and started relating an incident that occurred years ago involving me.

*My father had made me join a company he had joined recently and I had been looking forward to working under his able guidance. It was heady, exciting and exhilarating to finally see my father practice all the principles he so fondly advocated in person.*

*When I joined the company, I was the only female amongst around 10-15 male colleagues. The branch where I worked was a new one and people were still being interviewed and recruited. I used to commute to office with my father daily and since he came home for lunch so did I. One day I insisted that I would stay back like the rest of my colleagues and have my tiffin with them in the lunch room. This way I would get a chance of interacting with them and making friends too. My parents accepted my decision but none of us realised what was in store for me.*

*During office hours everyone was polite and cordial so I hadn't expected the silent treatment meted out to me during the lunch hour. It took me 3 days to understand that it was probably a way/manner of ragging me! I decided to handle them in a mature manner. I too stopped talking, we would all sit in silence and eat our respective lunches! What surprised me immensely was that I had won this round against colleagues who had a work experience of 15 years. It had elated me that I defeated those bullies at their own game.*

*My father too smiled and said that bullying was a very bad thing and one should ensure that neither one bullied nor got bullied. My father said that, "Goddess Parvati always stood up for women empowerment and women were in no way weak."*

Someone patted me gently and I hugged my daughter grateful for the pearls of wisdom that had helped all of us decode how to live life peacefully and harmoniously.

# MY EXPERIENCE ON AN ISLAND

SETALURI PADMAVATHI

I journeyed to join a school on an attractive and peaceful island where all students were playful, less concentrated in studies, naughty, creative, and bold. Almost all the students were interested in troubling the teachers while the class was going on. As a methodical teacher, I started my classes in an amicable manner, observing their attitude and sincerity towards their lessons. They're very much interested to know about my native place and family, love cleanliness, and used to come in white uniform which always reminded me of peaceful doves.

The school is in the lap of nature, surrounded by palm trees and the blue sea. Classrooms were well ventilated and furnished. It was an enjoyable place for a teacher to work. What a beautiful place and comfortable atmosphere it is! It has a beautiful playground very big library that consists of various books like literature, science, and technology, societal issues, logical thinking, etc. All the students are used to live with a comfortable life.

Students' punctuality was a notable quality and creativity was awesome, especially in drawing anything they imagine and see! Furthermore, they were skilled fishermen, carpenters, masons, and hardworking. I appreciate them for all their abilities that they live with as they're self-dependants on the small island. Almost all families love division of work and believe 'sharing is caring.' They are loving and affectionate, besides being cooperative.

In the beginning, it was very difficult to adjust to society and lifestyle. Gradually, I adopted all essential styles of life and accustomed to the ambiance of the school.

I motivated the students with my impressive teaching aids, examples and drew their attention. It was a group of twenty students. They began concentrating on lessons and developing themselves with great interest though they're average. It gave me immense happiness anyway.

I was impressed with a girl student, named Rifa who's silent, curious, and inquisitive. She's dark in complexion, attractive with big black eyes, friendly, competitive, soft-natured, loving, and hardworking. As an ambitious student, she wished to improve her language skills and fluency as well. Oh! Those naughty boys! They never allowed her to do her work peacefully. She was an average student but strongly believed that failure is the stepping stone for success. Despite having disturbance from peer groups, she used to get good guidance and develop her skills finally at the end of the year.

"Practice makes a man perfect." She believed in this quote and worked so hard to achieve her success. I was astonished to see her performance in her test papers. She was in many teachers' good books undoubtedly.



Appearing an international exam in IGCSE O' Level (Grade 10) was very tough for students as they'd to work systematically. They had vigorous practice for six months in LSRW skills constantly and completed their examinations. "If the power to do hard work is not a skill, it's the best possible substitute for it."

All of them got worried on the result day. I was unsure about their grades, as they were slow learners. At last, they came to know that most of them came out with flying colors, and Rifa, the dream girl scored a very good percentage. Rifa's parents were on cloud nine when they saw her prospering well, year by year. She got appreciation from her parents, teachers, and all her friends. Mischievous students had turned into hardworking students. Her parents came to me and thanked me.

"Success seemed to be a connection with action and successful people keep moving."



# **POETRY**

# THE MYSTICAL JOURNEY

ARUNDHATI MUKHERJEE

The autumn brings shades of auburn, russet and gold,  
the misty moon light in river behold!  
The harvest moon sheen,  
festive season, night jasmine gleam.

The boat moves on, boatman beckons all,  
the bonfire at night at the end of fall,  
the winter ushers in, as misty nights call,  
as the cold winds blow, the ride we recall.

The dewy grass green,  
the misty morn, sun unseen,  
the winter birds chirrup, on the branches,  
dead, sans leaves, hope it searches.

Cold is bold, just behold,  
when winter is nigh, spring just behind,  
seasons of life, scorches in sun,  
drenches in rain, gleams in fall.

Colours and hues of flowers do bloom,  
birdies sing in monsoon and spring, without gloom,  
nature sheds and rejuvenate,  
storm arises and abate.

The mystical journey flows,  
in misty night, the moon sheen glows,  
night darkens most, just before dawn shows,  
the light of waking sun, life moves on in highs and lows.



# OUR JOURNEY

GITA BHARATH

Once the moon was a lonely satellite  
And men looked up into the sky at night  
The bright stars twinkled, setting minds alight  
And from bullock carts men moved to space flight.

What do the eternal stars say today  
Do they still talk of space and time at play?  
But men's minds have become polluted, gray,  
Their intellect blunted and turned to clay.

I wonder sometimes if we've lost our way  
On evolution's path, and gone astray.  
Let's sharpen, refocus our clouded gaze  
On dreams of traversing endless spaceways.



# EMBERS

JAYALAKSHMI

Off and on we know  
Floating diyas come and go  
From unknown shores  
Illume our gloomy isles, revealing  
Those ashen pine shoots

Of those unspoken words  
Made our moments  
In an alpine nest  
In simmering dales.

Of one unexpected rain  
Drench and roll us  
In swampy field  
Scattering the grazingcattle.

Of those quivering retweets  
Of the unsheltered koels  
Far beyond the wuthering misty mountains.

Of those weird mysteries  
We immerse tranquil  
With our old pap peepal  
In waning twilights.

On and on recede and rebirth  
Dreams and despairs  
Yielding to times howling wheels  
Far and near stare fresh grass lings  
In befogged alien dales.

Still how dense fall and die steady monsoon  
On earth's reminiscingchest  
Lost in mirth of this  
Delirious drops  
I listen to you  
Call my name once more.

Photo Courtesy: Internet



# CONVERSATION WITH NATURE

JELLIE N.WYCKELSMA

High above the birds survey the sky  
Telling us how wonderful it is to fly  
In the rivers and oceans the silent fish  
Show us how beautiful their environment is

In the Antarctic circle the penguins  
Say they feel warm under by their plumage skins.  
Animals in the wild remind us that to be free  
Is the only way everyone's life should be

In the forests we hear the whispering leaves  
Sending messages from frolicking trees.  
Daisies say they are the stars in the field  
A little light in your dark days to yield

The bees buzz, sending us their soothing sound  
Butterflies flutter happiness for us all around.  
Sometimes we have to listen only and thus  
Hear clearly what nature is telling us ...



# COSMIC AFFAIR

JELLIE N.WYCKELSMA

Looking up at the firmament  
My eyes see a million twinkling stars  
I recall how children would sing along  
An old English nursery song:

*“Twinkle, twinkle little star  
How I wonder what you are  
High above the sky so high  
Like a diamond in the sky.”*

I am constantly overawed  
By the multitude of little lights  
When together they try to dispel  
The inkiness of the nights

Should I catch a falling star  
In my pocket it will stay  
Treasuring it for the rest of my life  
Never letting it get away ...

I am mesmerized by the cosmic mystic  
The vastness of the universe  
Which of course deserves far more  
Than this simple verse .....



# SONG OF THE CATAMARAN

KAMAR SULTANA SHEIK

Come, sings the Catamaran,  
The fish are calling, the rain is falling,  
Come to sea, with me, I have to feed many a family!

Come, sings the Catamaran,  
Let's on the still waves sway, and salty waters play,  
From the din of the foamy shore, far away!

Come, sings the Catamaran,  
Let's venture into the sea of adventure, filling our baskets with the hunger-quencher..  
The garlands are waiting, for our victorious homecoming!

Oh, what a surge of wanderlust it brings,  
When the Catamaran sings!



## Answers to Crossword on Page 17





# CONUNDRUM

LEENA THAMPI

I come from a different dimension,  
not from this generation  
But I live in it  
I want to be a traditionalist, yet be a Neophile.

I am a weird kind of new in between,  
Neither in crowd nor in my room  
I want to be lost, yet be found.

Name me insane ,intelligent,  
Introvert, arrogant or modest  
Don't ask me why ,  
I want to be a mystery, yet be solved.

I walk far away from negativity  
Now that doesn't ache my mentality,  
As I empty myself of myself  
I want to be together, yet be alone.

I realise that I was born  
Not to impress or loathe,  
but to impart and mould  
I want to be famous, yet be unknown.

I have travelled through my madness and found the real me  
And I wouldn't let anyone rent my space free  
I want to be attached, yet be detached.

My shadow tells me not to be afraid of,  
We will meet on the other side of the tunnel  
I want to be optimistic, yet be doubtful.

Nature the healer, releases the endorphin petrichor  
My love for rain will remain eternally strong  
I want to be an Autumn girl, yet be a pluviophile.

My soul is from elsewhere,  
A divine anonymous place  
And I intend to end up there  
I want to be a wanderer, yet be at home.



# KINDER TO SELF...

MADHUMATHI. H

On a coldest night  
My poems turned bonfire  
In their warmth  
I felt all the love I have written for the world  
I felt all the love  
I forgot to give myself  
My poems reminded me  
I need a hot cup of tea  
Before I shovel the snow  
Of all the winters of life...

Photo captured by Madhumathi.H



# NATURE'S REVENGE DURING COVID 19

K. MONIKA

If you'd not slashed my tree  
I would have given you oxygen for free.  
If you'd not sabotaged my wildlife  
I would have helped you now to survive.  
If you'd not tainted me by using plastic  
I would have assisted you in this drastic.  
If you'd not developed the pollution  
At present I would have given you the right solution.  
If you'd not dug a hole over my ozone  
I would have helped you in this hazard zone.  
If you'd not caged me  
I would have given you serenity and glee.  
Here and now I am away from harm  
But you are out of calm.  
Henceforth nurture nature  
For the welfare of future.



# ON THE WAY TO VILLAGE

K. MONIKA

The field, green and serene  
Where unadulterated love was seen.  
The birds hatch eggs in their nest  
While the farmers plough and harvest  
The road with grooves and mound  
The river flows with a burbling sound.  
Laden with tiny, brown shack  
And the ducks quack quack.  
The cattle driven by the cowboy  
The children swing over branches with joy.  
The land nurtured with care and amor  
Sans pollution and clamour.  
A flawless place where nature beguiled  
Time to enliven our innate child...



# A HAPPY NEW YEAR, A HAPPY NEW YOU

ROOPA SUBRAMANI

New years come, New years go,  
Another one is already here with brand new resolutions in tow

The mind with it's unstoppable intention to grow  
the intellect's craving power to know  
Everything that's hidden and yet to show,  
But the Heart, Oh, always so slow,  
never in a hurry to follow  
The mind whose glutinous tendency is to chow  
down every bit of information in an insatiable flow  
Into the brain that is ever so proud to glow  
All with the borrowed light shining from within the Source-full, spaceless window!

Therefore, as we welcome the brand new year with a million different things we have lined up to do, let us resolve in our hearts to never forget the preciousness of being, this life essence within us too and may this be our firm resolution for the year 2022, for this year to be a HAPPY NEW YEAR, A HAPPY NEW YOU!!

# STAR LIGHT, STAR BRIGHT

SANGITA KALARICKAL

Scorpio has long set  
Sagittarius ready to rise  
Winter sky rolls out  
its deep ink carpet

Phones pointed at the  
sky,  
we peer through star maps.

...that is Vega  
in Lyra...

from the shores of the Milky Way  
we wish upon a  
shooting star.

children squeal in  
sheer delight  
and in  
their eyes,  
stardust gleams.

And the previous generations  
smile back down  
from the blue yonder

...dust...  
to dust.



# THE SEEKER OF EVERYDAY MAGIC

SHINY VIKAS

The seeker of everyday magic  
The magical dawn  
The magical dusk  
The time that is neither ahead  
Nor behind, hold on!  
The rays that travel all-day  
The serenity of the moonlight shining all night  
Magic in every art  
In every creation  
The creator seeks nothing  
The magic is the creator's art  
We hold it in our everyday act  
By being present with the existence  
Magical  
Mystical  
Dark  
Shady  
Bright  
Vibrant  
Colorful  
In every magical move  
"Breathing- in"  
"Alive".



# LOVE TO LIVE, LIVE TO LOVE

SETALURI PADMAVATHI

A flower cannot blossom without sunshine  
A child cannot bloom without affection.  
A child and flower flourish on the earth  
As they get support from their warmth.

A place can be loved for its beauty  
A person can be loved for his creativity.  
A place and person can be attached  
As they are very much attracted.

A brother is lovable when he's honest  
A sister is lovable when she's sincere.  
Honesty and sincerity are the two sides  
Which help us to identify the true love.

Friends are lovable as they guide us  
They are bearable when they glide us.  
Parents are lovable when they tackle us  
They are acceptable when they suggest to us.

Teachers are lovable when they handle us  
They are suitable since they train us.  
People are lovable when they support us  
They are bearable when they are in rapport with us.





# NEED OF THE HOUR

SUDHA RAJENDRAN

There is sadness in the  
ticking of clock  
like the gloomy rain  
which is pouring continuously  
It is annoying me like the ticking  
of clock in a dark lonely night.  
My mind is like a closed dark damp room  
The mood of melancholy spreads over  
like the mucky smell of a dark damp room.  
I can't go out and I can't stay indoors either  
All I want is a summer sky.

All I want is a summer sky  
I want to feel the bright yellow light  
I want to watch the trees bathing in the warmth of the sun  
And to hear the rustling of leaves in the summer breeze  
I want to see sun rays piercing down through fluffy white clouds  
I want to hear cuckoos singing merrily from nearby trees  
I want to see the honey-glowed moon with its bright golden halo in the night summer  
sky  
I want the September yellow sunset  
I want the love of the sun.



# ANTAR MOUNA — INNER SILENCE

VIDYA SHANKAR

Out in the dark stretch of sandy space  
Far removed  
From invading city lights and busy sounds  
She sat in solitude  
The waters, gracefully swashing the shore  
Almost kissing the soles of her outstretched feet

There was a moon that night  
But concealed by intense layers of inky satin.  
Faint skyglow drizzling comforting patterns  
Of light and shade on grey-black ripples  
Transmuted her senses to a transcendental orbit —

The darkness before her  
Pristine and expansive as her chidakasha  
The wet sand on to her skin  
Though not flattering  
Was still part of the experience  
She tasted the salt, took deep breaths  
Of the raw, tangy, surfy freshness  
The resonant hum of undulation  
Filled her ears with inner peace

She was no longer fighting with her sinewy thoughts  
A calming slumber crept over her  
Yet an upsurge of energy too  
She rose, her hands stretched out wide  
She and the Universe were One!

FLASH!

A mobile phone camera ruined the moment  
The magic dissipated!

“Wonder whose arm this is  
Ruined a splendid picture of the dark sea!”



The moon chose that moment  
To reveal itself from its hiding –  
There was darkness no more  
She smiled



Footnotes  
*chidakasha*: space of consciousness or inner space



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