



SUNBEAM LAHARTARA'S THE QUIZZARDS OF OZ

October 2020 Edition

The Monthly Newsletter by Lahartara's Quiz Club Date - November 9, 2020

TERROR IN FRANCE TO TERROR IN EUROPE

The knife attack in the southern French city of Nice on 29 September that killed three people and injured many more has left the country, which has barely recovered from the beheading of a schoolteacher in a Paris suburb by an 18-year-old Chechen two weeks ago, in shock and pain. The suspected Nice attacker, a 21-year-old Tunisian who is now in hospital with injuries, killed two, including an elderly woman, in a church; the other escaped to a pub nearby but later died of injuries. France, home to Europe's largest Muslim community, has particularly been hit by Islamist terrorism in recent years. Thursday's incident, which occurred in the context of the controversy over satirical magazine Charlie Hebdo's decision to republish Prophet Mohammed's caricatures, is the latest in a series of terror attacks in the country in the last eight years that have killed more than 200.

Devesh Rai ,
X-A



"RED LIGHT ON, GAADI OFF"

The rise of pollution level in various parts of the country and particularly in Delhi to a substantial extent is an open testimony to the effect caused once the lockdown has opened. Little did one know that there awaited a downgrade deeper than the upliftment.

The Delhi government in order to confront the issue came up with a new initiative -'Red Light On, Gaadi Off' campaign to be effective presently in 272 wards. Under this campaign, the government encouraged the autoists to switch off their vehicles while waiting for the light to turn green at the traffic signals. It has been said that, idling at the traffic lights with the vehicle on even for 15-20 minutes results in the consumption of at least 200 litres of fuel. This would lead to the decrease in the particulate matter, especially PM 10 and PM 2.5 by tonnes in quantity and reduction in the pollution by 15-20%

Divyanshu Ghosh
X- D



FUN FACTS-:

1. The last census in Bhutan was held in 1975. No one knows exactly what the population is there.
2. At a time when the erasers we all know today didn't exist, people used bread crumbs instead!
3. Nestled in our oceans, there is around 200 times more gold than has so far been extracted in human history.

MOTIVATION OF THE MONTH -:

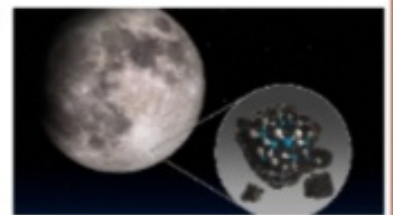
**WHEN
YOU FEEL
LIKE
STOPPING
THINK
ABOUT WHY YOU
STARTED**

WATER ON MOON: BIG DISCOVERY

NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA) has confirmed, for the first time, water on the sunlit surface of the Moon. This discovery indicates that water may be distributed across the lunar surface, and not limited to cold, shadowed places. SOFIA has detected water molecules (H₂O) in Clavius Crater, one of the largest craters visible from Earth, located in the Moon's southern hemisphere. Data from this location reveal water in concentrations of 100 to 412 parts per million – roughly equivalent to a 12-ounce bottle of water – trapped in a cubic meter of soil spread across the lunar surface. The results are published in the latest issue of Nature Astronomy.

SOFIA's results build on years of previous research examining the presence of water on the Moon. When the Apollo astronauts first returned from the Moon in 1969, it was thought to be completely dry. Orbital and impactor missions over the past 20 years, such as NASA's Lunar Crater Observation and Sensing Satellite, confirmed ice in permanently shadowed craters around the Moon's poles. Meanwhile, several spacecraft – including the Cassini mission and Deep Impact comet mission, as well as the Indian Space Research Organization's Chandrayaan-1 mission.

Atharv Vinayak
IX-D



FUN FACTS -:

1. The Nepal flag is the only one in the world that isn't square or rectangular.
2. Some Inuits have been known to use refrigerators to prevent their food from freezing in the cold temperatures that they live in.

NOBEL PRIZE 2020

Alfred Nobel wrote many wills during his lifetime. Interestingly, his last will specified that this fortune be used to create a series of prizes for those who confer the "greatest benefit on mankind". Nobel bequeathed 94% of his total assets, 31 million SEK (c. US\$186 million, €150 million in 2008), to establish the five Nobel Prizes. Nobel Prize season begins every October as committees in Sweden and Norway name laureates in a variety of prizes in Physics, Chemistry, Physiology, Literature, and Economics, as well as Peace.

NOBEL PRIZE WINNERS 2020

1) Physics:- **Roger Penrose, Reinhard Genzel, Andrea Ghez**

For their works on the black hole and the understanding of the universe. The Nobel prize in Physics was first awarded to Wilhelm Rontgen in 1901 for his discovery of X-Rays.

2) Chemistry:- **Emmanuelle Charpentier, Jeniffer A. Doudna**

For their works on the development of Crisp-Cas9, a method for genome editing. The Nobel Prize in Chemistry was first awarded to Jacobus Henricus in 1901 for his discovery of the laws of Chemical Dynamics and osmotic pressure in solutions.

3) Physiology (Medicine) **Havey J. Alter, Michael Houton, Charles M. Rice**

For their discovery of the Hepatitis C virus. The Nobel Prize in Physiology was first awarded to Emil Van Behring in 1901 for his work on Serum Therapy.

4) Literature:- It is awarded to **Louise Gluck**, one of America's most celebrated poets, "for her unmistakable poetic voices that with austere beauty makes individual existence universal". The first Nobel Prize in Literature was awarded to Sully Prudhomme in 1901 "for his poetic composition".

5) Peace:- It is awarded the **World Food Program** for its efforts to combat a surge in global hunger amid the pandemic, which has swept around the world with devastating impact. The first Nobel Peace Prize was awarded to Henry Dunant and Frederic Passy in 1901 for their efforts to help wounded soldiers and to work for international peace.

6) Economics:- It was awarded to Paul R. Morgan and Robert B. Wilson for improvements to the Auction theory and inventions of new auction formats. It was first awarded to Ragnar Frisch and Jan Tinbergen in 1969 for having developed applied dynamic models for the analysis of economic processes.

NOBEL PRIZE PHYSICS 2020 : INDIAN CONNECT

Nobel prize for physics in 2020 was shared and one half of it was awarded to Roger Penrose for his discovery " that black hole formation is a robust prediction of general theory of relativity ".

It is quite important to know that some of the fundamental research work is done by the two Indian scientists AK Ray Chaudhuri and CV Visheshwara .

Professor CV Visheshwara is the founding director of the 'Jawaharlal Nehru Planetarium ' in Bengaluru, where he established REAP (Research Education Advancement Programme in Physical Sciences) for undergraduate science students. He made his mark in the study of black holes in the 1970's as a graduate student at the University of Maryland.

Meanwhile AK Ray Chaudhuri is the graduate from Presidency College , Kolkata. He came up with his famous Raychaudhuri equation during his research work in the 1950's which is integral for the study of black holes.

-- Harit Mishra , X-C

CURRENT AFFAIRS OCTOBER 2020 :-

- 8th India- Sri Lanka Maritime Exercise SLINEX-20 begins.
- ISA Solar Awards conferred for the first time.

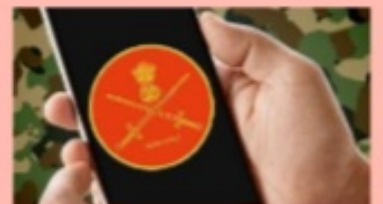
List of Winners:

Visvesvaraya award: Japan for the Asia Pacific region and the Netherlands for Europe and Others region.

Kalpana Chawla awards: Dr Bhim Singh from IIT Delhi (India) and Dr Aesha Alnuaimi from Dubai Electricity and Water Authority (United Arab Emirates).

Diwakar award: Arpan Institute (Haryana) and Arushi Society.

- India ranked 94 in Global Hunger Index 2020.
- India hosts 7th meeting of Ministers of Justice of SCO.
- Narendra Singh Tomar launches "AYUSHMAN SAHAKAR" scheme.
- Bangladesh govt orders 'no mask, no service' policy.
- Indian Army launches indigenous mobile application "SAI".
- 3rd India-US 2+2 Ministerial Dialogue begins in New Delhi.



Designed By- Atharv Vinayak, IX-D

Edited By- Devesh Rai X-A, Divyanshu Ghosh X-D, Atharv Vinayak IX-D, Shashwat Mishra IX-C, Harit Mishra X-C , Prateek Gupta X-D, Govind Mishra IX-D.