



C.A Dated On 17-08-2018

General Studies-1

Nowruz

Why in News?

The President of India, Shri Ram Nath Kovind in his message on the eve of the Parsi New Year (Nowruz) has said: -

"On the auspicious occasion of Parsi New Year, I offer my greetings and good wishes to all fellow citizens, and especially to all my Parsi brothers and sisters.

About Nowruz:

- **Nowruz** is the name of the [Iranian New Year's Day](#), also known as the [Persian New Year](#), which is celebrated worldwide by various ethno-linguistic groups.
- Despite its [Iranian](#) and [Zoroastrian](#) origins, Nowruz has been celebrated by diverse communities. It has been celebrated for over 3,000 years in [Western Asia](#), [Central Asia](#), the [Caucasus](#), the [Black Sea Basin](#), and the [Balkans](#).
- It is a [secular](#) holiday for most celebrants that is enjoyed by people of several different faiths, but remains a holy day for Zoroastrians.
- Nowruz is the day of the [vernal equinox](#), and marks the beginning of spring in the [Northern Hemisphere](#). It marks the first day of the first month ([Farvardin](#)) of the [Iranian calendar](#).
- It usually occurs on [March 21](#) or the previous or following day, depending on where it is observed.
- The moment the [Sun](#) crosses the [celestial equator](#) and equalizes night and day is calculated exactly every year, and families gather together to observe the rituals.

General Studies-2

International Year of Millets

Why in News?



C.A Dated On 17-08-2018

The Union Minister of Agriculture and Farmers' Welfare, Shri Radha Mohan Singh has written to the Director General, United Nations Food & Agriculture Organization (FAO) and proposed the declaration of an upcoming year as "International Year of Millets".

The Union Agriculture Minister stated that India is celebrating 2018 as the National Year of Millets and is promoting cultivation by amending cropping pattern of areas which are especially susceptible to climate change.

What are Millets?

- **Millets** are a group of highly variable small-seeded [grasses](#), widely grown around the world as [cereal crops](#) or grains for [fodder](#) and human food.
- Millets are important crops in the [semiarid tropics](#) of Asia and Africa (especially in [India](#), [Mali](#), [Nigeria](#), and [Niger](#)), with 97% of millet production in [developing countries](#).
- The crop is favored due to its [productivity](#) and short growing season under dry, high-temperature conditions.

Benefits Of Millets:

- An important staple cereal crop for millions of small holder dryland farmers across sub-saharan Africa and Asia, millets offer nutrition, resilience, income and livelihood for farmers even in difficult times. They have multiple untapped uses such as food, feed, fodder, biofuels and brewing.
- Therefore, millets are Smart Food as they are Good for You, Good for the Farmer and Good for the Planet.
- Nutritionally superior to wheat & rice owing to their higher levels of protein with more balanced amino acid profile, crude fiber & minerals such as Iron, Zinc, and Phosphorous, millets can provide nutritional



C.A Dated On 17-08-2018

security and act as a shield against nutritional deficiency, especially among children and women.

- The anaemia (iron deficiency), B-complex vitamin deficiency, pellagra (niacin deficiency) can be effectively tackled with intake of less expensive but nutritionally rich food grains like millets.
- Millets can also help tackle health challenges such as obesity, diabetes and lifestyle problems as they are gluten free, have a low glycemic index and are high in dietary fibre and antioxidants.
- Adapted to low or no purchased inputs and to harsh environment of the semi-arid tropics, they are the backbone for dry land agriculture.
- Photo-insensitive & resilient to climate change, millets are hardy, resilient crops that have a low carbon and water footprint, can withstand high temperatures and grow on poor soils with little or no external inputs. In times of climate change they are often the last crop standing and, thus, are a good risk management strategy for resource-poor marginal farmers.

Postal Highway

Context:

The Indian government has handed over a cheque amounting Rs 33 crore to the Nepal Government for construction of a Postal Highway.

Background:

The amount has been released towards 25% of the tendered cost (including 10% mobilization advance) of the two road packages of Birgunj-Thori Road being implemented under Postal Highway Project in Nepal with Government of India's grant assistance.



C.A Dated On 17-08-2018

With this payment, the Government of India has released a total of Rs 117.63 Crores to the Government of Nepal for implementing 14 packages of the Postal Highway Projects.

About the Postal Highway project:

- Postal Highway also *called Hulaki Rajmarg* runs across the Terai region of Nepal, from Bhadrapur in the east to Dodhara in the west, cutting across the entire width of the country.
- It is the Oldest highway in Nepal constructed by Juddha Shumsher Jung Bahadur Rana & Padma Shumsher Jung Bahadur Rana to aid transportation and facilitate postal services throughout the nation.

General Studies-3

Human space flight Programme



Context:

In his address to the nation on India's 72nd Independence Day, Prime Minister Narendra Modi announced that India will send an astronaut to space in the year 2022.



C.A Dated On 17-08-2018

Indian Human Space Flight Programme:

- India plans to build a crew vehicle that can accommodate 2 or 3 astronauts and human rate its GLSV Mk-III launcher. In 2004, ISRO prepared a document with the road-map for developing technologies relevant to human spaceflight.
- Initially, a manned space flight was proposed before 2017, at a budget of Rs 12.4 billion (\$242 million), using a fully autonomous orbital vehicle carrying two or three crew members to 400-km (250 miles) low Earth orbit for up to 7 days and back. The planning commission approved the mission and the government sanctioned Rs 95 crore to study all aspects of the manned space mission.
- ISRO has initiated pre-project Research and Development activities focusing on critical technologies for Human Space Flight Program.

Technological Challenges:

Three major areas that ISRO needs to master are, environmental control and life support (ECLS) system, crew escape system and flight suite and it's currently working on them, under pre-project studies for which the Government sanctioned Rs 145 crore.

Recent technological advancements:

- In what appears to be a preparation for the Gaganyaan mission, ISRO last month conducted its first 'pad abort' test that was successful.
- *The 'pad abort' test* or Crew Escape System is an emergency escape measure that helps pull the crew away from the launch vehicle when a mission has to be aborted. The test was conducted at the Satish Dhawan Space Centre, Sriharikota.
- The Pad Abort Test demonstrated the safe recovery of the crew module in case of any exigency at the launch pad.



C.A Dated On 17-08-2018

Laser Interferometer Gravitational Wave Observatory (LIGO) project.

Why in News?

The Environment Ministry has allowed scientists to test the suitability of land in Maharashtra's Hingoli district to host the India wing of the ambitious Laser Interferometer Gravitational Wave Observatory (LIGO) project.

This is a key step to establishing the one-of-its-kind astronomical observatory.

About LIGO Project:

- The project involves constructing a network of L-shaped arms, each four kilometres long, which can detect even the faintest ripples from cosmic explosions millions of light years away.
- The LIGO project operates three gravitational-wave (GW) detectors.
- Two are at Hanford in the State of Washington, north-western USA, and one is at Livingston in Louisiana, south-eastern USA.
- Currently these observatories are being upgraded to their advanced configurations.
- The proposed LIGO-India project aims to move one Advanced LIGO detector from Hanford to India.

LIGO-India:

- The LIGO-India project is an international collaboration between the LIGO Laboratory and three lead institutions in the LIGO-India consortium: Institute of Plasma Research, Gandhinagar; IUCAA, Pune; and Raja Ramanna Centre for Advanced Technology, Indore.
- The LIGO lab would provide the complete design and all the key detector components.
- Indian scientists would provide the infrastructure to install the detector and it would be operated jointly by LIGO-India and the LIGO-Lab.
- The project, piloted by the Department of Atomic Energy (DAE) and Department of Science and Technology (DST), reportedly costs ₹1,200 crore and is expected to be ready by 2025.



इहोरइहा
IAS ACADEMY
Your Dreams, Our Mission!

C.A Dated On 17-08-2018