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NATIONAL SPORTS AWARDS



• National Sports Awards are given every year to recognize and **reward excellence in sports.**

• 'Major Dhyan Chand Khel Ratna Award' is given for the spectacular and most outstanding performance in the field of sports by a sportsperson over the period of the **previous four years**.

- Arjuna Award is given for outstanding performance in Sports and Games' is given for good performance over a **period of the previous four years** and for showing qualities of leadership, sportsmanship and a sense of discipline.
- Arjuna Award (Lifetime) is given to honour and motivate those sportspersons who have contributed to sports by their performance and continue to contribute to promotion of sports even after their retirement from active sporting career.
- **'Dronacharya Award** is given for **outstanding coaches in Sports and Games'** is given to coaches for doing outstanding and meritorious work on a consistent basis and for enabling sportspersons to excel in International events.
- Maulana Abul Kalam Azad (MAKA) Trophy is awarded for the overall top performing university in Khelo India University Games.
- This year's awards were decided by the Selection Committee headed by Justice (Retd.)
 V. Ramasubramanian, Supreme Court of India and consisting members from eminent sportspersons, persons having experience in sports journalism and sports administrators.

BANANA CULTIVATION

According to the Agricultural and Processed Food Products Export Development Authority (APEDA), India has achieved a tenfold increase in banana exports over the past decade and aims to reach \$1 billion in exports within the next five years.

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Banana is basically a **tropical crop** and the second most important fruit crop in India next to mango.

- Climatic Conditions Requirement:
- **Temperature:** It grows well in a temperature range of 15°C 35°C with relative humidity of 75-85%.
- It prefers tropical humid lowlands and is grown from the sea level to an elevation of 2000m.
- Soil: Deep, rich loamy soil with pH between 6.5 -7.5 is most preferred for banana cultivation. Soil for banana should have good drainage, adequate fertility and moisture. Saline solid, calcareous soils are not suitable for banana cultivation.
- In India this crop is being cultivated in climate ranging from humid tropical to dry mild subtropics through selection of appropriate varieties.
- Varieties cultivated in India: Dwarf Cavendish, Robusta, Monthan, Poovan, Nendran, Red banana, Nyali, Safed Velchi, Basrai, Ardhapuri, Rasthali, Karpurvalli, Karthali and Grand Naine etc.
- Major Producing States: Andhra Pradesh, Maharashtra, Gujarat, Karnataka, Kerala, etc.

MELATONIN



Scientists have proved that nano-formulation of Melatonin showed improved antioxidative and neuroprotective properties and could be a potential therapeutic solution for Parkinson's disease (PD).

- It is a **neurohormone** secreted from the **pineal gland** of the brain in response to darkness.
- It is related to the timing and quality of our sleep and wake rhythms and determined by our **internal body clock.**

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- It makes us sleepy at certain times of the day. It starts to secrete when our bodies are getting ready to go to sleep and usually takes about 30 to 45 minutes to take full effect.
- Melatonin secretion is at **its highest in the middle of the night** and gradually starts to decrease until we are ready to wake up and start our day.

Key facts about Parkinson's disease:

- It is a **progressive neurological disorder** that affects the nervous system and the parts of the body controlled by the nerves.
- It is a condition in which a patient has limited or no control over his movements and body balance.
- The risk of developing Parkinson's disease naturally increases with age, and the average age at which it starts is 60 years old.
- Many studies have suggested that **men are more likely to be affected**by Parkinson's than women.

Cause:

- It is caused by the **degeneration of nerve cells** in the part of the brain called the substantia nigra, which controls movement.
- These nerve cells die or become impaired, losing the ability to produce an important chemical called dopamine.
- Dopamine operates with other neurotransmitters to help coordinate the millions of nerve and muscle cells involved in the movement.
- Lack of dopamine causes the slowed movements and tremors symptoms of Parkinson's disease.

Treatment: There's no cure for this disease, but treatments can help significantly improve your symptoms.

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WHAT IS INCINERATION?



Residents of Pithampur have expressed strong objection to incineration of 377 Metric Tonnes of harmful Union Carbide waste brought from Bhopal.

- It is the process of **burning hazardous materials at temperatures high enough to destroy contaminants.**
- It is conducted in an "incinerator," which is a type of furnace designed for burning hazardous materials in a combustion chamber.
- Many different types of hazardous materials can be treated by incineration, including soil, sludge, liquids, and gases.
- Although it destroys many kinds of harmful chemicals, such as solvents, PCBs (polychlorinated biphenyls), and pesticides, incineration **does not destroy metals such as lead and chromium.**
- Waste incineration **can be a form of waste-to-energy** because the heat generated during combustion can be used to create electricity.

How Does It Work?

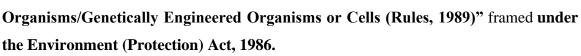
- The **materials** are **placed in the combustion chamber** of an incinerator where they are **heated to an extremely high temperature** for a specified period of time.
- As the wastes heat up, the **contaminants volatilize** (change into gases), and **most are destroyed.**
- Gases that are not destroyed pass through a secondary combustion chamber for further heating and destruction.
- The **resulting gases then pass through air pollution control equipment,** which removes particulate matter (extremely small particles or liquid droplets) and "acid gases."

CROSS & CLIMB ROHTAK

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WHAT IS THE GENETIC ENGINEERING APPRAISAL COMMITTEE (GEAC)?

• It is a statutory committee constituted under the "Rules for the Manufacture, Use/Import/Export and Storage of Hazardous Micro



- It was earlier called the Genetic Engineering Approval Committee, which was changed to Genetic Engineering Appraisal Committee in the year 2010.
- It functions under the supervision of the **Ministry of Environment**, **Forest**, **and Climate Change** (MoEF&CC).
- The **functions** of GEAC as prescribed in the Rules 1989 are as follows:
 - To **appraise activities involving** large-scale **use of hazardous microorganisms and recombinants** in research and industrial production from the environmental angle.
 - To appraise proposals relating to the release of genetically engineered organisms and products into the environment, including experimental field trials.
 - The committee or any persons authorized by it has **powers to take punitive action** under the Environment Protection Act.
- It keeps a check on the use, import, and export of genetically modified (GM) organisms and crops.
- Clearance of GEAC is mandatory for the environmental release of GM crops.
- Composition:
 - GEAC is chaired by the Special Secretary/Additional Secretary of MoEF&CC and co-chaired by a representative from the Department of Biotechnology (DBT).

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 Presently, it has 24 members and meets every month. The members comprise experts from other ministries as well as institutions such as the ICAR, ICMR, CCMB, and so on.

New Rules Governing the Selection of Experts:

- Under the new rules, an "expert member" ought to be disclosing their "interest" that could conflict with their duties.
- The expert is also expected to take all steps necessary to ensure that any conflict of interest not affect any decision of the GEAC.
- An expert member with any direct or indirect association with a matter being discussed in a meeting of the committee is obliged to disclose this prior to the meeting.
- Unless specifically requested by the committee, the expert is expected to recuse their selves from the meeting.
- All selected members would also have to fill out a form detailing their professional affiliations to a decade prior to joining the committee.

WINTER CHAR DHAM

Char Dham: Sacred Shrines of the Garhwal Himalayas

- The Revered Char Dham Shrines
 - Located in Uttarakhand's Garhwal Himalayas, the Char Dham comprises Gangotri, Yamunotri, Kedarnath, and Badrinath.
 - These shrines attract lakhs of pilgrims annually from May to November, contributing significantly to the state's economy.
- Winter Inaccessibility and Alternate Seats
 - Heavy snowfall during winter makes the shrines inaccessible, leading to their seasonal closure. Deities are relocated to lower-altitude winter seats:

Gangotri: Mukhba, Uttarkashi Yamunotri: Kharsali, Uttarkashi

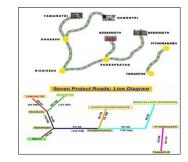
Kedarnath: Omkareshwar Temple, Ukhimath, Rudraprayag

Badrinath: Pandukeshwar, Chamoli

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Char Dham All Weather Highway Development Project

- It is a highway expansion project to widen 889 km of hill roads to provide all-weather connectivity in the Char Dham circuit.
- The project, envisaged in 2016, covers Uttarakhand's four major shrines Badrinath, Kedarnath, Gangotri and Yamunotri in the upper Himalayas.



Promoting Winter Char Dham Tourism

• Off-season tourism

• Winter Char Dham attracts pilgrims during the off-season to boost tourism.

• As of December 30, 15,314 pilgrims visited the

winter shrines, with Omkareshwar Temple receiving the highest footfall (6,482), followed by Pandukeshwar (5,104), Mukhba (3,114), and Kharsali (614).

• Economic Significance of Char Dham

- The Char Dham generates over Rs 200 crore daily for Uttarakhand's economy during the pilgrimage season.
- Winter tourism is yet to see substantial growth, but officials are optimistic about increased footfall as the season progresses.

Various Concerns

- Impact of Overcrowding and Commercialisation
 - Unchecked increase in pilgrimage numbers leads to overcrowding, environmental degradation, and the commercialisation of sacred sites.
 - Strain on local infrastructure and fragile ecosystems disrupts the sanctity of holy places.
- Winter Wildlife Disturbance
 - Winter traffic affects rare and threatened wildlife like snow leopards and mountain sheep, as they descend to lower altitudes for food and water.

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- Shy animals face disruptions due to human presence in sensitive areas.
- Harsh Terrain and Weather Risks
 - Safety, security, and public health are key concerns for pilgrims during harsh winter conditions in Uttarakhand's mountainous regions.

WHOLESALE PRICE INDEX

What is Inflation?

- Inflation is basically the general rise in the price of goods and services and the decline in purchasing power of people.
- This means that when inflation rises (without an equivalent rise in your income), one is able to buy lesser things than previously, or one has to pay more money for the same stuff now.
- A "rising" inflation rate implies that the rate (at which the prices rise) itself is increasing.
 - In other words, imagine a scenario where the inflation rate was 1% in March, 2% in April and then 4% in May and 7% in June.

What is Wholesale Price Index?

- Wholesale Price Index, or WPI, measures the changes in the prices of goods sold and traded in bulk by wholesale businesses to other businesses.
 - Wholesale market is only for goods, one cannot buy services on a wholesale basis.
- It is used to track the supply and demand dynamics in industry, manufacturing and construction.
- The index is released by the Economic Advisor in the Ministry of Commerce and Industry every month.
- The quantum of rise in the WPI month-after-month is used to measure the level of wholesale inflation in the economy.

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How is WPI calculated?

- The index is based on the wholesale prices of number of relevant commodities
- The commodities are chosen based on their significance in the region.
 - These represent different strata of the economy and are expected to provide a comprehensive WPI value.
- Number of commodities: 697 items
- Base year: 2011-12

Major Components of WPI:

- **'Primary articles'** (22.62%) is a major component of WPI, further subdivided into Food Articles and Non-Food Articles:
 - Food Articles: Cereals, Paddy, Wheat, Pulses, Vegetables, Fruits, Milk, Eggs, Meat & Fish, etc.
 - Non-Food Articles: Oil Seeds, Minerals and Crude Petroleum.
- The next major basket in WPI is **Fuel & Power** (13.15%), which tracks price movements in Petrol, Diesel and LPG.
- The biggest basket is **Manufactured Goods** (64.23%). It spans across a variety of manufactured products such as Textiles, Apparels, Paper, Chemicals, Plastic, Cement, Metals, and more.
- Manufactured Goods basket also includes manufactured food products such as Sugar, Tobacco Products, Vegetable and Animal Oils, and Fats.

What is the Major Difference Between WPI and CPI?

• While WPI keeps track of the wholesale price of goods, the CPI (Consumer Price Index) measures the average price that households pay for a **basket of different goods and services**.