



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

## Current Affairs - 05 September 2024

### NEW FLAG AND INSIGNIA OF THE SUPREME COURT OF INDIA

The President of India recently unveiled the new flag and insignia of the Supreme Court at the two-day National Conference of District Judiciary in New Delhi.



- The newly unveiled **flag features** symbols central to India's legal and cultural heritage: the Ashoka Chakra, the Supreme Court building, and the Constitution of India.
- The new Supreme Court flag is blue in colour.
- The insignia has 'Supreme Court of India' and 'Yato Dharmastato Jayah' (in Devanagari script) inscribed on it.
- The phrase "Yato Dharmastato Jayah" is a Sanskrit expression that translates to "Where there is Dharma, there is victory" or "Victory lies where Dharma (righteousness) prevails."
- This phrase encapsulates the essence of justice and righteousness that the Supreme Court strives to uphold.
- The new flag and insignia were conceptualized and designed by the National Institute of Fashion Technology (NIFT), Delhi.
- The **flag** will be **available in various designs**, including cross table flat, single table flag, pole flag, and wooden frame, ensuring its presence in diverse settings.

### WHAT IS CENTRAL INDUSTRIAL SECURITY FORCE (CISF)?



- It is a **Central Armed Police Force (CAPF)** in India.
- It was set up under an Act of the Parliament of India **on 10 March 1969** with a strength of 2,800.
- CISF was subsequently made an armed force of the Republic of India by another Act of Parliament passed on 15 June 1983.

## Current Affairs - 05 September 2024

---

- The force has since grown into a premier multi-skilled organization with a **present strength of more than 1,88,000 personnel**.
- It is directly under the **Union Ministry of Home Affairs**, and its headquarters are at **New Delhi**.
- The CISF at present **provides security cover to 359 establishments** across the country.
- **Organisation Structure:**
  - CISF is **headed by an Indian Police Service officer** with the **rank of Director-General**, assisted by an IPS officer in the rank of Addl. Director-General.
  - The force is **divided into seven sectors** (Airport, North, North-East, East, West, South, and Training), and **also has a Fire Service Wing**.

### Functions:

- The CISF **security umbrella** includes India's most **critical infrastructure facilities** like nuclear installations, space establishments, airports, seaports, power plants, etc.
- The specialized task of airport security was assigned to CISF in the year 2000 in the wake of the hijacking of **Indian Airlines Flight IC-814 to Kandahar**.
- In addition, the CISF also **protects important government buildings, iconic heritage monuments, Delhi Metro, Parliament House Complex, and Central Jails of Jammu and Kashmir**.
- The CISF also has a **specialized VIP Security vertical**, providing round-the-clock security to important protectees.
- CISF is one of the largest **Fire Protection Service providers** in the country. CISF is the only force with a **customized and dedicated fire wing**.
- Post the Mumbai terror attack in November 2008, the mandate of CISF was broadened to provide security cover to private corporate establishments also.
- The CISF also provides security consultancy services to private entities and its services are much in demand.



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

## Current Affairs - 05 September 2024

---

### WHAT IS THE SMART CITIES MISSION (SCM)?



Smart Cities Mission (SCM) was launched on 25 June 2015.

- The main **objective** of the SCM is to **promote** cities that provide **core infrastructure**, a **clean and sustainable environment**, and a **decent quality of life** to their citizens through the application of ‘**smart solutions**’.
- The focus is on **sustainable and inclusive development** through the creation of replicable models that act as lighthouses for other aspiring cities.
- **100 cities** have been selected to be developed as Smart Cities (through a two-stage competition) in various rounds from 2016 to 2018, with each getting **five years** from their selection to complete the projects.
- It is a **Centrally Sponsored Scheme under the Union Ministry of Housing and Urban Affairs (MoHUA)**.
- Some of the core infrastructure elements in a Smart City would include adequate water supply, assured electricity supply, sanitation, including solid waste management, efficient urban mobility and public transport, affordable housing, especially for the poor, robust IT connectivity and digitalization, good governance, especially e-Governance and citizen participation, sustainable environment, safety and security of citizens, particularly women, children, and the elderly, and health and education.

#### **Funding:**

- The **Central Government** will give financial support to the extent of Rs. 48,000 crores over 5 years, i.e., on an average of Rs.100 crore per city per year.
  - An **equal amount** on a matching basis is to be provided by the **State/ Urban Local Bodies (ULBs)**.
  - Emphasis has been given on the participation of the private sector through **Public Private Partnerships (PPP)**.
-



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

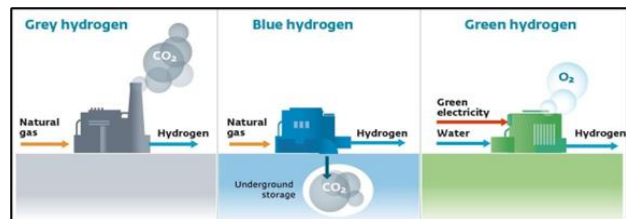
## Current Affairs - 05 September 2024

### GREEN HYDROGEN IN INDIA

- Hydrogen is the lightest chemical element.
- It is colourless, odourless, tasteless, non-toxic, and highly combustible.
  - It is the 3<sup>rd</sup> most abundant element in the human body after **Oxygen** and **Carbon**.
- Hydrogen is the most abundant chemical substance in the universe, constituting roughly 75% of all normal matter.
- Hydrogen can be produced from a range of resources including fossil fuels, nuclear energy, biomass and renewable energy sources.

#### Types of Hydrogen:

- Depending on production methods, hydrogen can be Grey, Blue or Green.
- **Grey Hydrogen:**
  - Grey hydrogen is created from natural gas, or methane, using **Steam Methane Reforming (SMR)** but without capturing the greenhouse gases made in the process.
  - The CO<sub>2</sub> produced in this process is released directly into the atmosphere.
- **Blue Hydrogen:**
  - Hydrogen is labelled blue whenever the carbon generated from steam reforming is captured and stored underground through industrial carbon capture and storage.
  - Blue hydrogen is, therefore, sometimes referred to as carbon neutral as the emissions are not dispersed in the atmosphere.
- **Green Hydrogen:**
  - Green hydrogen is produced by using clean energy from surplus renewable energy sources, such as solar or wind power, to split water into two hydrogen atoms and one oxygen atom through a process called electrolysis.
  - This makes green hydrogen the cleanest option – hydrogen from renewable energy sources without CO<sub>2</sub> as a by-product.



## Current Affairs - 05 September 2024

---

### Present Capacity:

- There are **26 hydrogen projects in India**, with a total capacity of 255,000 tonnes per year.
- However, a majority of these announced projects are still in their early stages.
- Only around **8,000 tonnes per year** of capacity is expected to be operational by 2024.

### Challenges associated with Green Hydrogen:

- **Technology:**
    - Electrolysis is the process of using electricity to split water into hydrogen and oxygen.
    - By running an electrical current through water, the membrane and electrolyte can separate the water into hydrogen and oxygen.
    - Green hydrogen needs electrolyzers to be built on a scale larger than we've yet seen.
  - **Transportation & Storage:**
    - Either very high pressures or very high temperatures are required, both with their own technical difficulties.
  - **Electricity:**
    - Creating green hydrogen needs a huge amount of electricity, which means an exponential increase in the amount of wind and solar power to meet global targets.
- 

### HOW TO ENSURE FOOD SAFETY AND REDUCE WASTE

- Food is far more than mere sustenance and **it is an integral part of cultural identity**, playing a pivotal role in rituals, festivals, and daily life.
- As **India progresses towards its vision of Viksit Bharat** by its 78th year of Independence, **ensuring food safety and security is paramount**.



## Current Affairs - 05 September 2024

---

- Therefore, it is important to delve into the multifaceted importance of food, the critical role of food safety, and the potential of food irradiation technology in addressing the challenges within India's food sector.

### Challenges in Food Safety and Security

- **Post-Harvest Losses and Perishable Goods**
  - One of the most significant challenges in food safety and security in India is the **high level of post-harvest losses**, especially of perishable goods such as fruits, vegetables, dairy products, and meat.
  - These losses occur at various stages of the supply chain, from harvesting to transportation, storage, and distribution.
- **Fragmented Supply Chain and Infrastructure Gaps**
  - India's food supply chain is highly fragmented, with numerous intermediaries between farmers and consumers.
  - The lack of a cohesive and well-integrated supply chain also makes it difficult to implement standardised food safety measures across the board.
- **Regulatory and Compliance Issues**
  - India's food safety regulatory framework is complex, involving multiple agencies and regulations.
  - While the Food Safety and Standards Authority of India (FSSAI) plays a central role in ensuring food safety, the enforcement of regulations at the ground level is often inconsistent.
- **Climate Change and Environmental Factors**
  - Climate change poses additional challenges to food safety and security in India.
  - Changes in temperature, rainfall patterns, and the frequency of extreme weather events can affect agricultural productivity and lead to increased risks of contamination and spoilage.

## Current Affairs - 05 September 2024

---

### Potential of Food Irradiation Technology in Addressing Challenges and Its Economic Potential in India

- **A Modern Solution to Age-Old Challenges**
  - Food irradiation is a technology that involves exposing food to ionizing radiation in a controlled environment.
  - This process effectively eliminates harmful microorganisms, reduces the risk of food-borne illnesses, and slows down the decay of perishable products.
- **Safe and Effective Method of Food Preservation**
  - Food irradiation is a safe and effective method that has been widely adopted in countries with advanced safety standards, including the US, Japan, Australia, Canada, and the European Union.
  - A notable example of its impact is the 2012 agreement that allowed Indian mangoes to be exported to the US after a 20-year ban.
- **The Economic Potential of Food Irradiation Facilities in India**
  - India has made significant strides in establishing food irradiation processing facilities, with 34 such units currently operational across the country.
  - The Ministry of Food Processing Industries (MoFPI) has played a crucial role in developing this infrastructure, with 16 of these facilities receiving MoFPI support.

### Conclusion

- Food is a cornerstone of culture and a vital component of economic growth and as India strides towards its vision of Viksit Bharat, addressing food safety and security through innovative solutions like food irradiation is essential.
  - With government support and entrepreneurial investment, India can enhance its food safety standards, reduce waste, and secure a more prosperous future for its agrifood sector.
-

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition

## Current Affairs - 05 September 2024



### EXERCISE VARUNA

Recently, a P8I aircraft of the Indian Navy has reached France to participate in ‘Exercise Varuna’ with the French Navy.



- It is the **bilateral Naval Exercise** between **India and France**.
- This bilateral exercise between the two navies was initiated in 1993.
- It was named ‘**VARUNA**’ in **2001** and has become a hallmark of India-France's strategic bilateral relationship.
- The 2024 edition of Indo-French bilateral naval ‘Exercise Varuna’ is scheduled in the Mediterranean Sea.
- It includes **advanced tactical exercises** underscoring the deepening synergy and interoperability between the two navies.
- The Indian Navy's P-8I aircraft, renowned for its **maritime surveillance and anti-submarine warfare capabilities**, will play a pivotal role in these exercises and it joins the INS Tabar.
- The P-8I’s participation in Exercise Varuna reflects the growing sophistication and complexity of the joint operations between the Indian and French navies.

### **Key facts about P-8I aircraft**

- P-8I is a long-range, **multi-mission maritime patrol aircraft** being manufactured by Boeing for the Indian Navy.
- It replaced the ageing fleet of the Indian Navy’s Tupolev Tu-142 aircraft.

### POSHAN TRACKER INITIATIVE



Recently, the Ministry of Women and Child Development received the National Award for e-Governance 2024 (Gold) for the Poshan Tracker initiative.





CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

## Current Affairs - 05 September 2024

---

- The Poshan Tracker program identifies and addresses **growth issues among children aged 0-6 years**, utilizing real-time monitoring and WHO growth charts to ensure optimal nutritional outcomes.
- Anganwadi Workers (AWWs) play a crucial role in **evaluating children's health status** and implementing timely interventions when deviations from expected growth patterns are detected.
- The Poshan Tracker employs **advanced ICT tools** and **Growth Measuring Devices (GMD)** at each Anganwadi Center (AWC) to facilitate accurate data collection and regular monitoring.
- The program's real-time growth monitoring has significantly improved child health outcomes in India, covering millions of **children under Mission Poshan 2.0**.

### Key points about Poshan Tracker App

- This application provides a **360-degree view** of the activities of the Anganwadi Centre (child care centres), service deliveries of Anganwadi Workers and complete beneficiary management **for pregnant women, lactating mothers and children under six**.
  - It also digitizes and automates physical registers used by workers to help improve the quality of their work.
  - The Anganwadi workers are being provided smartphones procured through Government e-Market (GeM) for efficient service delivery.
  - A nodal person has also been appointed to provide technical support and resolve any issue with downloading the new Poshan Tracker application and its functioning in each state.
  - The sources that each migrant worker who had registered in their original state could go to the nearest Anganwadi in their current place of residence and avail of the schemes and services offered.
  - It was launched by the **Ministry of Women and Child Development (MoWCD)**.
-