

## **Prelim Bits 14-05-2018**

### **Development and upgradation of Botanic Garden in Noida**

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- Union Minister for Environment, Forest and Climate Change laid the foundation-stone for the development and up gradation of the Botanic Garden of Indian Republic (BGIR) at Noida recently.

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- The Garden is being developed and upgraded with the objectives of collection of plant species, research, training, environment education, public awareness, aesthetics and entertainment through the protection of plant biodiversity

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- It is to be developed as a centre of excellence in the preservation of Rare, Endangered and Threatened (RET) and local plant species.

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- A gene bank, seed bank, herbarium unit, orchid house, cactus house, nursery, plant biodiversity, research facility, education and maintenance will be developed in the Botanic Garden.

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- At present, more than 10,500 individuals of about 900 plant species brought from 23 states of the country have been conserved in the garden.

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- They are conserved under various sections/areas like Economic Plant, Green Belt/Woodland, Fruit, Medicinal Plant, Cactus & Succulents, Nurseries and Water bodies.

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### **Anandibai Gopalrao Joshi**

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- At a time when the British ruled India, Anandibai Gopalrao Joshi became India's first woman doctor.

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- Joshi was born as Yamuna in Kalyan (in present-day Maharashtra) on March

31, 1865.

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- At the age of nine, she was married to Gopalrao Joshi, who renamed her as Anandi.

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- Her husband supported education for women and he encouraged Joshi to pursue education.

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- Anandibai Joshi from India, Kei Okami from Japan, and Tabat M. Islambooly from Ottomon/Syria were students in Woman's Medical College of Pennsylvania.

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- All three were the first woman from their respective countries to obtain a degree in Western medicine.

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## A green alternative

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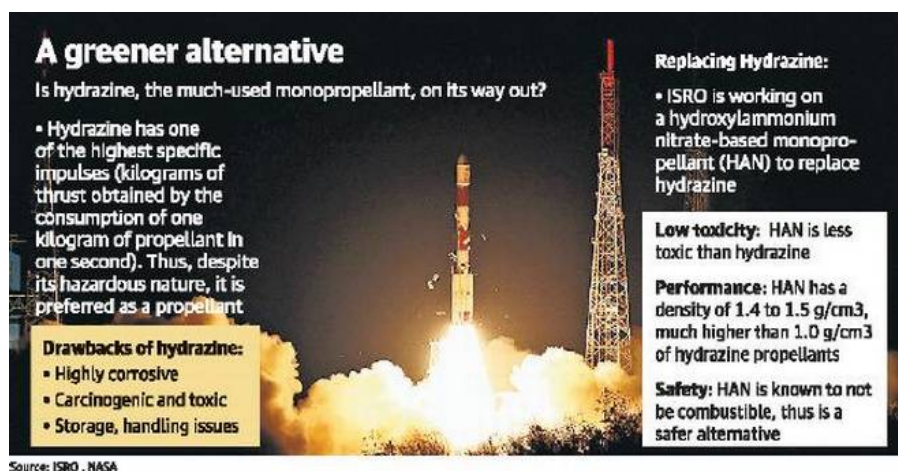
- Scientists at the Indian Space Research Organization (ISRO) have reported progress in the development of an environment-friendly propellant to power satellites and spacecraft.

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- The effort is to replace the conventional hydrazine rocket fuel, a highly toxic and carcinogenic chemical, with a greener propellant for future missions.

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- Hydrazine is used as space propellant for the past 6 decades despite its environment and health hazards and the challenges faced in its manufacturing, storage, ground handling and transportation.  
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- The main reason of it being still used is due to its high performance.  
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- The formulation is a HAN based monopropellant and it consists of Hydroxylammonium Nitrate (HAN), ammonium nitrate, methanol and water.  
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- A monopropellant is a chemical propulsion fuel which does not require a separate oxidizer.  
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- It is used extensively in satellite thrusters for orbital correction and orientation control.  
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## **Petcoke**

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- Government of India is planning to propose a ban over burning petroleum coke as a fuel nationwide to comply with a Supreme Court request.  
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- It is seen as a part of a long-running case to clean the country's air.  
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- Petroleum coke or petcoke is an oil refinery by-product.  
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- It is used as a fuel because of its higher energy content than coal.  
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- It releases larger amounts of carbon dioxide and sulphur dioxide, which can cause lung disease and acid rain.  
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- Government may allow petcoke to be used in the limestone and cement industries.  
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- More than half of India's petcoke demand of 27 million tones is imported, mostly from the United States.  
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- India is the world's biggest consumer of petcoke.  
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## **Sleep Paralysis**

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- The prevalence of sleep paralysis in India is unknown, as sleep medicine is an under-researched faculty in India.

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- Sleep paralysis is defined as a disturbing temporary inability to perform voluntary movements at sleep-wake transitions.

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- Despite being awake and conscious of the sleeping environment, it is impossible for subjects to move their limbs or even open their eyes.

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- Sleep paralysis is thought to occur due to a Rapid Eye Movement -intrusion into wakefulness, i.e. the body is still in REM sleep, while the brain has woken up.

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- REM sleep is the stage in which dreams occur which is characterized by a complete paralysis of the voluntary muscles of the body.

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- This prevalence appears to be higher among students, and those with psychiatric illness.

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## **Kangara fort**

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- The Kangara fort is located on a steep hill about 20 km from Dharamsala in Himachal Pradesh.

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- It occupies a narrow strip of land between the the Banganga and Majhi river.

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- The kot (fort) was earlier called Nagarkot or fort of the city or Kot Kangra.

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- It was built by the royal Rajput family of Kangra State (the Katoch dynasty).

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- The highest point in the fort is occupied by the palace courtyard.

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- Below the palace courtyard there is a large courtyard containing the stone carved temples of Laxmi Narayan, Ambika Devi and the Jain Temple.

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**Source: PIB, The Hindu, Business Standard**

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