

Prelim Bits 26-11-2017

Salvator Mundi (Saviour of the World)

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- It is an ethereal portrait of Jesus Christ by Leonardo da Vinci, which dates to about 1500.

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- It is one of around 16 verified da Vinci originals in existence.

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- It is the last privately owned Leonardo da Vinci painting and was put on sale recently.

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- Experts have had doubts about the authenticity as also the condition of the painting as the work has been marred by repeated repaintings.

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ASTROSAT

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- It is India's first dedicated multi wavelength space observatory.

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- Most other scientific satellites are capable of observing only a narrow range of wavelength band. But ASTROSAT enables the simultaneous multi-wavelength observations of various astronomical objects with a single satellite i.e it observes universe in the optical, Ultraviolet, low and high energy X-ray regions of the electromagnetic spectrum.

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- Multi-wavelength observations of ASTROSAT can be further extended with co-ordinated observations using other spacecraft and ground based observations.

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- The Cadmium-Zinc-Telluride Imager (CZTI) is an instrument to observe and image hard X-rays in AstroSat.

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- It has consistently been making important.

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- The latest discovery of it is a polarization analysis of the Crab nebula pulsar.

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Dindigul Locks

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- The Dindigul region in Tamilnadu is known for well-crafted locks.
- There has been decline in the lock-making tradition in recent times.
- The reasons are—

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1. the refusal of artisans to adopt modern technology
2. the absence of documentation,
3. research and development
4. an unorganised workforce paid poor wages
5. disinterest among younger workers to learn the craft
6. the invasion of cheaper and lightweight locks, especially from China and
7. the higher cost of handcrafted locks.

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- The imposition of 18% Goods and Services Tax (GST) has also hiked the price of Dindigul locks.
- Geographical Indication tag has been sought for Dindigul locks since 2013.

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Pre-Monsoon Dust

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- The aerosol burden over north India is 3 times more than the global mean value.
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- It has been increasing at about 3% per year for the past few decades.
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- But the amount of dust aerosol during the pre-monsoon period has decreased by 10-20% during the period.
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- Past studies have shown that whenever pre-monsoon dust aerosol is more over north Indian region, the early part of monsoon rainfall is higher.
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Water Bodies & Methane

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- Shallow lakes, ponds, rivers and wetlands are relevant in the context of climate change.
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- They are responsible for much of global greenhouse gas emissions.
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- An important part of these emissions is caused by bubbles filled with methane gas that develop in the sediment at the bottom of these water bodies.
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- When the bubbles reach the surface, the gas enters the atmosphere.
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- Nutrient-rich sediments produce more methane than nutrient-poor sediments.
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- One possibility for reducing methane production is therefore to make sure that sediments have fewer nutrients, which means using less fertiliser!
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