

# Prelim Bits 03-11-2018

### Aipan

\n\n

\n

- It is a traditional folk art in the state of Uttarakhand.  $\space{1mm}\spa$
- It is the traditional terracotta and white motifs drawn on floors and walls on ceremonial occasions.
  - \n
- It consists of rhythmic geometrical patterns on a terracotta painted base.  $\slashn$
- A tiny organisation is trying to revive the domestic interest in this traditional folk art.

\n

\n\n



## Kordylewski Clouds

\n\n

∖n

- The Kordylewski clouds are two mysterious swarms of dust trapped between the competing gravitational fields of Earth and the Moon.  $\n$
- These clouds occupy positions that are called Lagrange points.  $\space{\space{1.5}n}$
- In 1961, Polish astronomer Kazimierz Kordylewski became the first scientist to claim photographic evidence of this dust accumulation phenomenon.  $\n$
- Recently, team of scientists captured evidence of these clouds at Lagrange point L5.
  - ∖n
- They identified it using a technique called sequential imaging polarimetry to detect the extreme faintness of the particles.  $\n$

\n\n

### **Lagrange Points**

\n\n

∖n

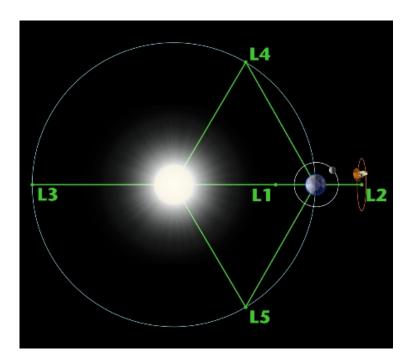
- A Lagrange point is a location in space where the combined gravitational forces of two large bodies, such as Earth and the sun or Earth and the moon, equal the centrifugal force felt by a much smaller third body.  $\n$
- The interaction of the forces creates a point of equilibrium where a spacecraft may be "parked" to make observations.  $\n$
- There are five Lagrange points around major bodies such as a planet or a star.
  - ∖n
- Three of them lie along the line connecting the two large bodies  $\space{\lambda}_n$
- The first point, L1, lies between Earth and the sun and gets an uninterrupted view of the sun and free from the occurrence of eclipses.  $\n$
- India's Aditya Satellite is placed at L1 point.  $\nphin$
- L2 with the Earth, moon and sun behind it, a spacecraft can get a clear view

\n\n

of deep space and it has a protection for radiation field from sun.  $\n$ 

- The James Webb Space Telescope will move into L2 point in 2018.  $\slashn$
- The third Lagrange point, L3, lies behind the sun, opposite Earth's orbit. For now, science has not found a use for this spot.  $\n$
- Points L4 and L5 are stable and lie along Earth's orbit at 60 degrees ahead of and behind Earth and dust and asteroids tend to accumulate in these regions due to its stability.
  - \n
- Asteroids that surround the L4 and L5 points are called Trojans and Earth's only known Trojan asteroid, 2010 TK7 is found in the region.  $\n$

\n\n



\n\n

## Sovereign Gold Bond Scheme

\n\n

∖n

- Government of India, in consultation with the Reserve Bank of India is going to open third series of Sovereign Gold Bonds 2018-19.  $\n$
- The bonds are to be issued by RBI.
- They will be restricted for sale to resident Indian entities including individuals, HUFs, Trusts, Universities and Charitable Institutions.

\n

 They will be denominated in multiples of gram(s) of gold with a basic unit of 1 gram.

\n

- Recently, RBI has increased the maximum investment to 4 kg (from 500g) for individuals and Hindu Undivided Family (HUF) and 20 kg for Trusts.  $\n$
- The interest rate is fixed at the rate of 2.50% per annum.  $\n$
- $\bullet$  The tenor of the bond will be for a period of 8 years with exit option from 5th year.

∖n

• The interest on Gold Bonds shall be taxable.

\n

• The capital gains tax arising to an individual on redemption of SGB has been exempted.

\n

- Bonds can be used as collateral for loans and are eligible for Statutory Liquidity Ratio purposes in Banks.  $\gamman$ 

\n\n

\n\n

### Source: Business Standard, PIB

