

Prelim Bits 04-04-2019

Annual Indo-Russian Forum for Media Cooperation

- Annual Indo-Russian Forum for Media Cooperation is about to be organized alternately in India and Russia in order to institutionalize the process of cooperation between the two countries in the media and entertainment sector.
- Television, news agencies, digital distribution platforms, new media, news gathering, co-production of programmes, sharing of content and exchange of professionals were identified as possible areas of collaboration.

State of Global Air Report

- The State of Global Air report 2019, prepared by the Boston-based Health Effects Institute (HEI).
- According to the report China and India together were responsible for half the total global attributable deaths from air pollution in 2017.
- Long-term exposure to outdoor and indoor air pollution is estimated to have contributed to 4.9 million deaths in 2017, of which China and India accounted for 1.2 million deaths each, states.
- The report conclude that air pollution collectively reduced life expectancy by 1 year, 8 months on average worldwide, matching the effect of smoking.
- The report found that long-term exposure to ambient PM2.5 contributed to 2.9 million deaths in 2017, making PM2.5 exposure responsible for 5.2% of all global deaths.

Menominee

- Menominee people live in Wisconsin state of USA and they speak Menominee, the language their tribe is named after.
- US government has recognized Menominee as a Native American tribe.
- Menominee language is now spoken by less than a dozen people.
- Over a thousand languages are already in the list of critically or severely endangered by agencies such as the UN.

Language Death

- Language death is a process in which the level of a speech community's linguistic competence in their language variety decreases, eventually

resulting in no native or fluent speakers of the variety.

- Language death can affect any language form, including dialects.
- In general, we now lose one language nearly every two weeks, according to language experts about half of the estimated 7,099 languages people speak on Earth will vanish by the next century.
- In India various languages are dying without anyone noticing.

Dark matter

- In general laws of gravity makes stars closer to the center of galaxies rotating faster than the stars on the edge.
- However, in most galaxies, the stars closer to the center and the stars at the edge of the galaxies take almost same time to make one revolution.
- This implied that something invisible and enveloping the galaxies was giving an extra push to the outer stars, speeding them up.
- This entity has remained as one of the central unresolved puzzles in cosmology since 1930s and it was named 'Dark Matter'.
- The material is considered to be a 'matter' since it appears to have gravitational attraction and it is 'dark' because it does not seem to interact with light (or for that matter any part of the electromagnetic spectrum).

Primordial black holes

- At the initial instant of the big bang, the densities would have been very high at many points, resulting in the formation of small black holes and were named 'primordial black holes'.
- Stephen Hawking computed that the mass of the primordial black holes could range from as low as one-hundredth of a milligram to as high as more than the mass of thousand Suns.
- According to Stephen Hawking primordial black holes make up all of the dark matter.
- Recently Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune has ruled out the possibility of primordial black holes being a major constituent of dark matter. .

Gravitational lensing

- Black holes are not radiant and will not be visible through any telescope.
- In rare instances when the black hole is in alignment with a distant star, due to gravitational attraction, light rays are bent inwards like a lens, making the star appear brighter.
- This rare phenomena can occur only when the star, the black hole and the observer on the Earth are aligned in a straight line.

Flying Squirrels

- Flying squirrels are strictly nocturnal and fly above the canopy.
- Flying squirrels do not actually 'fly', their forelimbs and hind limbs are attached together with a fold of skin, a membrane.
- When they jump above the canopy, the membrane unfolds and it seems that the squirrel is in flight.
- Flying squirrels make their homes in tree holes, if flying squirrels are seen making nests in tree branches, it can be understood that the forest is disturbed.
- Flying squirrels are found in India's two biggest diversity hotspots: the North East (Mostly in Arunachal Pradesh) and the Western Ghats (Mostly in Kerala).

Source: PIB, Indian Express the Hindu, Business Line, Down to Earth

