

1. Hubballi-Ankola Railway Link Project

Why in News?

- The controversial Hubballi-Ankola railway line project, which came up for discussion at the Karnataka State Board for Wildlife meeting, saw stiff opposition from a majority of the Board Members.

Highlights:

- In the year 1997-1998 the Ministry of Railways sanctioned the construction of the 168.289 KM broad gauge railway line from Hubli (Dharwad District) to Ankola (Uttara Kannada District) of Karnataka, to provide a direct rail link to the coast.
- The proposed rail project entails large-scale destruction of forests, including the felling of nearly 2.2 lakh fully grown trees in a biodiversity hotspot.
- There was political pressure from elected representatives of the region to get environmental clearance and permission from the wildlife board on the grounds that the project was a demand of the people of north Karnataka.
- Officials supportive of the project argued that the railway line did not cut through a protected area and was outside it, and hence the permission of the board was not required.
- The project was rejected by the Central Empowered Committee of the Supreme Court, the Ministry of Environment and Forests had opposed it, and even the National Tiger Conservation Authority (NTCA) had rejected it twice on the grounds that the damage rendered by such a linear project through pristine forests could not be mitigated and the adverse effect on flora and fauna would be irreversible.
- The 164.44-km railway line passes through pristine forests between two major protected areas, Kali Tiger Reserve and Bedthi Conservation Reserve.
- A 75-km stretch between Hubballi and Yellapur comprises plain land, while a 56-km stretch between Yellapur and Sunksal is a ghat section where the track alignment cuts through the Western Ghats.

2. Lok Sabha Passes Appropriation Bill

Why in News?

- The Lok Sabha passed the Appropriation Bill 2020-21, authorising the government to draw funds from the Consolidated Fund of India for its working as well as implementation of its programmes and schemes.

Highlights:

- The house passed the bill after the Speaker applied 'guillotine' on demands of grants for various ministries. With parliament having very limited time for scrutinising the expenditure demands of all the ministries, after a pre-decided period of discussions over spending envisaged in the budget for some ministries is over, a guillotine is applied.
- Once the speaker applies the guillotine, all the outstanding demands for grants, whether discussed or not, are put to vote at once. After this, appropriation bill is taken into consideration.

Government Accounts:

- **Consolidated Fund of India:**
 - ✓ This is the chief account of the Government of India. The inflow to this fund is by way of taxes like Income Tax, Central Excise, Customs and also non-tax revenues which arise to the government in connection with the conduct of its business.
 - ✓ Loans raised by issue of treasury bills are also received in this fund. The government meets all its expenditure including loan repayments from this fund.
 - ✓ No amount can be withdrawn from the fund without the authorisation from the Parliament. This fund is formed under the provision of Article 266 (1) of the Indian Constitution.

Contingency Fund of India:

- The Contingency Fund of India is set up in the nature of an imprest account under Article 267 (1) of the Constitution of India. The corpus of this fund is Rs. 500 crores. Advances from the fund are made for the purposes of meeting unforeseen expenditure by the President of India.
- The Secretary to the Government of India, Ministry of Finance, Department of Economic Affairs holds the fund on behalf of the President of India.

Public Account:

- The Public Account is constituted under Article 266 (2) of the Constitution. All other public moneys (other than those covered under Consolidated Fund of India) received by or on behalf of the Government of India are credited to the public account of India.
- The receipts under Public Account do not constitute normal receipts of Government. Parliamentary authorization for payments from the Public Account is therefore not required.

3. Mollusc Shell Indicates Shorter Length of Days Long Ago

Why in News?

- Scientists picked up its fossil from dry land in the mountains of Oman. Their analysis provided new clues about the behaviour of the Earth.

Highlights:

- It has long been known that Earth's spin has slowed over time. Previous climate reconstructions, however, have typically described long-term changes over tens of thousands of years.
- Earth spun 372 times a year 70 million years ago, compared to the current 365. This means the day was 23½ hours long, compared to 24 today.
- This new measurement, in turn, informs models of how the Moon formed and how close it has been to Earth over their 4.5-billion-year gravitational relationship. The ancient mollusc, *Torreites sanchezi*, belonged to an extinct group called rudist clams.
- At 70 million years ago, it belonged to the Late Cretaceous and was around the time this epoch ended that dinosaurs went extinct.
- Using lasers on a single individual, scientists sampled tiny slices and counted the growth rings accurately. This allowed them to determine the number of days in a year 70 million years ago, and more accurately calculate the length of a day.
- The period of Earth's orbit has remained the same. One year 70 million years ago was as long as one year today. However, the year would have been 372 days long, with each day half-an-hour shorter than one day today.
- Friction from ocean tides, caused by the Moon's gravity, slows Earth's rotation and leads to longer days. And as Earth's spin slows, the Moon moves farther away, at 3.82 cm per year.
- If this rate is projected back in time, however, the Moon would be inside the Earth only 1.4 billion years ago. Which cannot be, for the Moon has been with us much longer. Which means the Moon's rate of retreat has changed over time.

4. ExoMars

Context:

- The Launch of ExoMars rover has been delayed to 2022.



About Rosalind Franklin Rover:

- The European-built **Rosalind Franklin** rover, which named for the famed British chemist and X-ray crystallographer. Rosalind Franklin is the first European Mars rover.
- His work contributed to DNA research, recently passed final pre-launch thermal and vacuum tests at an Airbus facility in Toulouse, France.

About ExoMars:

- It is a joint endeavour between ESA and the Russian space agency, Roscosmos.
- Its primary goal is to address the question of whether life has ever existed on Mars.

Components of the Mission:

- **It comprises of Two Missions**
 - ✓ The **First** launched in March 2016 and consists of the **Trace Gas Orbiter (TGO) and Schiaparelli**, an entry, descent and landing demonstrator module. Its main objectives are to search for evidence of methane and other trace atmospheric gases that could be signatures of active biological or geological processes. The Schiaparelli probe crashed during its attempt to land on Mars.
 - ✓ The **second**, comprising a rover and surface platform, is planned for 2022. Together they will address the question of whether life has ever existed on Mars.

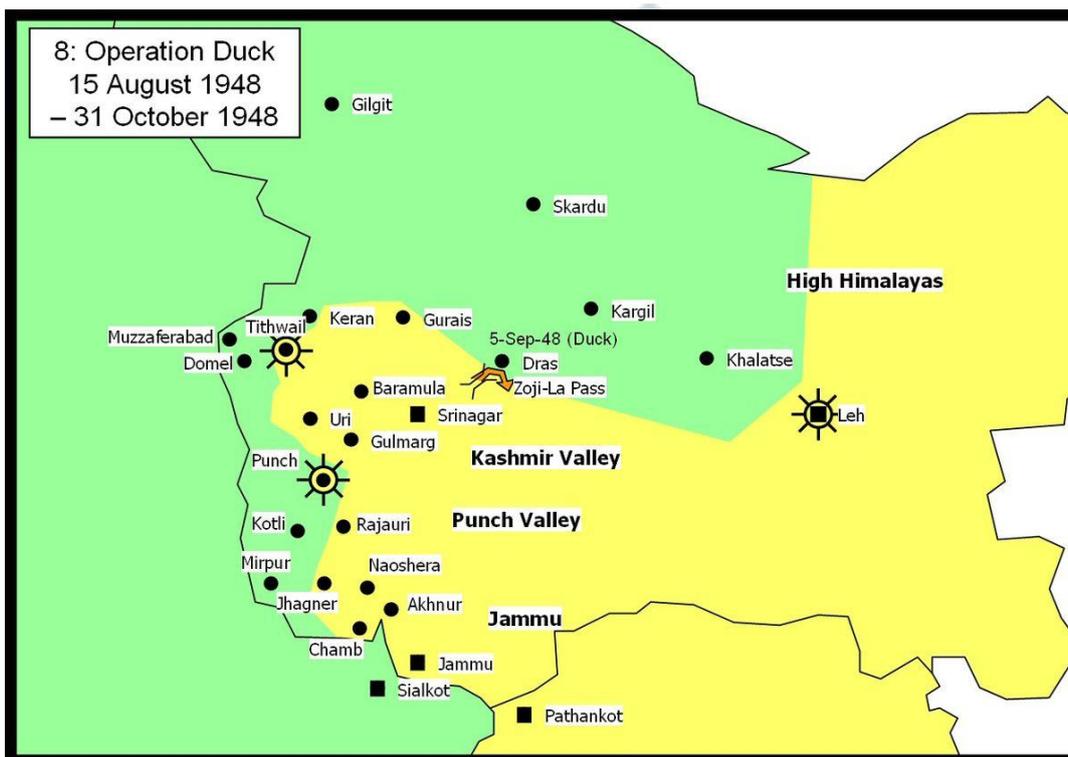
Other Missions of Mars:

- Three other Mars missions remain scheduled for launch during this year's planetary launch window in July and August.
- NASA's Perseverance rover, formerly known as **Mars 2020**, will take off in July from Cape Canaveral.
- A **Chinese Mars rover** is also being prepared for launch later this year.
- The United Arab Emirates' **Hope Mars orbiter** is slated to launch on a Japanese H-2A rocket this summer

5. Zoji La

Context:

- Zoji La pass is recently seen in news



About Zoji La Pass:

- It links Leh and Srinagar and provides an important link between Union Territories of Ladakh and Kashmir.
- It remains closed during winters due to heavy snowfall, cutting off Ladakh region from Kashmir.

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- In 2018, the Zoji La tunnel project was launched, which is the Asia's longest and strategic bi-directional tunnel, which will provide all-weather connectivity between Srinagar, Kargil and Leh.

6. Project Baseline Website by Verily

Why in News?

- The company Verily has gone live with its **Project Baseline website** for COVID-19 testing.

What is Verily?

- Verily is the life sciences and healthcare subsidiary owned by Google's parent company Alphabet.
- Launched in 2015, Verily claims its mission is to "make the world's health data useful so that people enjoy healthier lives".

Project Baseline website:

- The **Project Baseline website** launched by Verily helps in determining whether a coronavirus screening test is required for a person living in the United States.
- Project Baseline was launched in 2017 with the goal of bridging the gap between research and care.
- A clear agenda is to create a detailed baseline of what a healthy human being should be using anonymised data from hundreds of users.

"SOS Alert" System:

- An "SOS Alert" System was also been introduced by the Google.
- An "SOS Alert" on coronavirus searches across the world, giving prominence to posts from mainstream news publications and health authorities.
- SOS Alerts aim to make emergency information more accessible during a natural or human-caused crisis.
- It has also banned ads for face masks as well as monetisation on YouTube videos related to COVID-19. This seeks to dis-incentivise creation of fake videos promoting alternative treatments for the virus.