G7's \$600-bn infra project (GS Paper 2, International Relation)

Why in news?

The G7 group announced an attempt to compete with China's formidable Belt and Road Initiative by raising \$600 billion for global infrastructure programmes in poor countries.

Partnership for Global Infrastructure and Investment:

- The Partnership for Global Infrastructure and Investment, unveiled by U.S. President and G7 allies from Canada, Germany, Italy, Japan and the European Union, aims to fill a huge gap left as communist China uses its economic clout to stretch diplomatic tentacles into the furthest reaches of the world.
- The target was for the U.S. to bring \$200 billion to the table, with the rest of the G7 another \$400 billion by 2027.



Private firms in key role:

Unlike China's BRI initiative, the proposed G7 funding would depend largely on private companies being willing to commit to massive investments and is therefore not guaranteed.

Group of 7:

- The G7 is an informal forum of leading industrialised nations, which include Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.
- Representatives of the European Union are always present at the annual meeting of the heads of state and government of the G7.

G7 2022 Summit:

- Germany holds the presidency of the G7 in 2022.
- Germany invited India, along with Argentina, Indonesia, Senegal, and South Africa to the 2022 Summit as partner countries.
- Ukrainian President Volodymyr Zelenskyy, will take part virtually.

Iskander-M missile system

(GS Paper 3, Defence)

Why in news?

• Russia has promised its ally **Belarus** delivery of **nuclear- capable missiles**, **which** can use ballistic or cruise missiles, in their conventional and nuclear versions.

What is the Iskander-M missile system?

- Codenamed "SS-26 Stone" by NATO, Iskander-M is a term used by Russia to define both the transportererector launch system and the short-range ballistic missile (SRBM) it fires.
- The system can also fire ground-launched cruise missiles (GLCMs) the SSC-7 and the SSC-8.
- The Iskander-M system has been exclusively used by the Russian military, whereas Iskander-E is the one meant for export.



What is the missile's capability and range?

- The Iskander-M missile has a range of 500 km and it can carry a payload of up to 700 kg. It is capable of carrying both conventional and nuclear warheads.
- The conventional warheads can be equipped with include cluster bombs, electromagnetic pulse (EMP) warheads and bunker-buster munitions, according to US-based Missile Defence Advocacy Alliance (MDAA).
- The export variant, Iskander-E, has a range of 280 km with a reduced 480 kg payload.

When was it inducted and first used in combat?

- While the Iskander system was **inducted by Russia in 2006**, its development picked pace in the late 1980s after the "Oka" SRBM or the OTR-23 was banned under the Intermediate Nuclear Forces Treaty.
- The Oka was Russia's first attempt to replace the Soviet Scud missiles. Iskander was the second. Russia first used the Iskander in combat in Georgia in 2008.
- The Iskander missiles are designed to confuse missile defences by flying on a low trajectory and manoeuvring in flight to strike targets within 2 to 5 metres accuracy.

What does its proposed delivery to Belarus mean?

- Russia has made the announcement at the time when the G-7 meets in Germany. It is also one more time that it has raised nuclear weapons as a sort of warning to the West against climbing the escalation ladder in the Ukraine war.
- In the past too, Russia has used the Iskander system to project power against Europe, more so because of its ability to be fitted with tactical nuclear warheads.
- In 2012, it said that the weapon could be used to target Europe's missile defences.
- The Iskander system has already been deployed in Kaliningrad, a Russian exclave, from where it can be fired to target NATO forces in Poland, the Baltic States, and Sweden.

Odisha to install siren to caution elephant movement in forest

(GS Paper 3, Environment)

Why in news?

- The Forest Department in Odisha is experimenting with a siren system, which would **go off automatically sensing elephant herds crossing the National Highway** to reduce human-elephant encounters.
- The system has been installed at two places at Ratasingha and Haldihabahal to assess its operability and how seamless it can work to prevent encounters with wild elephants.

How it will work?

- The siren system detects elephant herds approaching National Highway by its infrared sensor system.
- There is an in-built programme to identify jumbos from their sizes and other attributes.
- Once detected, the siren would go off alerting traffic from both sides.



Apiculture programme:

- Similarly, the Khadi Village Industries Commission is implementing **apiculture programme to keep elephants at bay** in neighbouring Angul district.
- In cooperation with Athmallik Forest Division, about 100 bee boxes have been set up at border of Laxmipur village in Angul district.
- Marauding elephants stray into the village frequently damaging large crop areas. Sometimes, human-elephant encounters result in human casualties.
- Elephants are expected to be stung by bees if their boxes are hit. It would drive elephants back. CCTV cameras have been installed to capture reaction of elephants.

Himachal Pradesh govt. to buy-back single-use plastic items from students

(GS Paper 3, Science and Tech)

Why in news?

- As the Centre has decided to ban the use of single-use plastic from July 1, the State of Himachal Pradesh is all set to kick-start a **buy-back scheme in schools and colleges** to purchase the single-use plastic items from students in a bid to instill a sense of environment preservation by 'catching them young'.
- Under the novel scheme, the students would be encouraged to bring single-use plastic items from their home and deposit it with the school, for which they will be paid ₹ 75 a kg by the government.
- The aim is to inculcate a habit among the youngsters towards environment conservation.



Implementing agency:

- The scheme will be implemented in all the schools and colleges through the Eco-clubs.
- There are 3,000 Eco-clubs in schools and in 100 colleges under the National Green Corps programme.
- These Eco-clubs are an association of student-teachers that work to inculcate environmental awareness and protection.

HIMCOSTE:

• The Himachal Pradesh Council for Science, Technology and Environment (HIMCOSTE), is the **State nodal agency for the National Green Crops;** Eco-club Programme of the Ministry of Environment, Forest and Climate Change of Government of India and is implementing the national scheme in 3000 Eco-club schools and 100 colleges in Himachal Pradesh.

Community involvement:

- Besides the students, the scheme also aims to involve teachers, school management committees and parents
 by creating awareness surrounding the ill-effects of plastic waste at the district-level through the Eco-club
 schools, covering both rural and urban schools.
- The project aims to achieve a reduction in waste littering, especially single-use in and around the school campus, homes of Eco-club students and others in its first phase.

What's next?

- The single-use plastic items collected from the schools would then be handed over to the Public Works Department and this plastic will be used in bitumen to construct roads in the State.
- The roads built with plastic-bitumen are durable and long-lasting, besides it would help to dispose of the waste plastic.