

Mission DefSpace

For Prelims: Positive Indigenisation List, Initiatives in the Defence Sector, HAL HPT-32.

For Mains: Mission DefSpace, Government Policies & Interventions, Indigenization of Technology, Significance of Indigenisation of Defence and associated challenges.

Why in News?

Recently, the Prime Minister has launched 'Mission DefSpace' at the ongoing DefExpo.

- He also released the fourth <u>Defence Indigenisation List</u> which bars import of 101 items after certain timelines
- He also unveiled the HTT-40 (Hindustan Turbo Trainer-40) indigenous trainer aircraft designed and developed by Hindustan Aeronautics Limited (HAL) at the India Pavilion during the Expo.

What is Mission DefSpace?

About:

- It is an ambitious effort to **develop innovative solutions for the three Services** (<u>Indian airforce</u>, <u>Navy</u> and <u>Army</u>) in the space domain through the Indian industry and start-ups.
- 75 challenges are being opened to get **innovative solutions**, based on the defence requirements in the space domain.
- Startups, innovators and the private sector will be invited to find solutions for the problems that will include both offensive and defensive capabilities.
- It aims to develop a range of military applications for space warfare and to enable the
 private industries to offer solutions to the armed forces for future offensive and
 defensive requirements.
- Defence applications in space will not only help the Indian armed forces but can also be extended to friendly foreign nations.

What is the Indigenisation of Defence?

About:

- Indigenisation is the capability of developing and producing any defence equipment within the country for the dual purpose of achieving self-reliance and reducing the burden of imports.
- Self-reliance in defence manufacturing is one of the key objectives of the Department of Defence Production.
 - <u>Defence Research Development Organisation (DRDO)</u>, <u>Defence Public</u>
 <u>Sector Undertakings (DPSUs)</u> and private organisations are playing a critical role in indigenisation of defence industries.
- **India is among the world's largest arms importers,** and the armed forces are expected to spend about USD 130 billion on defence purchases over the next five years.
- 4th Indigenisation List:

- It lays special focus on equipments/ stems, which are being developed and likely to translate into firm orders in the next five to 10 years.
- The items listed in the fourth list will provide ample visibility and opportunity to the domestic defence industry for understanding the trend and futuristic needs of the armed forces and create requisite research and development and manufacturing capacity within the country.

Significance:

- Promote Domestic Industry:
 - These weapons & platforms will promote domestic industry and transform R&D and manufacturing in the country.
- Reducing Fiscal Deficit and Instills Nationalism:
 - The other benefits of indigenisation will be reduction in the fiscal deficit, security against its porous borders and hostile neighbours, generation of employment and ignition of the fire of nationalism and patriotism with the strong sense of integrity and sovereignty amongst the Indian Forces.

What is HTT-40 Indigenous Trainer Aircraft?

- HTT-40 is a basic training aircraft developed by Hindustan Aeronautics Limited (HAL) for the Indian Air Force (IAF).
- It will replace the ageing fleet of HAL HPT-32 Deepak trainers that are in service with the IAF.
- Its trainer offers the best-in-class fuel economy and power rating.
- It takes-off from a short distance and has a high climb rate.
- It has a maximum speed of 450km/h and can reach a maximum distance of 1,000 km. The stall The Vision speed with flaps down is 135 km/h.



UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. In the context of the Indian defence, what is 'Dhruv'? (2008)

- (a) Aircraft-carrying warship
- **(b)** Missile-carrying submarine
- (c) Advanced light helicopter
- (d) Intercontinental ballistic missile

Ans: (c)

Mains

- **Q.** What is the significance of Indo-US defence deals over Indo-Russian defence deals? Discuss with reference to stability in the Indo-Pacific region. **(2020)**
- **Q.** How is S-400 air defence system technically superior to any othersystem presently available in the world? **(2021)**

Source: TH

