Syllabus subtopic: Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology.

Prelims and Mains focus: About Pinaka missile system and its role in India’s defence system

News: India successfully conducted test firing of the indigenously developed Pinaka missile system for the second consecutive day on Friday from the Integrated Test Range at Chandipur off the Odisha coast.

Both the missiles were fired to engage a target located at 20-kilometre range and high accuracy was achieved.

About Pinaka missile system

- Pinaka rocket systems are developed by Defence Research and Development Organisation (DRDO). The rocket system was named after Pinaka, the bow of Lord Shiva.
- It was initially a 30 to 40 km range rocket. Its range was increased 70 to 80 km with Pinaka Mark II.

About DRDO

- The Defence Research and Development Organization (DRDO) was established in 1958 by amalgamating the Technical Development Establishment and the Directorate of Technical Development and Production with the Defence Science Organisation.
- It is under the administrative control of the Ministry of Defence, Government of India headquartered in New Delhi.
- It works with a network of 52 laboratories, which are engaged in developing defence technologies covering various fields, like aeronautics, armaments, electronics, land combat engineering, life sciences, materials, missiles, and naval systems.