Date - 2 March 2022

'Exercise Dharma Guardian 2022'

 From 27 February to 10 March 2022, a joint exercise between India and Japan 'Abhyas Dharma Guardian 2022', is being conducted at the Foreign Training Node Belagavi (Belgaum, Karnataka).

Practice Dharma Guardian 2022:

- Abhyas Dharma Guardian 2022 is an annual training program that is being conducted in India since 2018.
- The scope of this exercise includes platoon level joint training conducted in forest and semi-urban/urban areas.
- The joint exercise program includes house intervention drills, raids on terrorist targets in semi urban areas, first aid, and unarmed combat and close quarter combat firing, where both sides will jointly engage in well-developed tactical exercises to thwart potential threats.
- Special emphasis is being given on promoting strategic skills, inter-operability between forces and mutual relations between forces to fight global terrorism.

Other military exercises between India and Japan

- MALABAR: India and Japan participate in a naval warfare exercise called MALABAR along with the United States and Australia.
- Jimex (Navy)
- **Shinyu Friendship** (Air Force)

National Science Day (NSD)

• In the same way the Prime Minister congratulated India's scientific community on the occasion of National Science Day (February 28).

Key points

- National Science Day (NSD) is celebrated every year on 28 February to commemorate the discovery of the Raman Effect by Nobel Laureate and physicist CV Raman on this day in the year 1928.
- In the year 1986, the National Council of Science and Technology asked the Government of India to designate 28 February as NSD.
- Since 1987, this event has been celebrated all over the country in schools, colleges, universities and other academic, scientific, technical, medical and research activities.
- The purpose of celebrating this day is to increase scientific temper, popularize science and encourage innovative activities by promoting scientific temper among people and to create a positive scientific research culture.
- The nodal agency to support NSD is the National Council for Science and Technology Communication (NCSTC), Ministry of Science and Technology.

Theme 2022:

- "Integrated Approach in science and technology for Sustainable Future".
- The theme focuses on a four-fold integrated approach to a sustainable future which includes:
 - Extended scientific intervention, including engineering.
 - Medical and other institutions.
 - Additional scientific integration includes identification of needs of other ministries like Jal Shakti, Railways.
 - Expanded science driven all-inclusive approach integrating startups and industry.

C.V. Raman:

- Physicist Chandrasekhar Venkata Raman was born in Tamil Nadu.
- He was awarded the Nobel Prize in Physics in 1930 for his work in the field of light scattering.
- This phenomenon of light scattering was named as Raman Effect.
- In the year 1954, he was awarded the Bharat Ratna, India's highest civilian award.

Raman Effect

- The Raman Effect is a scattering of photon particles by molecules that encourage higher vibrational or rotational energy levels. It is also called Raman scattering.
- In simple words, it is a change in the wavelength of light which is caused by the rays of light being deflected by the molecules.
- When a ray of light passes through a dustless and transparent sample of a chemical compound, a small portion of the light emerges in other directions than the direction of the incident ray.
- The wavelength of most of this scattered light remains unchanged. However, there is also a small part of the light whose wavelength is different from the wavelength of the incident light and its presence is a result of the Raman Effect.
- The Raman Effect forms the basis of Raman spectroscopy, which is used by chemists and physicists to obtain information about materials.
- Spectroscopy is the study of the interaction between matter and electromagnetic radiation.

'Operation Ganga'

- Recently the Government of India has started a 'multi-pronged' initiative named 'Operation Ganga'.
- A dedicated Twitter handle 'OpGanga Helpline' has also been announced to assist in the safe evacuation of Indians from Ukraine.
- Current tensions between Russia and Ukraine have escalated with the outbreak of war in Ukraine after the recent spate of attacks by the Russian military.

Operation Ganga:

- It is an evacuation mission to bring back all the Indian nationals who are currently stranded in Ukraine.
- Around 20,000 Indians, including students, were trapped in Ukraine.
- So far more than 900 Indians from Ukraine have been safely brought back to India by three Air India flights.
- Indian evacuation flights are operating from neighboring countries like Romania and Hungary.
- The Indian government is also providing facilities to rescue Indians trapped in the borders of Romania, Hungary, Poland and Slovakia.

Other evacuation operations undertaken by India:

Vande Bharat (2020)

- 'Vande Bharat Mission' has been run to bring back Indian citizens stranded abroad due to the ban on global travel due to Coronavirus.
- Under this mission, about 60 lakh Indians were brought back till April 30, 2021 in several phases.

Operation Samudra Setu (2020)

- It was a naval operation as part of the national effort to bring back Indian nationals from abroad during the COVID-19 pandemic.
- Under this, 3,992 Indian citizens were successfully brought back to their homeland by sea.
- Indian Navy ships Jalashwa (Landing Platform Dock), Airavat, Shardul and Magar (Landing Ship Tank) participated in the operation, which lasted 55 days and covered 23,000 km by sea. More travel was involved.

Operation Brussels (2016):

- In March 2016, Belgium was hit by a terrorist attack at Brussels Airport in Zaventem and at the Malbec metro station in central Brussels.
- Under this, a total of 242 Indians, including 28 crew members, were brought to India by Jet Airways flight.

Operation Rahat (2015):

- Operation Rahat, launched by the Indian Armed Forces during the 2015 Yemen crisis, evacuated over 4640 Indian nationals along with 960 foreign nationals from 41 countries from Yemen.
- The operation was conducted both by air and by sea.

Operation Maitri (2015):

- Operation Maitri was conducted by the Government of India and the Indian Armed Forces as a rescue and relief operation in the 2015 Nepal earthquake.
- The Indian Armed Forces had evacuated about 5,188 people, while about 785 foreign tourists were granted transit visas.

Operation Safe Homecoming (2011):

- It was started by the Government of India on 26 February 2011 for the safe return of Indian citizens trapped in the Libyan Civil War.
- Around 15,000 civilians were rescued in this operation.
- In this both the air route and sea route were used by the Indian Navy and Air India.

Operation Sukoon (2006):

- As the military conflict in Israel and Lebanon began in July 2006, India launched
 Operation Sukoon, now known as the 'Beirut Sealift', to rescue its stranded civilians.
- It was the largest naval rescue operation since the Dunkirk evacuation.
- The task force evacuated approximately 2,280 people, including some Nepalese and Sri Lankan nationals, between July 19 and August 1, 2006.

Kuwait Airlift (1990):

- When 100,000 Iraqi soldiers armed with 700 tanks invaded Kuwait in 1990, royals and VIPs fled to Saudi Arabia.
- At the same time the life of the general public was put at risk.
- More than 170,000 Indians were among those trapped in Kuwait.
- India launched an evacuation operation, in which over 1,70,000 Indians were airlifted and brought back to India.

Rashtriya Vyoshi Yojana (RVY)

 Ministry of Social Justice and Empowerment will distribute 4,800 daily living aids and assistive devices among 895 senior citizen beneficiaries under Rashtriya Vayoshri Yojana (RVY).

National Vayoshree Scheme:

- It was launched in the year 2017 by the Ministry of Social Justice and Empowerment.
- It is a central sector scheme financed from the Senior Citizens Welfare Fund. This fund was notified in the year 2016.
- All unclaimed amounts from small savings accounts, PPF and EPF are transferred to this fund.

Aim:

 It aims to provide aids and assistive devices to senior citizens belonging to the Below Poverty Line (BPL) category who are suffering from age-related disability/disability like impaired vision, hearing impairment, tooth loss and walking disturbance.

- Assistive devices such as walking sticks, elbow crutches, walkers/crutches, tripod/quad pods, hearing aids, wheelchairs, artificial teeth and glasses are provided to the eligible beneficiaries.
- According to the 2011 census data, the population of senior citizens in India is 10.38 crores. More than 70% of the senior citizens population lives in rural areas of the country and a large percentage (5.2%) suffer from old age-related disability.

Implementation:

 The scheme is being implemented by the Artificial Limbs Manufacturing Corporation (ALIMCO), a Public Sector Undertaking, under the Ministry of Social Justice and Empowerment.

Other Schemes Related to Old Age Persons:

- SAMPANN Pariyojna
- SACRED Portal for Elderly
- **Elder Line:** Toll-free number for the elderly
- SAGE (Senior Care Aging Growth Engine)
- Maintenance and Welfare of Parents and Senior Citizens (MWPSC) Act, 2007
- Integrated Program for Older Persons (IPOP)
- Rashtriya Vayoshri Yojana (RVY)
- Indira Gandhi National Old Age Pension Scheme
- Pradhan Mantri Vaya Vandana Yojana
- Vayoshreshtha Samman

Swadeep Kumar