

Important Fact For Prelims (27th February 2019)

Exercise Sampriti 2019

- The 8th edition of India-Bangladesh joint military exercise, 'Exercise Sampriti 2019' will be conducted at Tangail, Bangladesh from March 2nd to 15th.
- The exercise will involve tactical level operations in a counter insurgency and counter terrorism environment under the mandate of the United Nations.
- The Exercise Sampriti is hosted alternately by both the countries. The 7th edition was held in India at Mizoram.
- The exercise aims to build, strengthen and promote positive relations between the Armies of India and Bangladesh.

Space Flight of First UAE Astronaut

- The first astronaut from the United Arab Emirates (UAE) will head to the International Space Station (ISS) via the Russian Soyuz rocket on 25th September, 2019.
- After this UAE will join the list of eighteen countries that have sent their people to ISS.
- The pioneering mission to the ISS is part of the UAE Astronaut Programme that aims to fulfil the UAE's aspirations in taking part in scientific missions and manned space exploration missions.
- In 2018, UAE launched its **first locally made satellite KhalifaSat from Japan.** It has planned a Mars probe named as Hope Mars Mission, for the next year.

International Space Station (ISS)

- ISS is a habitable artificial satellite the single largest man-made structure in low earth orbit.
- It circles the Earth in roughly 92 minutes and completes 15.5 orbits per day.
- The ISS programme is a joint project between five participating space agencies: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada) but its ownership and use has been established by intergovernmental treaties and agreements.
- Its first component was launched into orbit in 1998 and its development and assembly continues, with components scheduled for launch this year.
- It serves as a microgravity and space environment research laboratory in which crew members conduct experiments in biology, human biology, physics, astronomy, meteorology, and other fields.
- Continuous presence at ISS has resulted into the longest continuous human presence in the low earth orbit.
- It is expected to operate until 2030.

Gynandromorphs

- According to Scientists, the **study of gynandromorphs** could offer clues as to why some human diseases strike one gender more than the other.
- Gynander or gynandromorphs are the organisms in which the body consists of both male and

female parts.

- The term is derived from the Greek words (gyne = woman; aner = man and morphe = form). Thus, in these animals one part of the body shows female and the other part male features. The phenomenon has been documented in birds, crustaceans and butterflies.
- However, it still remains a mystery as to how gynandromorphs are born. Gynandromorphs occur naturally, usually resulting from a random genetic error.
- These instances of split-sex animals and insects could offer clues to why some human diseases strike one sex more than the other.
- Diseases like multiple sclerosis, obesity, metabolic syndrome, autoimmune disease, Alzheimer's, even ageing differs by sex. Few decades back, scientists did not think that sex chromosomes played any role in causing sex differences in these diseases.

Climate-Smart Varieties of Rice

- Recently, the National Rice Research Institute (NRRI), has released four new rice varieties, including two high-protein and two climate-smart varieties.
- The four new varieties comprises of:
 - Two high-protein rice varieties (CR Dhan 310 and CR Dhan 311) and
 - Two climate-smart varieties (CR Dhan 801 and CR Dhan 802), which are tolerant to both submergence and drought and few biotic stresses to face the challenges of climate change.
- NRRI also developed a Mobile App 'riceXpert' to provide information to farmers in real time besides facilitating the flow of information from scientist to farmers.
- NRRI is the nodal agency for planning, implementation and monitoring of the Bringing Green Revolution in Eastern India programme.
- It was **established in 1946** and subsequently the administrative control of the Institute was transferred to the Indian Council of Agricultural Research (ICAR) in 1966.
- NRRI is one of the institutes of Indian Council of Agricultural Research (ICAR) and is located at Cuttack in the state of Odisha.

Quick Reaction Surface-to-Air Missile

- Defence Research and Development Organisation test fired indigenously developed Quick Reach Surface-to-Air missiles (QRSAM) from Integrated Test Range Chandipur, in Odisha.
- The test flights successfully demonstrated the robust Control, Aerodynamics, Propulsion, Structural performance and high manoeuvring capabilities thus proving the design configuration.
- It is a state-of-the-art missile with all weather weapon system, a strike range of 30 km and capable of engaging multiple targets.

Bagru Block Printing //



- Union Council Minister Smriti Irani inaugurated the 'Titanwala Museum' in Bagru village of Rajasthan that showcases the Chippa community's (literally meaning people who stamp or print) Hand-block printing.
- Bagru printing is one of the traditional techniques of printing with natural colour followed by the

