Kerala On alert due to the rise in Shigella Bacteria cases in the state.
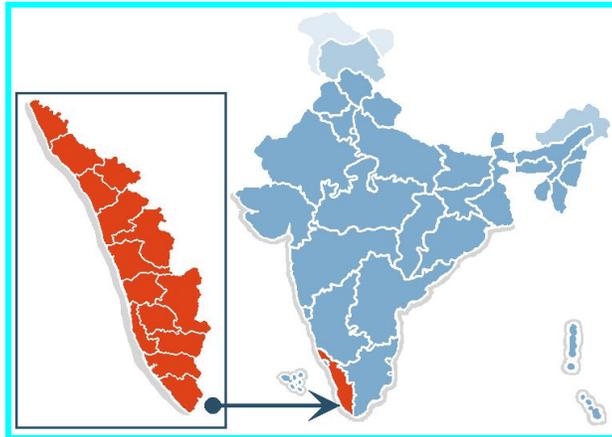
About:

Shigella is a genus of Bacteria that is rod shaped and genetically closely related to E.Coli. The genus is named after **Kiyoshi Shiga**, who first discovered it in **1897**.

Shigella causes disease in primates, but not in other mammals.

Japanese Physician (Kiyoshi Shiga)

Symptoms:

- The name of the bacteria is Shigella and the infection is known as shigellosis.
- Symptoms include diarrhea (sometimes bloody), fever, and stomach cramps which can last for seven days.
- Symptoms usually begin 1–2 days after infection and last 7 days.

Causes:

- Shigella bacteria spread from one person to another person through various means — even after the infected person is cured.
- It takes a small number of bacteria to make someone ill.
- Contaminated food, water are the source of the infection.

Test:

➔ **The presence of the bacteria is generally confirmed through a stool test.**

Cure:

- Most people recover without needing antibiotics.
- People with severe illness and those with weakened immune systems should be given antibiotics.
- Antibiotics can shorten the duration of illness (by about 2 days) and might help reduce the spread of Shigella to others.
- Treatment is generally done through antibiotics, which can shorten the duration of the illness.

Vulnerable section:

- Children below 10 years are prone to contract the infection, though elderly can also get infected.
- It is mainly prevalent in Low income countries.
- According to the 2015 Global Burden of Disease report, diarrhoeal diseases were collectively responsible for 1.3 million deaths across all age groups around the world.

Recent Development in Kerala:

- An 11 year old boy died and 20 people who were in contact with the boy are also having the symptoms.
- Earlier in 2019 also around 40 children in a school were diagnosed with this disease and a mid day meal was sent for monitoring.

NATIONAL MATHEMATICS DAY
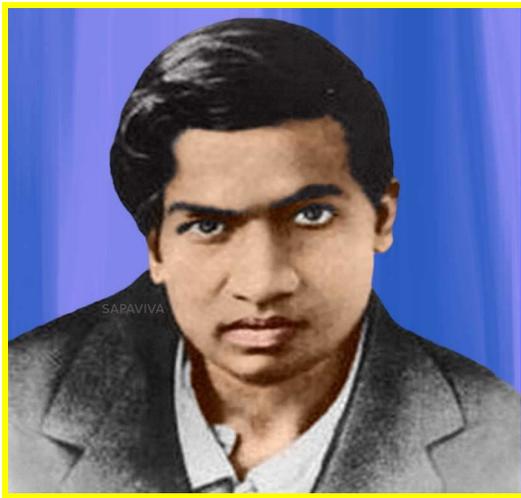
Born: 22 December 1887, Erode(Tamil Nadu)

Died: 26 April 1920, Kumbakonam (Tamil Nadu)

Every year 22nd December, Birthday of Srinivas Ramanujan is celebrated as National Mathematics Day.

- Srinivasa Ramanujan was an Indian mathematician who lived during the British Rule in India.
- Indian mathematician whose contributions to the theory of Numbers include pioneering discoveries of the properties of the partition function.
- Though he had almost no formal training in pure mathematics, he made substantial contributions to mathematics.

In 2012, the then prime minister Manmohan Singh declared **22 December** as **National Mathematics Day.**

Over 60% rise in India's leopard population since 2014.

Context:

- The Union Environment Minister released the 'Status of Leopards in India 2018".
- India's leopard population has increased to over 12,000 in 2018 from around 8,000 in 2014.

About Leopard Census:

- The study was conducted through capturing the images and satellites imaging and field work by teams of forest officers along with teams of the Wildlife Institute of India(Dehradun based) and National Tiger Conservation Authority.
- According to the **report**, India's **leopard population** in 2018 was estimated at 12,852, with the most number of them being found in **Madhya Pradesh at 3,421**, followed by Karnataka at 1,783 and Maharashtra at 1,690.
- More than 60% increase in population has been recorded over the previous estimate which was conducted in 2014.

About leopards:

- The Indian leopard is a leopard subspecies widely distributed on the Indian Subcontinent.

- It is one of the big cats occurring on the Indian subcontinent, apart from the Asiatic lion,bengal tiger,snow leopard and clouded leopard.

- Listed in **Schedule I** of the Indian Wildlife (Protection) Act, 1972.

- Included in **Appendix I of CITES.**

- Listed as **vulnerable on the IUCN Red List.**

- It is listed as vulnerable on the IUCN Red List because populations have declined following habitat loss and fragmentation poaching for the illegal trade of skins and body parts, and persecution due to conflict situations.

➔ In 2014, a national census of leopards around tiger habitats was carried out in India except the northeast. 7,910 individuals were estimated in surveyed areas and a national total of 12,000-14,000 speculated.

Indian Navy has signed a MoU with INCOIS

Context :

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  Indian Navy has signed a Memorandum of Understanding (MoU) with - Indian National Centre for Ocean Information Services (INCOIS)
- This MoU is focused on sharing ocean services, data, and expertise in the field of operational oceanography and the same will benefit

both Indian Navy and INCOIS in furthering meaningful interactions and professional exchanges in future.

What is Indian National Centre for Ocean Information Services(INCOIS)?

- Indian National Center for Ocean Information Services (INCOIS) is an autonomous organization of the Government of India, under the Ministry of Earth Sciences(MoES), was established as an autonomous body in 2007.
- INCOIS provides the best possible ocean information and advisory services to society, industry, government agencies and the scientific community and Indian Navy deals with the multifaceted and specialized aspects of Oceanography and Meteorology in support of naval operations in all its three dimensions.
- It is a unit of the Earth System Science Organization.

About Indian Navy:

- ➔ The Indian Navy is a three-dimensional force, capable of operating above, on and under the surface of the oceans, safeguarding our national interests.
- ➔ The Chief of the Naval Staff (CNS) exercises operational and administrative control of the Indian Navy from the Integrated Headquarters of the Ministry of Defence (Navy).

- ➔ The Navy has the following three Commands, each under the control of a Flag Officer Commanding-in-Chief:-
- The Western Naval Command (Headquarters at Mumbai).
- The Eastern Naval Command (Headquarters at Visakhapatnam)
- The Southern Naval Command (Headquarters at Kochi)