

## 1. AREA 51

**Context:** Around two million people plan to storm a US Air Force facility called Area 51

- ▶▶ On a Facebook event titled “**Storm Area 51, They Can’t Stop All of us**”, two million people have clicked “attending” and another 1.4 million have clicked “interested”.

### About Area 51:

- ▶▶ A 38,400-acre facility, Area 51 is in Southern Nevada. Officially known as the Nevada Test and Training Range
- ▶▶ Area 51 is part of the **Nellis Air Force Base** and is used as a training centre for the US Air Force. The name originates from its location of the **Nevada map**.

### Conspiracy Theories:

- ▶▶ Several Americans believed it was where the government hid bodies of aliens and UFOs
- ▶▶ Some believed it was where the government held “meetings” with extra-terrestrials, and others speculated it was where the government developed “time travel” technology.
- ▶▶ The CIA, has been using the facility since 1955 to develop and test supersonic aircraft and stealth fighter jets.
- ▶▶ It was only in 2013 that the CIA published declassified documents admitting that the Area 51 is a secret military site.

## 2. SAFFRON FARMING IN LEH

**Context:** In Jammu and Kashmir, Ladakh Farmers and Producers Cooperative Limited have started experimenting with **saffron farming in Leh**.

- ▶▶ Ladakh is part of saffron farming experiment along with hill States of **Himachal Pradesh and Uttarakhand**.
- ▶▶ At present, saffron is farmed in Pulwama and Pampore areas of Jammu and Kashmir.
- ▶▶ Ladakh has similarities of climatic conditions with **Iran and Afghanistan** where saffron is grown.

### About Saffron:

- ▶▶ Saffron which is considered as nature’s precious wonder gift to mankind is in great demand for its medicinal, cosmetic and aromatic properties.
- ▶▶ It grows from a very small plant botanically known as **Crocus Sativus**.
- ▶▶ Its purple coloured flower is the only part mostly seen above the ground.

- ▶▶ The blossoms appear during **late autumn** (mid-October to early November) and present a very fascinating memorable sight in moonlight particularly on '**Kartik Purnima**'.
- ▶▶ The aromatic reddish stigmas of these flowers are harvested which form the most expensive part of the colourful spice called '**Mogra**'.
- ▶▶ The remaining stalks are also processed to get inferior grade of saffron called '**Lacha**'.
- ▶▶ Government of India is implementing the **National Saffron Mission under the Rashtriya Krishi Vikas Yojana (RKVY)**.
- ▶▶ **Objective:** The Saffron National Mission is to improve the overall production of saffron, enhancing quality of saffron, enhancement of research and extension capability and develop appropriate system for organized marketing for the growers

### **3. MACHAIL MATA YATRA**

**Context:** The 43-day-long '**Machail Mata Yatra**' commenced on July 25 and was scheduled to end on September 5.

- ▶▶ Thousands of devotees from across the country visit the scenic Paddar valley, also famous for its sapphire mines, during the yatra.
- ▶▶ On Friday, annual Amarnath Yatra was suspended due to terror threat

#### **About Machail Mata Yatra:**

- ▶▶ Machail Mata is a **Goddess Durga shrine** popularly known as **Machail Mata** being located in the village Machail, from where it derives its name, in Kishtwar District of Jammu region in India.
- ▶▶ Thousands of devotees from across the country visit the Paddar valley during the yatra and pay obeisance at the holy shrine of goddess Durga in Machail village after trekking for 30-km.
- ▶▶ The annual Amarnath Yatra has already been suspended due to security reasons.

### **4. CANINE DISTEMPER**

**Context:** Tigers in India face lurking threat from virus, there is heightened risk of disease transfer from dogs to tigers, leopards in **Ranthambhore National Park**

- ▶▶ A recent study published in **Threatened Taxa** notes that 86% of the tested dogs around **Ranthambhore National Park in Rajasthan** carried CDV antibodies in their bloodstream.
- ▶▶ This finding points out that there is an increased risk of disease transfer from the dogs to tigers and leopards that live in the park.

- ▶▶ Last year, over 20 lions from the Gir forest succumbed to the viral infection and now a guideline has been prepared by the **National Tiger Conservation Authority** to prevent the spillover of the disease to wild animals.

### About Canine Distemper:

- ▶▶ It is a **contagious and serious disease** caused by a **virus** that attacks the respiratory, gastrointestinal and nervous systems of puppies and dogs.
- ▶▶ It is sometimes termed **Hardpad disease**.
- ▶▶ **Symptoms:** Commonly observed signs are a runny nose, vomiting and diarrhea, dehydration, excessive salivation, coughing and/or labored breathing, loss of appetite, and weight loss
- ▶▶ **Virology:** It is caused by a single-stranded RNA virus of the family Paramyxoviridae, which is a close relative of the viruses that cause measles in humans and rinderpest in animals
- ▶▶ **Transmission:** The disease is highly contagious via inhalation. The virus can also be transmitted by shared food and water bowls and equipment.
- ▶▶ **Diagnosis:** There is no cure for canine distemper infection. Treatment typically consists of supportive care and efforts to prevent infections.

### About Ranthambhore National Park:

- ▶▶ It is one of the biggest and most renowned national park in Northern India.
- ▶▶ The park is located in the Sawai Madhopur district of southeastern Rajasthan, which is about 130 km from Jaipur.
- ▶▶ The park is majorly famous for its tigers and is one of the best locations in India to see the majestic predators in its natural habitat.

## 5. KALA AZAR

**Context:** By encapsulating an antifungal drug in polymer nanofibers, researchers at the **Indian Institute of Technology (IIT) Hyderabad** have been able to achieve controlled and sustained release of the drug for up to 10 days.

### In India:

- ▶▶ Kala azar is **endemic** to the **Indian subcontinent** in four countries (**Bangladesh, Bhutan, India and Nepal**).
- ▶▶ Within India it is endemic to four contiguous states (West Bengal, Bihar, Jharkhand and eastern Uttar Pradesh).
- ▶▶ In India **LEISHMANIA DONOVANI** is the only parasite that causes this disease.

- ▶▶ Under **National Vector Borne Disease Control Programme** (NVBDCP), Government of India is coordinating with endemic States to eliminate the disease.

### About Kala Azar:

- ▶▶ It is a slow progressing indigenous disease caused by a protozoan parasite of genus *Leishmania*
- ▶▶ In India *Leishmania donovani* is the only parasite causing this disease
- ▶▶ The parasite primarily infects reticuloendothelial system and may be found in abundance in bone marrow, spleen and liver.

## 6. GJ 357 d

**Context:** NASA satellite uncovers ‘**first nearby super-Earth**’ named **GJ 357 d**

### About GJ 357 d:

- ▶▶ The super-Earth planet -- named GJ 357 d -- was discovered in early 2019 owing to **NASA's Transiting Exoplanet Survey Satellite (TESS)**, a mission designed to comb the heavens for exoplanets.
- ▶▶ Astronomers from the Institute of Astrophysics of the Canary Islands and the University of La Laguna, both in Spain, announced the discovery of the GJ 357 system in the journal *Astronomy & Astrophysics*.
- ▶▶ They showed that the distant solar system — with a diminutive M-type dwarf sun, about one-third the size of our own sun — harbours three planets, with one of those in that system’s habitable zone: GJ 357 d.
- ▶▶ With a **thick atmosphere**, the planet GJ 357 d is **22% larger than the Earth** and could maintain liquid water on its surface like Earth.

