SHORTNEWS:

1.EQUINE DISEASE-FREE COMPARTMENT

Context: India has achieved a major milestone in international veterinary standards with the **establishment of its first internationally recognised Equine Disease-Free Compartment (EDFC)** at the **Remount Veterinary Corps (RVC) Centre & College**, Meerut, Uttar Pradesh.

More on News: The EDFC has been officially declared free from **Equine Infectious Anemia**, **Equine Influenza**, **Equine Piroplasmosis**, **Glanders**, and **Surra**.

- Additionally, India has historically remained free from **African Horse Sickness since 2014.**

About Equine Disease

- **Equine disease** refers to a medical condition that affects **horses** (equines), including donkeys and mules.
- These diseases can be caused by **viruses, bacteria, parasites, or environmental factors** and may affect different systems in the horse's body such as the respiratory, digestive, or nervous system.

Common Examples of Equine Disease

- **Equine Infectious Anemia (EIA):** A viral disease spread by bloodsucking insects; causes fever, anemia, and weight loss. **Equine Influenza:** A highly contagious viral respiratory disease leading to fever, coughing, and nasal discharge.
- **Equine Piroplasmosis:** A tick-borne parasitic disease causing fever, anemia, jaundice, and weakness.
- **Glanders:** A serious bacterial infection that can spread to humans; causes nasal discharge, ulcers, and swollen lymph nodes in equines.

What is an Equine Disease-Free Compartment (EDFC)?

- An **EDFC** is a facility that maintains a population of horses under **strict biosecurity and veterinary protocols**, certified to be free from specific equine diseases.
- It allows for **international movement** of horses without imposing standard country-wide restrictions.
- It complies with the World **Organisation for Animal Health's** Terrestrial Animal Health Code.

2.PLACES IN NEWS: HELGOLAND

Context: More than 300 top **quantum physicists** gathered on **Helgoland** in June for a conference that was billed as a highlight of the **International Year of Quantum Science and Technology.**

About Helgoland

- Located in the North Sea, about **50–65 km off the coast of Germany.**
- Lies in the **German Bay (Deutsche Bucht)**, near the estuaries of the Jade, Weser, and Elbe rivers.
- Famous for its **red sandstone cliffs**, **clean air**, and **scientific history**
- **Climate**: Oceanic climate with **mild winters.**

Historic significance

- Controlled by **Dukes of Schleswig-Holstein (1402)**, then **Denmark (1714)**
- **British possession (1807–1890)**; ceded to **Germany in 1890** in exchange for **Zanzibar and African territories**
- Developed into a major naval base, called **"Gibraltar of the North Sea"**
- Military installations demolished post-World War I (Treaty of Versailles)
- **Remilitarized by Nazi Germany** and **heavily bombed** in World War II.
- **Evacuated** after the war; used as a **RAF bombing range** until **returned to West Germany in 1952**.

Scientific and Technological Importance

- Site for **navigation**, **wind-energy production**, and **scientific research**.
- Important for the **study of birds**.
- Helgoland is considered the **birthplace of quantum mechanics**.
- In June 1925, **Werner Heisenberg**, developed **matrix mechanics**, the first complete version of quantum theory.

3.ALUMINIUM AND COPPER VISION DOCUMENTS

Context: Recently, India unveiled its Aluminium and Copper Vision documents, aligned with PM Modi's vision of Viksit Bharat by 2047.

- **Aluminium Vision**: Aims for a **6-fold increase** in aluminium production by 2047.
- **Copper Vision**: Anticipates **6-fold demand increase** by 2047 and outlines strategies for expanding smelting and refining capacity by 2030.

Aluminium Vision Document

- **Production Expansion**:

    - **Target**: Increase aluminium production from **4.5 million tonnes per annum (MTPA)** to **37 MTPA** by 2047.
    - Requires an investment of over **₹20 lakh crore** to meet demand.
- **Key Strategic Pillars**:
    - **Raw Material Security**: Expansion of **bauxite production** to 150 MTPA by 2047.
    - **Circular Economy**: Double the national aluminium **recycling rate**.
    - **Low-Carbon Technologies**: Promote adoption of low-carbon technologies to align with clean energy systems and **electric mobility**.
    - **Self-Sufficiency**: Focus on self-reliance in aluminium production and raw material security.
- **Global Competitiveness**: The vision aims to position India as a **global aluminium hub**, claiming **10% of the global market** by 2047.
    - The document emphasizes the importance of aluminium in supporting **clean energy**, infrastructure development, and energy independence.

Copper Vision Document

- **Anticipated Demand Growth**:
    - **Copper Demand**: Expected to grow **six-fold** by 2047.
    - The document aims to meet **growing domestic demand** while ensuring **raw material security**.
- **Capacity Expansion**: Plan to add **5 million tonnes per annum (MTPA)** of smelting and refining capacity by **2030**.
- **Strategies**:
    - **Secondary Refining**: Focus on scaling up secondary refining processes and enhancing domestic recycling capacities.
    - **Raw Material Security**: Reduce dependency on **imports** by securing overseas mineral assets through **global partnerships**.