

# **Daily current affairs**

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#### **Holocene**

- The Holocene is the current geological (The geologic time scale (GTS) is a system of chronological dating that relates geological strata (stratigraphy) to time. It is used by geologists, paleontologists, and other Earth scientists to describe the timing and relationships of events that have occurred during Earth's history) epoch(An epoch is a unit of time where in geochronology, an epoch is a subdivision of the geologic timescale that is longer than an age but shorter than a period).
- In general, the Holocene has been a relatively warm period in between ice ages.
- The Holocene extinction, otherwise referred to as the Sixth extinction or Anthropocene extinction, is the ongoing extinction event of species during the present Holocene epoch, mainly as a result of human activity.
- The anthropocene is a proposed epoch dating from the commencement of significant human impact on the Earth's geology and ecosystems, including, but not limited to, anthropogenic climate change.
- The International Commission on Stratigraphy (ICS), sometimes referred to by the unofficial name "International Stratigraphic Commission" is a subordinate body of the International Union of Geological Sciences—of which it is the largest body within the organisation that concerns itself with stratigraphy, geological, and geochronological matters on a global scale.

## **International Labour Organization**

- The only tripartite U.N. agency, since 1919 the ILO brings together governments, employers and workers of 187 member States , to set labour standards, develop policies and devise programmes promoting decent work for all women and men.
- The unique tripartite structure of the ILO gives an equal voice to workers, employers and governments to ensure that the views of the social partners are closely reflected in labour standards and in shaping policies and programmes.
- The ILO was founded in 1919, in the wake of a destructive war, to pursue a vision based on the premise that universal, lasting peace can be established only if it is based on social justice. The ILO became the first specialized agency of the UN in 1946.

• The main aims of the ILO are to promote rights at work, encourage decent employment opportunities, enhance social protection and strengthen dialogue on work-related issues.

The International Labour Organization publishes India Wage Report

### **Zirconium**

Zirconium is a chemical element with symbol Zr and atomic number 40. The name zirconium is taken from the name of the mineral zircon, the most important source of zirconium. Zirconium is mainly used as a refractory and opacifier, although small amounts are used as an alloying agent for its strong resistance to corrosion. Zirconium forms a variety of inorganic and organometallic compounds such as zirconium dioxide and zirconocene dichloride, respectively. Five isotopes occur naturally, three of which are stable. Zirconium compounds have no known biological role.

#### **Use of Zirconium in Nuclear Reactors:**

- Zirconium is used in nuclear reactors to provide the cladding, or outer covering, for the cylindrical fuel rods that power a nuclear reaction. Packed inside the zirconium cladding are pellets of uranium oxide or other fissionable materials.
- Zirconium is the metal of choice in this application because it absorbs relatively few of the neutrons produced in a fission reaction and because the metal is highly resistant to both heat and chemical corrosion.
- Low neutron absorption is vital to any structural material used in a nuclear reactor because large numbers of neutrons produced by the reaction must be free to interact simultaneously with all the nuclear fuel confined inside hundreds of fuel rods. This interaction sustains the necessary chain reaction throughout the reactor's core.
- Zirconium cladding, which is usually an alloy of zirconium, tin, iron, nickel and chromium, is used in the fuel rods of commercial nuclear electric generating plants as well as in military reactors, and its sale does not necessarily imply that the user intends to build military reactors capable of producing bomb fuel.
- The silicate compounds of zirconium from which the metal is extracted are mined in the former Soviet Union, Australia, Brazil and Florida, among other places. The metal is present in the gems called zircons