

RBI Rule

- The Manipur government has declared that the whole State has been affected by riots and violence, impacting the economic activities and livelihood of the public.
- To provide relief, the State government has invoked a rarely used Reserve Bank of India (RBI) provision pertaining to restructuring and rescheduling of loans.
- It provides relief to borrowers when economic activity comes to a halt and offers a moratorium on the repayment of loans.
- The guidelines have been mostly invoked in areas affected by natural calamities and not for a law and order situation

KEY POINT

- The Reserve Bank of India (Relief Measures by Banks in Areas Affected by Natural Calamities) Directions, 2018 has been issued to banks in regard to matters relating to relief measures to be provided in areas affected by natural calamities.
- These Directions are in effect from October 2018.
- The provisions of these Directions shall apply to every Scheduled Commercial Bank (including Small Finance Banks (SFBs) and excluding Regional Rural Banks (RRBs))

licensed to operate in India by the Reserve Bank of India.

THE HINDU

Lab Grown diamond

- Lab Grown Diamonds are just like test tube babies grown from a single seed of Diamond under the same heat and pressure as in the crust of mother earth.
- They are ecologically friendly as they do not scar the earth with mining. Laboratory-grown diamonds have essentially the same chemical, optical, and physical properties and crystal structure as natural diamonds.
- Like natural diamonds, they are made of tightly-bonded carbon atoms.
- They respond to light in the same way and are just as hard as natural diamonds.
- The main differences between laboratory-grown and natural diamonds lie in their origin.
- Think of it this way: laboratory-grown diamonds are like ice from your refrigerator, while natural diamonds are like ice from a glacier.
- They are both ice, although their formation stories and the age of each are very different. Natural diamonds formed millions to billions of years ago in Earth's mantle and

then were explosively carried by kimberlite and lamproite volcanoes to Earth's surface, often carrying fascinating inclusions within them.

- The oldest laboratory-grown diamonds are decades old; they are created in laboratories or large factories, most commonly using the High-Pressure, High-Temperature (HPHT) method or the Chemical Vapor Deposition (CVD) method.
- Laboratory-grown diamonds appear identical to natural diamonds to the unaided eye and typically require testing by a laboratory with advanced instruments to be identified. Method used -

Chemical Vapor Deposition (CVD)

- This technique enables scientists to grow laboratory-grown diamonds using moderate temperatures (700°C to 1300°C) and lower pressures.
- Carbon-containing gas is pumped into a vacuum chamber and deposited onto a diamond seed, crystallizing as a laboratory-grown diamond.
- The eventual size of the diamond depends on the time allowed for growth

THE HINDU

India and US

- The ongoing U.S. visit of Prime Minister Narendra Modi, engine manufacturer GE Aerospace announced signing a memorandum of understanding (MoU) with Hindustan Aeronautics Ltd. (HAL) to produce fighter jet engines for the indigenous light combat aircraft (LCA).
- The proposal needs authorization from the U.S. Congress before an agreement can be concluded.
- "The agreement includes the potential joint production of GE Aerospace's F414 engines in India, and GE Aerospace continues to work with the U.S. government to receive the necessary export authorization for this.
- The effort is part of the Indian Air Force's (IAF) LCA Mk2 programme,"

THE HINDU

G20 Education

- A meeting of the Education Ministers of G-20 countries held in Pune agreed to equitable and inclusive use of Artificial Intelligence in education and skilling that respects human rights.
- All G-20 members also agreed to the critical role that education plays as an enabler of human dignity and empowerment globally.

- An outcome statement of the meeting said the G-20 members have agreed on the need to work together for a resilient, equitable, inclusive, and sustainable future through education.
- Cord blood And Regenerative medicine
- Cord blood is the blood that remains in the placenta and umbilical cord after the birth of your baby.
- Cord blood is rich in stem cells, which can be used to treat many different cancers, immune deficiencies, and genetic disorders.

What is regenerative medicine?

- Regenerative medicine seeks to replace tissue or organs that have been damaged by disease, trauma, or congenital issues, vs. the current clinical strategy that focuses primarily on treating the symptoms.
- The tools used to realize these outcomes are tissue engineering, cellular therapies, and medical devices and artificial organs.
- Combinations of these approaches can amplify our natural healing process in the places it is needed most, or take over the function of a permanently damaged organ.

THE HINDU
