

January - 11

TNPSC BITS

- ❖ The fifth volume of the Reserve Bank of India's history is released recently.
 - This volume encompasses the 11-year period from 1997 to 2008.

NATIONAL

Draft Online Gaming Policy

The draft **online gaming regulation** under the **IT Rules** aims to promote the vibrant **innovation ecosystem**, **protect gamer's rights** and **lay down** the guardrails against wagering and betting.

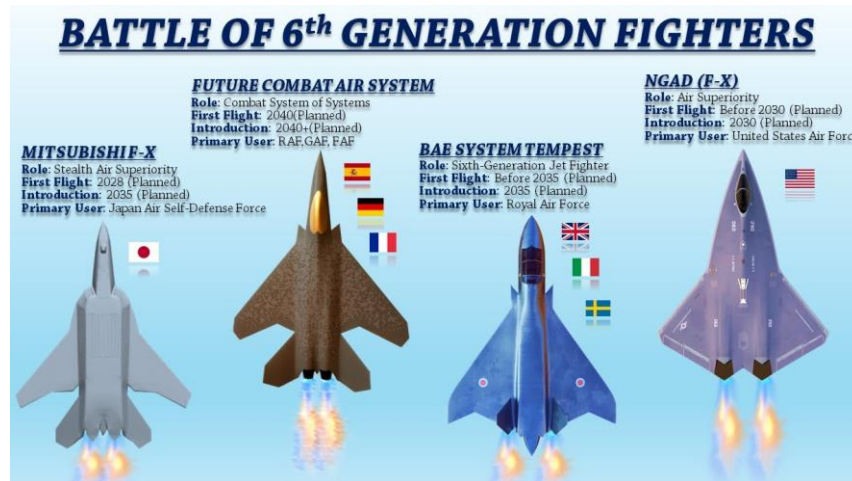
 <p>The rules provide for the creation of an industry driven self-regulatory body (SRB)</p>	 <p>The SRB will provide certification to online gaming intermediaries</p>
 <p>Online gaming intermediaries are required to identify and verify a user's identity</p>	 <p>Online gaming intermediaries which do not comply with the rules can incur liability</p>
 <p>Online gaming intermediaries are required to take appropriate measures to safeguard children</p>	
 <p>Online gaming intermediaries are required to safeguard users against the risk of gaming addiction and financial loss as well as content which leads to harm and self harm</p>	

- ❖ Recently, the Ministry of Electronics and IT (MeitY) has released the Draft Rules for Online Gaming.
- ❖ The proposed rules have been introduced as an amendment to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.
- ❖ Online games will have to register with a self-regulatory body.
- ❖ Online gaming firms will be required to undertake additional due diligence, including KYC of users, transparent withdrawal and refund of money.
- ❖ Gaming companies will also have to secure a Random Number Generation Certificate.

- ❖ Online gaming companies will not be allowed to engage in betting on the outcome of games.
- ❖ Similar to social media and e-commerce companies, online gaming platforms will also have to appoint a compliance officer who will ensure that the platform is following norms

INTERNATIONAL

Sixth-generation fighter jet



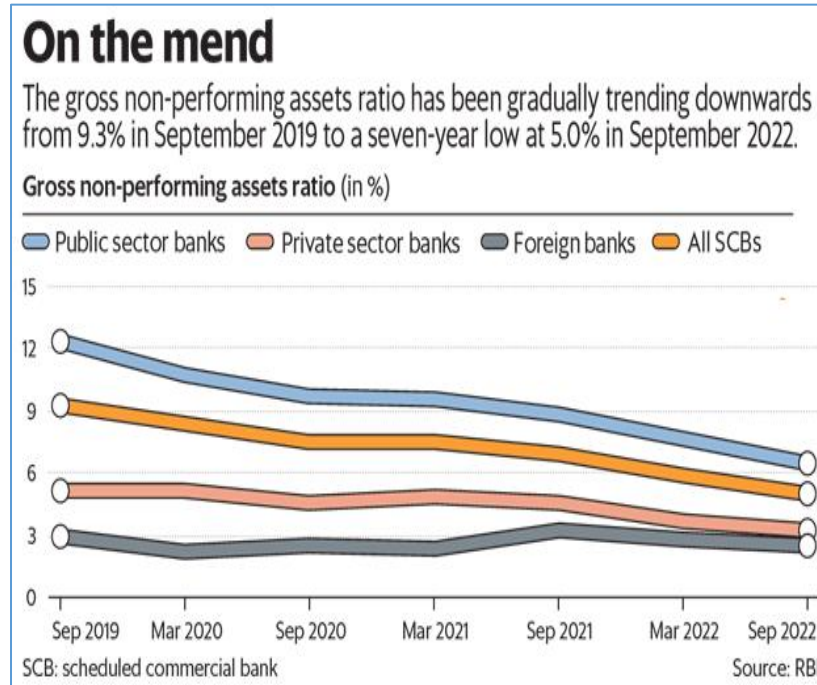
- ❖ Japan jointly develops its next-generation fighter jet with the U.K. and Italy.
- ❖ The new jet is seen as a replacement for Britain's Typhoon fighters and Japan's F-2s.
- ❖ All three countries are part of the US fifth-generation F-35 stealth fighter program.
- ❖ Meanwhile, China and Russia are also thought to be pursuing sixth-generation aircraft.
- ❖ China and Russia now fly fifth-generation fighters – Beijing's J-20 and J-31 jets and Moscow's Su-57.

ECONOMY

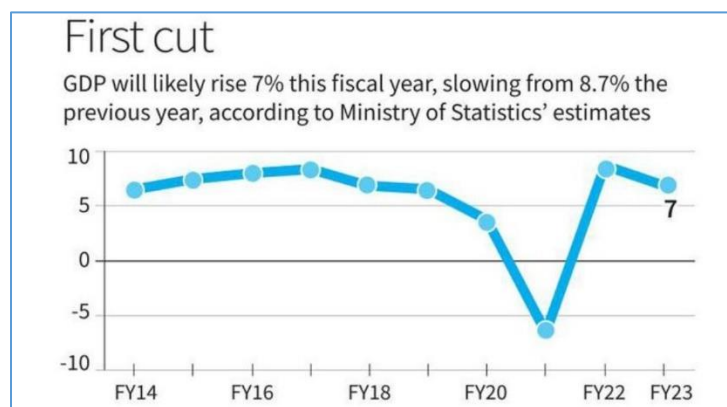
Financial Stability Report

- ❖ The Reserve Bank released the 26th issue of the Financial Stability Report.
- ❖ The profit after tax of scheduled commercial banks has also witnessed a growth of 40.7% in the first half of FY 2022-23.

- ❖ The gross non-performing assets (GNPA) ratio of scheduled commercial banks has steadily reduced to a seven-year low of 5.0% in September 2022.
- ❖ Further, the net non-performing assets (NNPA) have also reduced to a 10-year low of 1.3% of total assets.



First Advance Estimates of National Income



- ❖ The National Statistical Office (NSO) released a First Advance Estimates of National Income for the financial year 2022-23.
- ❖ India's growth in real Gross Domestic Product (GDP) during 2022-23 is estimated at 7 percent compared to 8.7 percent in 2021-22.
- ❖ The growth in nominal GDP during 2022-23 is estimated at 15.4 per cent as compared to 19.5 per cent in 2021-22.

- ❖ Real GDP or GDP at Constant (2011-12) prices in the year 2022-23 is estimated at 157.60 lakh crore rupees.
- ❖ The Provisional Estimate of GDP for the year 2021-22 of 147.36 lakh crore rupees.

SCIENCE AND TECHNOLOGY

First semi high-speed hydrogen train

- ❖ China has launched Asia's first hydrogen powered trains for the Urban Railways.
- ❖ The hydrogen train gets a top speed of 160 km/h.
- ❖ The operational range without refuelling is 600 km.
- ❖ Fuel cells have been installed in this train, which generate energy by mixing hydrogen with oxygen and in return only water and steam are emitted.
- ❖ Germany was the first country to introduce hydrogen powered trains in September 2022.




Lumpi-ProVaccind Vaccine

- ❖ Institute of Veterinary Biological Products (IVBP), Pune got “Non-Exclusive Rights” for Commercial production of “Lumpi-ProVac”.
- ❖ Lumpi-ProVac is safe in animals and induces LSDV-specific antibodies and cell-mediated immune response.
- ❖ The vaccine is used for the prophylactic immunization of animals against Lumpy Skin Disease, which illicit protection for about one year.
- ❖ Lumpy skin disease (LSD) is a contagious viral disease of cattle and buffalo that causes relatively low mortality.

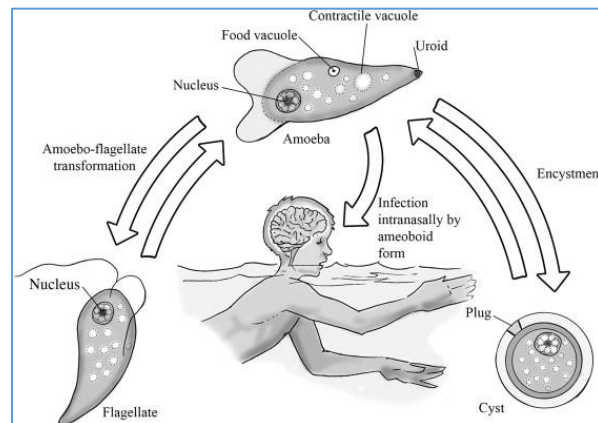
- ❖ The lumpy skin disease virus is a virus of the capri pox virus genus in the poxviridae family.
- ❖ It is transmitted by insects that feed on blood, like mosquitoes, ticks, and certain species of flies.
- ❖ It does not affect humans.

LSD: CAUSE AND EFFECT

<ul style="list-style-type: none"> > Lumpy skin disease is a viral disease that affects cattle > It is transmitted by blood-feeding insects like certain species of mosquitoes and flies, or ticks > It can spread through saliva and contaminated feed and fodder > It can spread rapidly in warm and moist conditions > It causes fever, nodules on the skin, enlargement of lymph 	<p>nodes, depression and can also lead to death</p> <ul style="list-style-type: none"> > Causes reduced milk yield, abortion in pregnant animals and sterility in bulls > Control options include vaccination and culling of infected animals
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Brain-eating amoeba

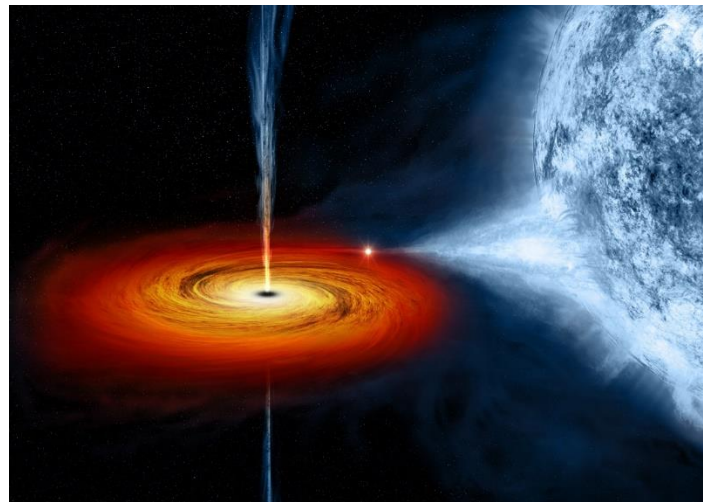


- ❖ South Korea reported its first case of infection from *Naegleria fowleri* or “brain-eating amoeba”.
- ❖ *Naegleria* is an amoeba, a single-celled organism, and only one of its species.
- ❖ It was first discovered in Australia in 1965.
- ❖ It is commonly found in warm freshwater bodies, such as hot springs, rivers and lakes.
- ❖ The amoeba enters the human body through the nose and then travels up to the brain.

- ❖ Once *Naegleria fowleri* goes to the brain, it destroys brain tissues and causes a dangerous infection known as primary amoebic meningoencephalitis (PAM).

Tidal disruption event

- ❖ Telescopes operated by NASA recently observed a massive black hole devouring a star.
- ❖ The incident was the fifth-closest example of a black hole destroying a star.
- ❖ It occurred 250 million light-years from the earth, in the centre of another galaxy.
- ❖ The astronomical phenomenon of the destruction of a star by a black hole is formally called a tidal disruption event (TDE).
- ❖ A tidal force is the difference in the strength of gravity between two points.
- ❖ If the tidal force exerted on a body is greater than the intermolecular force that keeps it together, the body will get disrupted.
- ❖ The event is formally called AT2021ehb.
- ❖ It took place in a galaxy with a central black hole about 10 million times the mass of our sun.



Comet C/2022 E3 (ZTF)

- ❖ A newly discovered comet could be visible to the naked eye as it shoots past Earth and the Sun.
- ❖ This is the first time in 50,000 years.
- ❖ After travelling from the icy reaches of our Solar System it will come closest to the Sun and pass nearest to Earth.
- ❖ The comet is estimated to have a diameter of around a kilometre

- ❖ The comet has spent most of its life "at least 2,500 times more distant than the Earth is from the Sun.
- ❖ The last time the comet passed Earth was during the Upper Palaeolithic period, when Neanderthals still roamed Earth.
- ❖ This comet's next visit to the inner Solar System was expected in another 50,000 years.
- ❖ This will smaller than NEOWISE, the last comet visible with an unaided eye, which passed Earth in March 2020.
- ❖ Earlier in 1997, the Hale-Bopp comet swept by with a potentially life-ending diameter of around 60 kilometres.

