

UPSC Daily Current Affairs | Prelim Bits 27-03-2020

Guidelines for payment gateways

- Reserve Bank of India has released guidelines for regulating payment aggregators and payment gateways, nearly six months after it first proposed regulating these entities in a discussion paper.
- While the original discussion paper, which was released in September 2019, suggested three ways to look at the issue- no regulation, light touch regulation or full regulation, the final guidelines seem to have favored the third alternative.
- The new guidelines say that a payment aggregator (entities that facilitate e-commerce sites and merchants to accept various payment instruments) should be a company incorporated in India under the Companies Act, 1956 / 2013.
- It further says non-bank entities offering payment aggregator services will have to apply for authorization on or before June 30, 2021.
- E-commerce marketplaces, according to the guidelines, providing payment aggregator services will have to be separated from the marketplace business and they will have to apply for authorization on or before June 30, 2021.
- The biggest examples of this- PhonePe, a Flipkart company, and Paytm's payment aggregator business are already separate entities from the marketplace models.
- It has also specified financial requirements for aggregators- payment aggregators existing today will have to achieve a net worth of ₹15 crore by March 31, 2021 and a net worth of ₹25 crore by the end of third financial year, which means or before March 31, 2023.
- The net-worth of ₹25 crore shall be maintained at all times thereafter.

Highlights of World Happiness Report

- The World Happiness Report is an annual publication of the United Nations Sustainable Development Solutions Network.
- It contains articles, and rankings of national happiness based on respondent ratings of their own lives, which the report also correlates with various life factors.

- Researchers for the World Happiness Report asked people in 156 countries to evaluate their own levels of happiness, and took into account measures such as GDP, social support, personal freedom and levels of corruption to give each nation a happiness score.
- According to the report Finland's residents enjoy a high quality of life, security and public services, with rates of inequality and poverty among the lowest of all OECD countries
- As in each of the previous seven reports, Nordic states dominated the top ten, along with countries such as Switzerland, New Zealand and Austria.
- Luxembourg also edged into the tenth spot for the first time this year.
- The happiest countries are those "where people feel a sense of belonging, where they trust and enjoy each other and their shared institutions.
- There is also more resilience, because shared trust reduces the burden of hardships, and thereby lessens the inequality of well-being.
- Meanwhile, the countries at the bottom of this year's ranking are those afflicted by violent conflicts and extreme poverty, with Zimbabwe, South Sudan and Afghanistan classed as the world's least happy countries.
- The data for this year's World Happiness Report was collected in 2018 and 2019, and is therefore not impacted by the widespread restrictions imposed by many countries to stem the spread of the new coronavirus.
- However, the report's authors predict that the lockdown conditions many of the world's residents are now living under could, paradoxically, boost happiness in future.
- The most frequent explanation seems to be that people are pleasantly surprised by the willingness of their neighbors and their institutions to work in harness to help each other.

United Nations Sustainable Development Solutions Network

- The United Nations Sustainable Development Solutions Network (SDSN) initiative was launched in 2012.
- It operates under the auspices of the United Nations to mobilize scientific and technical expertise in support of the Sustainable Development Goals (SDGs).
- SDSN aims to accelerate joint learning and help to overcome the separation of technical and policy work by promoting integrated approaches to the interconnected economic, social, and environmental challenges confronting the world.
- SDSN works closely with United Nations agencies, multilateral financing institutions, the private sector, and civil society.
- The organization and governance of SDSN enables leaders from all

regions to participate in the development of the network, while at the same time ensuring effective structures for decision making and accountability.

- As part of the global network, SDSN South-East Asia (SDSN-SEA) mobilizes universities, other knowledge institutions as well as civil societies of South East Asia to support the SDGs.

Project Isaac

- Indian Institute of Technology, Gandhinagar (IITGN) has launched Project Isaac to engage its students in creative projects to enhance their critical skills while they are confined to their homes because of Corona virus.
- The official release said, the project is inspired by Sir Isaac Newton, who was similarly sent home by Trinity College, Cambridge, because of the Great Plague of London in 1665.
- During this year, Newton, then a 22-year-old college student developed some of his most profound discoveries, including early calculus, as well as his theories of optics and gravity.
- As part of the project, four different competitions are being organized by IIT, Gandhinagar to cultivate new skills among students regarding writing, painting, coding, music, creative expression, and so on. Students can take part in competitions online.
- Nearly 40 per cent of IITGN students are already participating in various activities, which are entirely voluntary.
- Project Isaac is a model for academic institutions worldwide to explore ways to engage students in the midst of the pandemic.

Laser Surface Texturing Technology

- Laser surface micro-texturing offers precise control of the size, shape and density of micro-surface texture features.
- In this technology, a pulsating laser beam creates micro-dimples or grooves on the surface of materials in a very controlled manner.
- Such textures can trap wear debris when operating under dry sliding conditions and sometimes provide effects like enhancing oil supply (lubricant reservoir) which can lower friction coefficients and may enable reduced wear rate.
- International Advanced Centre for Powder Metallurgy & New Materials (ARCI) has developed ultrafast laser surface texturing technology, which can improve the fuel efficiency of internal combustion engines.
- Also Read about [Nanocomposite](#) Coating developed by ARCI.

ARCI

- International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI)
 - ARCI is an autonomous research and development center of the Department of Science and Technology (DST), established in 1997.
 - Its main campus is located at Hyderabad with operations in Chennai and Gurgaon.
 - Surface engineering, ceramics, powder metallurgy and laser processing of materials constitute the four major thrust areas at ARCI.
 - ARCI's mandate is-
1. Development of high-performance materials and processes for niche markets
 2. Demonstration of technologies at prototype/pilot scale
 3. Transfer of technology to Indian industry.

Source: PIB, AIR News, Business Standard