1.World Trade Report of WTO: Key Highlights

The World Trade Organisation recently released the World Trade Report, 2020. The report analyses the adoption of government policies to foster technological progress and digital innovation. The report says that due to covid-19 crisis, around 115 countries have adopted new digital and industrial strategies to fasten the transition towards digital economy. This mainly includes tax breaks to facilitate digital innovation, policies to address access to data, technological hub to maximise knowledge diffusion and research and development report.

The increasing importance of data in the digital world is creating higher demand for new international rules on data localisation, privacy protection and data transfer.

Key findings of the report

- The report highlighted that the World Trade Organisation has supported innovation by eliminating tariffs through the Information Technology Agreement.
- The report says that Asian power houses which has India China and Japan have contributed to 40% of world research and development in 2017. The contribution was 8.2 % in 1996.
- According to the report, Brain gain effects exist in Russia and China but not in India. Brain gain is the increase in number of intelligent and trained professionals entering a country to live and work as the country provides greater opportunities.
- According to the report, the online platforms have gained significant growth since the start of the pandemic. For instance, the MercadoLibre reported 70.5% increase in revenue in the first quarter of 2020. Similarly, Alibaba reported 22% increase in sales in the first quarter.
- The main challenge that lies in the changing digital world is to build up necessary infrastructure that facilitates the transition.

It is published annually. It aims to deepen understanding about the trends in trade, issues, policies. The World Trade report, 2020, has focused on technology and innovation policies in the current digitalizing world economy. The report explains the role of the World Trade Organisation in the changing world.

2.What is Ethereum 2.0?

Ethereum is a crypto currency. Recently, it was launched in a faster, cheaper and more environmentally friendly platform, as the upgraded version called 'Ethereum 2.0'.

What is Ethereum?

- Ethereum is a decentralised and open source blockchain platform, which is a growing list of cryptographic blocks. Ether (ETH) is the cryptocurrency token of the Ethereum platform.
- It is the world's second-largest cryptocurrency by market capitalization, only after bitcoin. It is also the world's most actively used blockchain.
- Ethereum was first proposed in 2013 by a Russian- Canadian cryptocurrency researcher and programmer Vitalik Buterin.
- The largest cryptocurrency 'Bitcoin' works on the principle of Mining, which in turn requires solving complex problems leading to large consumption of electricity.
- This updated Ethereum 2.0 changes this system into 'proof of stake', which links the quantities of ether with the selection as validators.

Cryptocurrencies cannot be used as a legal currency in India.

What are the current cryptocurrency regulations in India?

In December 2017, the Government of India clarified that the virtual currencies do not have protection or regulator permission in India. In 2018-19 Budget, the Finance Minister Nirmala Sitharaman announced that the Government of India will take all measures to eliminate the use of cryptocurrencies as a part of the payment system in the country. In 2018, the Reserve Bank of India notified that the entities operating under it should not deal with cryptocurrency.

What are cryptocurrencies?

It is a specific type of virtual currency that are protected by cryptographic encryption techniques. Some of the popular cryptocurrencies are ripple, Bitcoin, ethereum. There is no Central authority to record the transactions. The cryptocurrencies use technologies such as distributed ledger Technology or blockchain technology to store transaction data.

Subhash Chandra Garg committee on cryptocurrency

The inter-ministerial committee constituted under the chairmanship of Subhash Chandra Garg has submitted its report suggesting the draft bill, "Banning of Cryptocurrency and Regulation of Official Digital Currency bill, 2019".

3.What is 100 Octane Petrol?

The Indian Oil Corporation recently launched the first 100 Octane petrol. This is the first time 100 Octane fuel is being launched in the country. The fuel was manufactured in the Indian Oil Corporation Mathura Refinery located in Uttar Pradesh. According to the Ministry of petroleum and natural gas, the fuel is to be available at selected Indian Oil Corporation outlets. They are Delhi, Noida, Gurgaon, Agra, Chandigarh, Jaipur, Mumbai, Ludhiana, Pune and Ahmedabad.

What are Octane ratings?

Octane ratings are the measure of fuel stability. It is the ability of the fuel to avoid knock. Knock occurs when the fuel is prematurely ignited in the engine cylinder. This degrades the efficiency of the engine and damages the engine. Higher the Octane number higher is the resistance of the fuel to knock. In other words higher the Octane number, the fuel can with stand more compression before detonating.

100 Octane Petrol

The 100 Octane petrol is usually used in luxury vehicles that demand high-performance. It is available only in six countries in the world namely Germany, United States, Greece, Malaysia, Indonesia and Israel. The 100 Octane fuel is usually used in race vehicles.

Other Octane grades

In most of the retail stations in India only three Octane grades are available. They are

87 Octane petrol called the regular petrol, 89 octane grade called the mid-grade and 91 to 94 octane grade called the premium petrol.

Why do luxury vehicles require higher Octane grade fuels?

When the level of Octane is higher, that is, when the fuel is of higher-Octane grade, the cylinders do not ignite as quickly as that of a regular gas engine cylinders. The luxury vehicles require premium fuel due to their high performance engines that demand higher levels of Octane. Using a regular fuel in a luxury vehicle will lead to knocking hand eventual wear and tear of the engine.

4.World Malaria Report, 2020

The World Malaria Report, 2020 was recently released by the World Health Organisation. As per the report, India recorded the largest reduction in malaria cases in South East Asia. The case count has reduced from 20 million in 2000 to

around 5.6 million in 2019. The report also stated that the global malaria case count has remained unchanged for the past four years. In 2019, the number was around 229 million. According to the world Malaria report, 2020 prepared by the World Health Organisation, India was one among the 11 highest Malaria burden countries in the world.

Key findings of the report

- India is the largest contributor of Malaria cases in the south-east Asia region. Around 88% of Malaria cases in the region are from India.
- India has reduced the Malaria cases by 21% between 2018 and 2019.
- India has also reduced the malarial deaths in the past two years. In 2019, the number of deaths due to malaria in India was 409,000. It was 411,000 in 2018. This has made India one of the largest contributors to drop in malaria cases in the south-east Asia region.
- According to the report the highest Malaria burden countries were Cameron, Democratic Republic of Congo, Burkina Faso, Mozambique, Mali, Ghana, India, Nigeria and United Republic of Tanzania. These countries accounted for 70% of the global estimated Malaria burden. Most of these countries were from Africa.
- African region accounted for more than 90% of the overall malarial disease burden. However, since 2000 the number of Malaria deaths in the continent has reduced by 44%.
- The progress against malaria has not increased according to the WHO report. This is mainly due to the gaps in access to life saving tools and covid-19 pandemic. This is also due to a shortfall in funding at both National and international levels. The malarial funding in 2019 reached 3 billion USD as against the target of 5.6 billion USD.

World Malaria Day: It is celebrated on April 25.

5.Wolf Brigade 44: Key Facts

The Brigade 44 openly pledged allegiance to Nazi leader Adolf Hitler. It seeks to end the democratic form of governance in Germany while propagating racism and anti-Semitism. This group was banned by the German government along with its symbols, which includes a skull with two grenades marked with the number 44. Number 44 here means Division Dirlewanger, named after Oskar Dirlewanger, who is accused of ordering massacres against civilians in Belarus in the 1940s. The number 4 stands for alphabet 44.

Why did Germany ban Wolf Brigade 44?

According to the German government, Wolf Brigade 44 wanted a Nazi state. During a raid operation, the German police found Nazi symbols from 11 members of the Wolf Brigade 44 organisation. The German government is completely against

organisations that propagate re-establishment of Nazi state in the country. The Wolf Brigade 44 openly pledged allegiance to Adolf Hitler and propagated anti-semitism and racism. It claimed that it seeks to end the democratic rule in the country. Due to these reasons the Wolf Brigade 44 was banned in Germany.

The wolf Brigade 44 indirectly hinted that it is a part of the Nazi Paramilitary SS that was established during World War II. This para military force was particularly brutal and bore the name of Oskar Dirlewanger.

Oskar Dirlewanger

He was the founder and commander of Nazi SS penal unit. He fought World War I and the Spanish Civil War. In 1944, Dirlewanger participated in the Wola Massacre shooting 40,000 civilians.

Adolf Hitler

He was a German politician ad leader of the Nazi party. In 1913, Hitler moved to Germany. In 1919, he joined the German's Worker Party, the precursor of the Nazi party. He became the chancellor of Germany in 1933. He was born in Austria. ''Mein Kampf'' was the autobiography written by Hitler. Hitler initiated World War II in 1939 by invading Poland. He openly declared that Britain is Germany's enemy. Hitler committed suicide on 30th April, 1945.

6.Anti-ship version of BrahMos Test: Highlights

The Indian Navy test-fired the anti-ship version of the BrahMos supersonic cruise missile in the Andaman and Nicobar Islands territory. This comes amid the border tensions with China in eastern Ladakh. This successful test is a part of a series of trials being carried out by the three services. BrahMos Aerospace is a joint venture of India and Russia aimed at producing lethal weapons that can be launched from submarines, ships, aircraft and land.

About BrahMos

BrahMos is the world's fastest cruise missile in operation. After India signed MTCR (Missile Technology Control Regime), Russia is planning to develop new generation BrahMos with India. The new missile will be of 800 kilometre plus range. India is currently increasing all of its missile ranges. This decision was taken in 2019.

MTCR is a multilateral export control regime. It was formed by the G7 countries in 1987. The MTCR aims to limit the risk of proliferation of weapons of mass destruction. India joined MTCR in 2016.

Recent missile launches

On October 23, 2020, the Indian Navy released a video showing the INS Prabal launching a missile. Similar tests were conducted by Indian Navy on October 30, 2020 as well. On October 30, 2020, the Indian Navy test fired an anti-ship missile from INS Kora in Bay of Bengal.

The other recently conducted missile test fires of India are as follows

- RUDRAM anti-radiation missile
- A new version of shaurya missile
- LASER guided anti-tank missile
- Brahmos missile with an indigenous booster
- Prithvi II missile
- Test fire of RUSTOM II
- TORPEDO SMART
- Flight test of ABHYAS
- Test fire of Hypersonic Technology Demonstrator Vehicle
- Flight Test of Naval Version of BRAHMOS
- Test fire of PRITHVI II
- Failed test of Nirbhay
- SANT Missile test
- Nag Missile
- Test Fire of Brahmos Supersonic Cruise Missile by the Indian Air Force
- First flight test of Quick Reaction Surface-to-Air-Missiles
- Second Flight Test of QRSAM Missile
- Brahmos Supersonic Cruise Missile Test