



ACE

Engineering Publications

(A Sister Concern of ACE Engineering Academy, Hyderabad)

Hyderabad | Delhi | Pune | Bengaluru | Lucknow | Chennai | Vijayawada | Visakhapatnam | Tirupati | Kolkata | Ahmedabad

ESE-2020

(Preliminary Examination)

Current Issues

(May - 2020)

ACE is the leading institute for coaching in ESE, GATE & PSUs

Address: Sree Sindhi Guru Sangat Sabha Association, # 4-1-1236/1/A, King Koti, Abids, Hyderabad-500001.

Ph: 040-23234418 / 19 / 20 / 21, 040 - 24750437

15 All India 1st Ranks in ESE

57 All India 1st Ranks in GATE

Current Issues

(May - 2020)

Open Budget Survey

- The Open Budget Survey is part of the International Budget Partnership's Open Budget Initiative, a global research and advocacy program to promote public access to budget information and the adoption of accountable budget systems.
- The open budget survey has been covering 117 countries. It rates the level of transparency in budget across nations on a scale of 0-100.
- The survey evaluates each country on the basis of the availability of eight key budget documents of the Central or Federal government. The survey assesses whether these documents are made public and whether they provide comprehensive information or not.
- India is placed at 53rd position among 117 nations in terms of budget accountability and transparency with a score of 49 out of 100.

SHARING INFO

Country	Ranking (Score)
New Zealand	1 (89)
South Africa	1 (89)
Sweden	3 (87)
US	8 (77)
UK	10 (74)
India	53 (48)

Global average score is 43

Score Range: 41-60 = limited info; 61-80 = substantial info; 81 & above = extensive info

Source: Open Budget Survey

- As per the survey, India has performed well in timely publishing and providing relevant information in the audit reports and in year reports. It has scored well and higher than in many other countries.

Budget transparency refers to the extent and ease with which citizens can access information about and provide feedback on government revenues, allocations, and expenditures. Budgets are key documents since they lay out a government's priorities in terms of policies and programs. Opening up budgets is a first step toward democratizing the budget process and giving citizens a say in policy formulation and resource allocation.

GI tags to new products

- GI tag has been given to Black rice of Manipur, also called the Chak-Hao, Gorakhpur Terracotta, Kadalai Mittai of Kovilpatti, Kashmiri saffron, Sohrai Khovar and Telia Rumal.
- Black rice variety has a deep black colour and is higher by weight than that of other coloured rice varieties like brown rice, etc. This is mainly due to the anthocyanin agent.

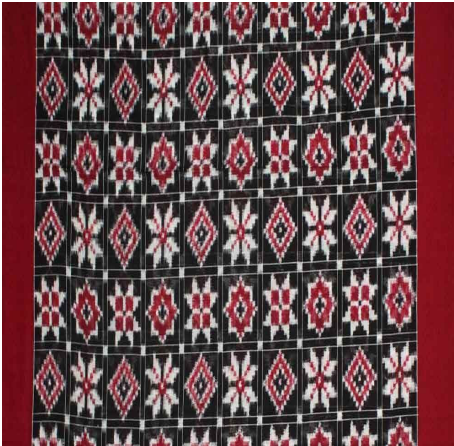


- Kovilpatti Kadalai Mittai is a pea nut candy made in southern parts of Tamil Nadu. The candy is prepared from ground nut and jaggery. The water is exclusively used from the river Thamirabarani.
- Gorakhpur Terracotta: The potters of the town make animal figures like elephants, horses.



- Kashmir Saffron: It is long, thick and has natural deep red colour. Also, it has high aroma and is processed without adding any chemicals.

- The colour of the saffron is unique due to the high quantity of crocin.
- The Kashmir Saffron is the only saffron in the world that is grown at an altitude of 1,600 metres.
- The saffron available in Kashmir is of three types: 'Lachha Saffron', 'Mongra Saffron' and 'Guchhi Saffron'.
- Sohrai Khovar painting is a traditional and ritualistic mural art being practised by local tribal women during local harvest and marriage seasons using local, naturally available soils of different colours in the area of Hazaribagh district of Jharkhand. The style features a profusion of lines, dots, animal figures and plants, often representing religious iconography.



- Telia Rumal cloth of Telangana involves intricate handmade work with cotton loom displaying a variety of designs and motifs in three particular colours — red, black and white.

Darbar Move

- Darbar Move is a century-old practice in which the government functions for six months each in the two capitals of the State, Srinagar and Jammu.
- The practice was reportedly started in the late 19th century by Ranbir Singh, the Maharaja of Jammu and Kashmir, who used to shift his capital between Srinagar in the summer and Jammu in the winter to escape extreme weather conditions in these places.
- Hundreds of trucks are usually plied to carry furniture, office files, computers, and other records to the capital.
- Regional parties in Jammu and Kashmir advocated the continuation of the practice “to help in the emotional integration between two diverse linguistic and cultural regions of Jammu and Kashmir.”
- The High Court observed that if this practice was rationalised, the amount of money, resources and time which could be saved, could be utilised towards the welfare and development of the Union Territory, which has otherwise witnessed much turmoil.
- It could be utilised for protection and propagation of culture and heritage of the communities. It could also be used for facilitating expenditure on the COVID-19 related issues.

- The court also remarked that given the modern weather control mechanisms, the consideration of extremities of weather, which was the case, reason and basis for the Darbar Move, does not hold weight today.

Silent hypoxia

- Many Covid-19 patients have reported a condition called ‘silent’ or ‘happy’ hypoxia, in which patients have extremely low blood oxygen levels, yet do not show signs of breathlessness.
- It is a form of oxygen deprivation that is harder to detect than regular hypoxia. Patients appear to be less in distress.
- In many cases, Covid-19 patients with silent hypoxia did not exhibit symptoms such as shortness of breath or coughing until their oxygen fell to acutely low levels, at which point there was a risk of acute respiratory distress (ARDS) and organ failure.
- Many are now advocating for its early detection as a means to avoid a fatal illness called Covid pneumonia.
- Hypoxia is a condition wherein there is not enough oxygen available to the blood and body tissues.
- Hypoxia can either be generalised, affecting the whole body, or local, affecting a region of the body.

Change in Iran’s currency

- Long called the rial, Iran’s money will soon likely be called the Toman, and an impressive four zeros will be shaved off all denominations.
- What was previously 10,000 rials will become one Toman under the plans.



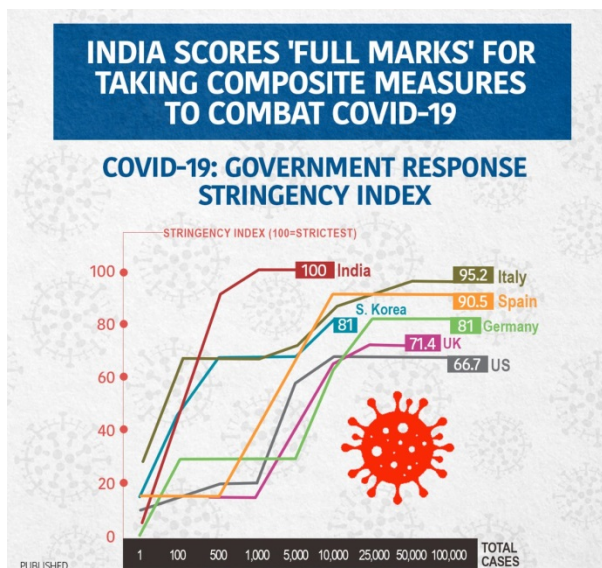
- Iran has seen the value of its national currency decline steadily since the Islamic Revolution brought the religious government to power in 1979. That drop has accelerated in recent years as harsh US sanctions battered the country’s economy.
- The currency has been devalued 3,500 times since 1971. It declined steadily since the Iranian Revolution, 1979 brought the religious government to power.

Vizag gas leak

- A gas leak, reminiscent of the 1984 Bhopal tragedy, has affected thousands of residents in five villages in Visakhapatnam in Andhra Pradesh.
- The source of the leak was a styrene plant owned by South Korean electronics giant LG, located at RRV Puram near Gopalapatnam, about 15 kms from the coast city.
- Styrene is a flammable liquid that is used in the manufacturing of polystyrene plastics, fiberglass, rubber, and latex.
- It is also found in vehicle exhaust, cigarette smoke, and in natural foods like fruits and vegetables.
- Short-term exposure to the substance can result in respiratory problems, irritation in the eyes, irritation in the mucous membrane, and gastrointestinal issues.
- Long-term exposure could drastically affect the central nervous system and lead to other related problems like peripheral neuropathy. It could also lead to cancer and depression in some cases.

Stringency Index

A Stringency Index created by Oxford University shows how strict a country's measures were, and at what stage of the pandemic spread it enforced these. As per the index, India imposed its strictest measures much earlier than others.



- The Stringency Index is a number from 0 to 100 that reflects these indicators. A higher index score indicates a higher level of stringency.
- It is among the metrics being used by the Oxford COVID-19 Government Response Tracker.

Locust attacks

- Locusts are a group of short-horned grasshoppers that multiply in numbers as they migrate long distances in destructive swarms (up to 150km in one day).
- Locusts normally arrive during July-October, but have already been spotted in Rajasthan. At a time India is battling Covid, they present a new worry with their potential for exponential growth and crop destruction.



- The desert locust is regarded as the most destructive pest in India as well as internationally, with a small swarm covering one square kilometre being able to consume the same amount of food in one day as 35,000 people.
- The swarms devour leaves, flowers, fruits, seeds, bark and growing points, and also destroy plants by their sheer weight as they descend on them in massive numbers.
- Controlling desert locust swarms primarily uses organophosphate chemicals by vehicle-mounted and aerial sprayers, and to a lesser extent by knapsack and hand-held sprayers.
- Extensive research is ongoing regarding biological control and other means of non-chemical control with the current focus on pathogens and insect growth regulators. Control by natural predators and parasites so far is limited since locusts can quickly move away from most natural enemies.

Vande Bharat Mission

- It is the biggest evacuation exercise to bring back Indian citizens stranded abroad amidst the coronavirus-induced travel restrictions.
- The mission has given priority to Indian citizens with “compelling reasons to return” – like those whose employment have been terminated, those whose visas have expired and not expected to be renewed under the present circumstances and those who have lost family members in recent times.

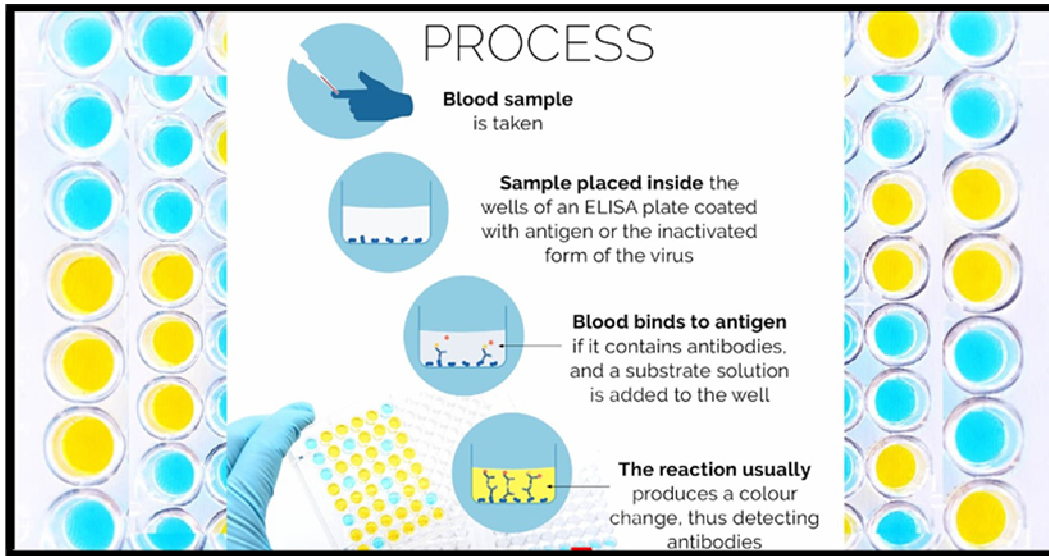
Mission Sagar

- Mission Sagar has been launched as part of the government's outreach initiative towards five Island nations in the Indian Ocean amidst the ongoing COVID-19.
- Under the mission, Indian Naval Ship Kesari has departed for Maldives, Mauritius, Seychelles, Madagascar and Comoros, to provide food Items, COVID-related medicines including HCQ tablets and special Ayurvedic medicines with medical assistance teams.
- Also, as part of the mission, INS Kesari would enter the Port of Male in the Republic of Maldives, to provide them 600 tons of food provisions.



COVID Kavach Elisa

- It is India's first indigenous antibody-based ELISA test kit for diagnosis of novel Corona Virus.
- It is developed by National Institute of Virology, Pune.



COVID KAVACH ELISA

The test kit developed by **National Institute of Virology, Pune**

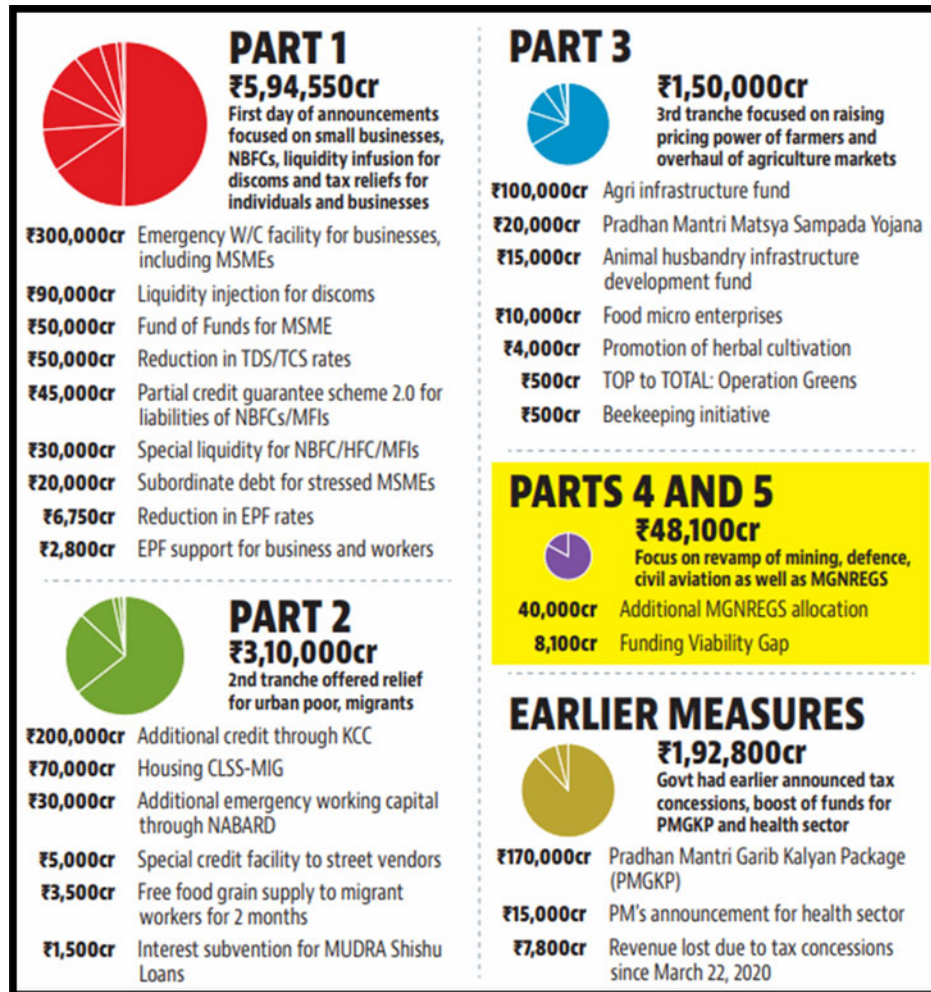
This test kit has been **validated at two sites** and has a sensitivity of 92% and specificity of 97%

It can evaluate **90 samples together within 2.5 hours**, which can allow labs to run many samples in a day.

- It can test around 90 samples in approximately two and half hours. The technology has been transferred to pharmaceutical manufacturing companies for mass-scale production.

Aatma Nirbhar Bharat Abhiyaan

On May 12, the Prime Minister, Mr. Narendra Modi, announced a special economic package of Rs 20 lakh crore (equivalent to 10% of India's GDP) with the aim of making the country independent against the tough competition in the global supply chain and to help in empowering the poor, labourers, migrants who have been adversely affected by COVID.



Following this announcement, the Finance Minister, Ms. Nirmala Sitharaman, through five press conferences, announced the detailed measures under the economic package.

Measures announced:

1st Tranche:

- Changed Definition of MSME:
 - ✓ Previously, an enterprise with investment up to Rs 25 lakh was called a micro unit. Under the new definition, a firm upto investment of Rs 1 crore is to be called Micro unit, of Rs 10 crore is to be called as small unit and investment greater than Rs 20 crore will be called as medium unit.
 - ✓ With the changed definition both investment and turnover is used to define MSMEs. Under the new definition a firm with turnover of Rs 5 crore is to be called a micro unit, of Rs 50 crore will be called as small unit and turn over greater than Rs 100 core is to be called as Medium unit.

Lockdown antidote

Finance Minister Nirmala Sitharaman announced the features for the first part of the Atmanirbhar Bharat Abhiyan

For small businesses

- ₹3,00,000 crore emergency credit for Micro, Small and Medium Enterprises (MSMEs)
- Only domestic firms can bid for govt. procurements up to ₹200 crore

For employees/ tax payers

- EPF deductions slashed for 3 months to **20% from 24%** of salary; IT returns deadline extended
- This will enhance take-home pay if employers pass it on, but dent retirement savings

companies

- Deadlines for realty projects and public infrastructure contracts extended

For infrastructure sector

- Power PSUs to lend ₹90,000 crore to stressed State distribution

For financial sector

- Fresh ₹45,000 crore partial credit guarantees for non-banking finance companies (NBFCs)
- ₹30,000 crore special liquidity for microfinance/ housing finance firms and NBFCs



Relief at hand: Finance Minister Nirmala Sitharaman addressing a press conference to announce details of the economic stimulus package in New Delhi on Wednesday.

- ✓ It is to be noted that for an enterprise to come under the category of MSME it has to fulfill both investment and turn over conditions.
- ✓ Also, under the new definition, the differentiation between the manufacturing and service based MSMEs is being removed.
- ✓ In a major boost to the MSME sector, collateral free loan of 3 lakh crore rupees has been announced with a moratorium of 12 months. These loans will benefit 45 lakh small and medium units.
- For NBFCs
- ✓ ₹30,000-crore special liquidity scheme for NBFCs. Investment would be made in primary and secondary market transactions in investment grade debt paper of NBFCs, HFCs and MFIs.
- **Other measures:**
- ✓ It also proposes Mandatory sourcing — up to ₹200 crore.
- ✓ Power distribution companies will receive a ₹90,000 crore liquidity injection.
- ✓ Contractors will get a six-month extension from all Central agencies, and also get partial bank guarantees to ease their cash flows.
- ✓ Employee Provident Fund (EPF) support, provided to low-income organised workers in small units under the PMGKY is being extended for another three months.
- ✓ Mandatory EPF contributions are also being reduced from 12% to 10%.
- ✓ For salaried workers and taxpayers, some relief was provided in the form of an extended deadline for income tax returns for financial year 2019-20, with the due date now pushed to November 30, 2020.


- ✓ The rates of tax deduction at source (TDS) and tax collection at source (TCS) have been cut by 25% for the next year, while statutory provident fund (PF) payments have been reduced from 12% to 10% for both employers and employees for the next three months.

2nd Tranche:

- ✓ Free food grains will be supplied to all Migrant labourers for 2 months i.e. May and June, 2020.
- ✓ Technology system to be used to enable Migrants to access PDS (Ration) from any Fair Price Shops in India so as to achieve 100% National portability by March, 2021 under One Nation one Ration Card scheme.
- ✓ Central Government will launch a scheme for migrant workers and urban poor to provide ease of living at affordable rent.
- ✓ Government of India will provide Interest subvention of 2% for prompt payees for a period of 12 months to MUDRA Shishu loanees, who have loans below Rs 50,000.
- ✓ A special scheme will be launched within a month to facilitate easy access to credit to Street vendors. 50 lakh street vendors will be benefitted under this scheme and credit of Rs. 5,000 crore would flow to them.
- ✓ Rs 70,000 crore boost is given to housing sector and middle-income group (MIG) through extension of Credit Linked Subsidy Scheme for MIG under PMAY(Urban) up to March 2021.

2ND TRANCHE OF ECONOMIC STIMULUS: KEY MEASURES

- ▶ Free food grain supply to migrants for next 2 months
- ▶ ₹5,000cr special credit facility for street vendors
- ▶ 5kg of rice/wheat per family and 1 kg of chana to non-card holders
- ▶ Interest subvention support of **2%** for Mudra Shishu loan payees
- ▶ PDS ration cards to be made portable; **100%** coverage under 'One Nation One Ration Card' by March 31, 2021
- ▶ ₹30,000cr additional emergency working capital fund for farmers through NABARD
- ▶ Affordable Rental Housing Complexes (ARHC) for migrant worker/Urban poor
- ▶ ₹2 lakh cr of concessional credit boost to **2.5cr** farmers through Kisan credit cards
- ▶ ₹6,000cr employment push using CAMPA funds
- ▶ Extension of housing subsidy scheme for middle-income families till Mar 2021



- ✓ 6,000 crore of funds under Compensatory Afforestation Management & Planning Authority (CAMPA) will be used for Afforestation and Plantation works, including in urban areas. This will create job opportunities.
- ✓ NABARD will extend additional re-finance support of Rs 30,000 crore for meeting crop loan requirement of Rural Cooperative Banks and RRBs. This refinance will be front-loaded and available on tap.
- ✓ A special drive to be conducted to provide concessional credit to PM-KISAN beneficiaries through Kisan Credit Cards. Fisherman and Animal Husbandry Farmers will also be included. This will inject additional liquidity of Rs 2 lakh crore in the farm sector.


3rd Tranche:

The 3rd Tranche includes measures to strengthen Infrastructure Logistics, Capacity Building, Governance and Administrative Reforms for Agriculture, Fisheries and Food Processing Sectors.

- Measures for improving agricultural infrastructure:
 - ✓ Rs 1 lakh crore Agri Infrastructure Fund for farm-gate infrastructure for farmers.
 - ✓ Rs 10,000 crore scheme for Formalisation of Micro Food Enterprises (MFE).
 - ✓ Rs 20,000 crore for fisherman through Pradhan Mantri Matsya Sampada Yojana (PMMSY).
 - ✓ National Animal Disease Control Programme for Foot and Mouth Disease (FMD) and Brucellosis launched.

3RD TRANCHE OF ECONOMIC STIMULUS: KEY MEASURES

- Setting up of Rs 1 lakh cr agriculture fund for farm-gate infrastructure
- Rs 4,000cr for herbal cultivation in India
- Rs 10,000cr scheme for formalisation of micro food enterprises (MFE)
- Rs 20,000cr for fishermen through Pradhan Mantri Matsya Sampada Yojana
- Animal Husbandry Infrastructure Development fund worth Rs 15,000cr
- Rs 500 crore scheme for infrastructure development related to bee-keeping
- Amendments to Essential Commodities Act to enable better price realisation for farmers



- Agriculture marketing reforms to provide marketing choices to farmers
- Extension of 'Operation Greens' to all fruits and vegetables
- Legal framework to help farmers fix their own price for products
- Launch of National Animal Disease Control Programme for foot and mouth disease with outlay of Rs 13,343cr

- ✓ Animal Husbandry Infrastructure Development Fund of 15,000 crore will be setup.
- ✓ Promotion of Herbal Cultivation: Outlay of Rs. 4,000 crore.
- ✓ Beekeeping initiatives – Rs 500 crore.
- ✓ “Operation Greens” run by Ministry of Food Processing Industries (MOFPI) will be extended from tomatoes, onion and potatoes to All fruit and vegetables.
- ✓ A new scheme to provide interest subvention @2% per annum to dairy cooperatives for 2020-21 has been launched, also providing additional 2% p.a interest subvention on prompt payment/interest servicing. This scheme will unlock Rs 5,000 crore additional liquidity, benefitting 2 crore farmers.

4th Tranche:

4th Tranche of measures are aimed at reforms in the eight sectors of Coal, Minerals, Defence production, Civil Aviation, Power Sector, Social Infrastructure, Space and Atomic energy.

- ✓ Private sector will be allowed to use ISRO facilities and other relevant assets to improve their capacities.
- ✓ Research reactor in PPP mode for production of medical isotopes shall be established. Facilities in PPP mode to use irradiation technology for food preservation shall also be established.
- ✓ For boosting private sector investment, Government will enhance the quantum of Viability Gap Funding (VGF) upto 30% each of Total Project Cost as VGF by the Centre and State/Statutory Bodies.

SECTORS OPENED UP

The fourth tranche of the economic stimulus package largely deals with reforms

DEFENCE

- Hike in FDI in defence manufacturing from 49% to 74% under automatic route
- Listing of weapons/platforms which will be banned for imports
- Promoting indigenisation of spares that are imported
- Corporatisation of Ordnance Factory Board



CIVIL AVIATION

- Easing of restrictions on use of Indian air space to increase efficiency of passenger aircraft, save fuel and time
- 6 more airports to be privatised
- India to become global hub for Maintenance, Repair and Overhaul
- **₹1,000 crore per year:** Benefit for the aviation sector



COAL AND MINERALS

- Starting commercial mining in coal sector
- Liberalising entry norms -- nearly **50 blocks** to be offered immediately
- Incentivising coal gasification/liquefaction through rebate
- Earmarking **₹50,000 crore** for infrastructure development in coal sector
- Auctioning Coal Bed Methane (CBM) extraction rights in Coal India's mines
- Introducing seamless composite exploration-cum-mining-cum-production regime in minerals sector, **500 blocks** to be auctioned
- Joint auctioning of bauxite and coal mineral blocks
- Rationalising stamp duty payable at the time of award of mining leases



SPACE

- Pvt firms to be allowed in the field of satellites and other space-based services
- Private sector to be allowed to use ISRO facilities



ATOMIC ENERGY

- Research reactor to be set up in PPP mode for production of medical isotopes
- PPP-mode units to use irradiation tech for food preservation



SOCIAL INFRASTRUCTURE

- Govt's share in viability gap funding for development of social infrastructure, including hospitals, hiked to 30% from 20%, with a total outlay of ₹8,100 crore



POWER DISTRIBUTION

- Privatisation of Discoms in Union Territories



- ✓ Restrictions on utilisation of the Indian Air Space will be eased so that civilian flying becomes more efficient. India to become a global hub for Aircraft Maintenance, Repair and Overhaul (MRO).
- ✓ A Composite exploration-cum-mining-cum-production regime for minerals to be announced for enhancing Private Investments in the Mineral Sector.
- ✓ The distinction between captive and non-captive mines to allow transfer of mining leases and sale of surplus unused minerals production shall be removed.
- ✓ Commercial Mining in Coal Sector on revenue sharing basis instead of regime of fixed Rupee/tonne to be introduced. Coal Bed Methane (CBM) extraction rights will be auctioned from Coal India Limited's (CIL) coal mines.
- ✓ FDI limit in the Defence manufacturing under automatic route will be raised from 49% to 74%. A list of weapons/platforms for ban on import will be notified. Corporatisation of Ordnance Factory Board to be implemented for improving autonomy and efficiency in Ordnance Supplies.
- ✓ Power Departments / Utilities in Union Territories will be privatised.

5th Tranche:

An additional Rs 40,000 crore under MGNREGS to provide employment boost.

- ✓ The new Public Sector Enterprise Policy promotes the entry of private companies into every sector of industry, while limiting public sector enterprises to only strategic sectors.
- ✓ In strategic sectors, at least one enterprise will remain in the public sector but private sector will also be allowed. In other sectors, PSEs will be privatized.
- ✓ Decriminalisation of Companies Act violations involving minor technical and procedural defaults such as shortcomings in CSR reporting, delay in holding of AGM etc. to de-clog the criminal courts and NCLT.
- ✓ State governments have been given more fiscal room in the current crisis with the hiking of their borrowing limits from 3% to 5% of Gross State Domestic Product (GSDP). However, the hiked limits will be conditional on States implementing reforms related to ration portability, ease of doing business, power distribution, and urban local bodies.

Final dose

The fifth tranche of the economic package under the Atmanirbhar Bharat Abhiyan was announced on Sunday


Health

-  Public spending to be increased; more health and wellness centres
- Infectious diseases hospitals and public health labs to be set up in all districts


Disinvestment

-  Public sector firms in non-strategic sectors to be privatised
- No more than four public sector undertakings to remain in 'strategic' sectors; to be notified soon


States

-  Borrowing ceiling raised from ₹6.41 lakh crore (3% of GDP) to ₹10.69 lakh crore
- Only a quarter of this hike is unconditional; rest are linked to reforms in specified areas

Unemployment

-  MGNREGS allocation hiked by ₹40,000 crore to fund 300 crore person days
- Aimed at giving migrants who have returned home an income option

Industry

-  Fresh insolvency proceedings suspended for a year, eligible loan size to be hiked from ₹1 lakh to ₹1 crore
- COVID-19 related debt not to trigger defaults; firms can list abroad directly

- ✓ Public Expenditure on Health will be increased by investing in grass root health institutions and ramping up Health and Wellness Centres in rural and urban areas. Infectious Diseases Hospital Blocks to be setup in all districts.
- ✓ PM eVIDYA, a programme for multi-mode access to digital/online education to be launched immediately.
- ✓ Manodarpan, an initiative for psycho-social support for students, teachers and families for mental health and emotional well-being to be launched immediately as well.
- ✓ National Foundational Literacy and Numeracy Mission for ensuring that every child attains Learning levels and outcomes in grade 5 by 2025 will be launched by December 2020.
- ✓ Further enhancement of Ease of Doing Minimum threshold to initiate insolvency proceedings has been raised to Rs. 1 crore (from Rs. 1 lakh, which largely insulates MSMEs).
- ✓ Suspension of fresh initiation of insolvency proceedings up to one year, depending upon the pandemic situation.
- ✓ Central Government to be empowered to exclude COVID 19 related debt from the definition of “default” under the Code for the purpose of triggering insolvency proceedings.
- ✓ Direct listing of securities by Indian public companies in permissible foreign jurisdictions.
- ✓ Private companies which list NCDs on stock exchanges not to be regarded as listed companies.

Tour of Duty (ToD)

- Indian Army is considering allowing common citizens to join the 1.3- million-strong force for a three-year tenure to serve the nation under the ‘Tour of Duty (ToD) or ‘Three Years Short Service’ scheme.
- Initially, 100 officers and 1,000 men are being considered for recruitment as part of test bedding of the project.
- It is for youths who “do not want to make defence services their permanent vocation, but still want to experience the thrill and adventure of military professionalism”.
- The proposal is a shift from the concept of permanent service/job in the Armed Forces, towards ‘internship’/temporary experience for three years.
- For this, it proposes that the individual’s earnings for the three-year period could be made tax-free, and he/she could be given preference in public sector jobs as well as post-graduate courses.
- “Tour of Duty (ToD)” tenure is for both officers and jawans.
- It will bring in savings from salaries and pensions, and “decrease the frustration” of officers who are released after 10-14 years of short service, when they are in their mid-30s.
- According to a report of Standing Committee of Defence, 2019, the deficiency in officer cadre of Indian Army stood at approximate 14 per cent.
- The Army had 42,253 officers and 11.94 lakh jawans according to the report.
- The Indian Navy had 10,000 officers 57,310 and personnel.

Eventbot

- The Computer Emergency Response of Team (CERT) of India has issued warning against a new malware called “EventBot”.
- The malware steals personal financial information from Android phone users.
- It cheats victims secretly attacking computer or phone operating system.
- It targets money-transfer services, financial applications.
- Malware is defined as a software designed to perform an unwanted illegal act via the computer network. It could be also defined as software with malicious intent.



Malware can be classified based on how they get executed, how they spread, and/or what they do. Some of them are discussed below.

Virus: A program that can infect other programs by modifying them to include a possible evolved copy of itself.

Worms: Disseminated through computer networks, unlike viruses, computer worms are malicious programs that copy themselves from system to system, rather than infiltrating legitimate files.

Trojans: Trojan or trojan horse is a program that generally impairs the security of a system. Trojans are used to create back-doors (a program that allows outside access into a secure network) on computers belonging to a secure network so that a hacker can have access to the secure network.

Hoax: An e-mail that warns the user of a certain system that is harming the computer. The message thereafter instructs the user to run a procedure (most often in the form of a download) to correct the harming system. When this program is run, it invades the system and deletes an important file.

Spyware: Invades a computer and, as its name implies, monitors a user's activities without consent. Spywares are usually forwarded through unsuspecting e-mails with bonafide e-mail i.ds. Spyware continues to infect millions of computers globally.

Travel bubble

- The Baltic countries of Estonia, Latvia, and Lithuania have started what is being referred to as a 'travel bubble' to help put their economies back on track post-Covid lockdowns.
- With the pandemic throwing both international and domestic trade and travel out of gear since earlier this year, such 'travel bubbles' are now being recommended to keep at least parts of the global economy afloat.
- Creating a travel bubble involves reconnecting countries or states that have shown a good level of success in containing the novel coronavirus pandemic domestically.
- Such a bubble would allow the members of the group to rekindle trade ties with each other, and kickstart sectors such as travel and tourism.
- In the Estonia-Latvia-Lithuania travel bubble, residents would be able to travel freely by rail, air, and sea without quarantine measures.
- Those wanting to enter this corridor from countries outside would first have to go into isolation for 14 days.
- To be able to freely travel in the zone, one should not have travelled outside the three countries in the past 14 days, should not be infected with coronavirus, and should not have come in contact with anyone who has been coronavirus infected.

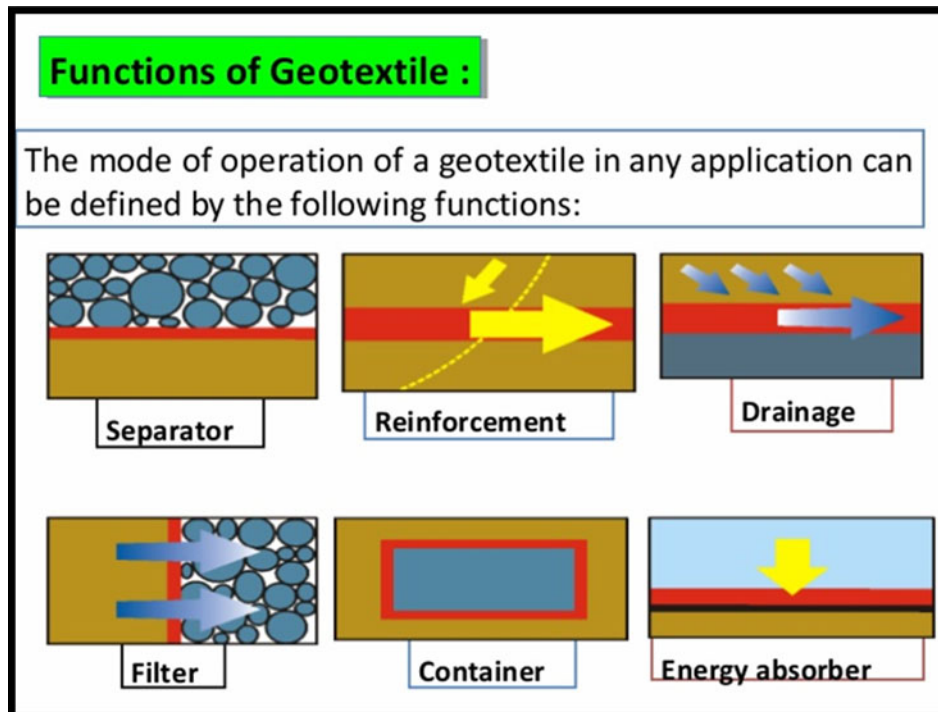


Geotextiles

- National Rural Infrastructure Development Agency (NRIDA) has announced that coir geo textiles will be used for construction of rural roads under the Pradhan Mantri Gram Sadak Yojana (PMGSY-III).
- Coir is a 100% natural fiber, obtained from a renewable source – the coconut husk.
- Coir Geo Textile is naturally resistant to rot, molds and moisture, and free from any microbial attack hence it needs no chemical treatment. It has a permeable, natural and strong fabric with high durability.
- It protects the land surface and promotes quick vegetation.
- It is totally biodegradable, and helps in soil stabilisation.
- It can dissipate the energy of flowing water and absorb the excess solar radiation.

Geotextiles are permeable fabrics which, when used in association with soil, have the ability to separate, filter, reinforce, protect, or drain. These are typically made from polypropylene or polyester.

- They support many civil engineering applications including roads, airfields, railroads, embankments, retaining structures, reservoirs, canals, dams, bank protection, coastal engineering and construction site silt fences or geotube.
- They are also used for sand dune armoring to protect upland coastal property from storm surge, wave action and flooding.



- They are used as matting to stabilize flow in stream channels and swales.
- They can improve soil strength at a lower cost than conventional soil nailing.