



ASPIRE IAS
The Name Associated with Excellence

PIB

Monthly Magazine (JUNE - 2020)

Copyright ©Aspire IAS All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Aspire IAS.

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

ASPIRE IAS

PIB INDEX

SR. NO.	TOPIC NAME	PAGE NO.
1	PM SVANidhi	5
2	One Nation One Ration Card Scheme	5
3	Ultra Swachh	6
4	Central Employment Guarantee Council (CEGC)	6
5	Science, Technology, and Innovation Policy (STIP)	7
6	Decisions taken in the Cabinet Meeting	8
7	Pan-India Real Time Market in Electricity	9
8	SWADES (Skilled Workers Arrival Database for Employment Support)	10
9	World Environment Day 2020	11
10	Periodic Labour Force Survey (PLFS)	11
11	Blowout in Gas Well	12
12	Commercial coal mining	13
13	IFLOWS-Mumbai	14
14	Science, Technology and Innovation Policy (STIP) 2020	15
15	Aarogyapath	16
16	Raja Parba	16
17	Amoebiasis	17
18	Global Partnership on Artificial Intelligence (GPAI)	17
19	Indian Gas Exchange	18
20	Composite Regional Centres (CRC)	18
21	Annular Solar Eclipse	19

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 3 Easy to PICK—"PIB Monthly Magazine "June -2020

22	Workshop tomorrow on Good Governance Practices in a Pandemic for International Civil Servants	19
23	Khelo India State Centres of Excellence (KISCE)	20
24	Garib Kalyan Rojgar Abhiyaan	21
25	Umifenovir	22
26	Earthquakes in Delhi-NCR	22
27	World Sickle Cell Day	23
28	Atal Innovation Mission	24
29	Pokhran potteries	24
30	Stellar evolution in the Milky Way Galaxy	25
31	Extreme Helium Stars	26
32	INS Airavat	27
33	International Comparison Program (ICP)	27
34	Annual TB Report 2020	28
35	Animal Husbandry Infrastructure Development Fund	29
36	Kala-azar	30
37	Role of ancient algae in building a healthy global marine ecosystem	30
38	Gravel geometry of the Indus river	31
39	Nasha Mukh Bharat: Annual Action Plan (2020-21)	32
40	National Productivity Council	33

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 4 Easy to PICK–“PIB Monthly Magazine "June -2020

41	Banking Regulation (Amendment) Ordinance, 2020	33
42	TRIBES India products on the Government e-Marketplace (GeM)	34
43	NOC for power, oil and gas exploration projects	35
44	PM Formalization of Micro Food Processing Enterprises (PM FME)	35
45	Gold Nanoparticles	36
46	Loan Agreements between Government of India and World Bank	37

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 5 Easy to PICK–“PIB Monthly Magazine "June -2020 PM SVANidhi

About

The Ministry of Housing and Urban Affairs has launched a Special Micro-Credit Facility Scheme – PM SVANidhi (PM स्वनिधि) – PM Street Vendor's AtmaNirbharNidhi, for providing affordable loans to street vendors.

• Features of the scheme:

- The IT platform will also help in integrating the vendors into the formal financial system.
- This platform will integrate the web portal/mobile app with UdyamiMitra portal of SIDBI for credit management and PAiSA portal of MoHUA to administer interest subsidy automatically.
- The vendors can avail a working capital loan of up to Rs. 10,000, which is repayable in monthly instalments in the tenure of one year.
- On timely/early repayment of the loan, an interest subsidy @ 7% per annum will be credited to the bank accounts of beneficiaries through Direct Benefit Transfer on six monthly basis.
- There will be no penalty on early repayment of loan.
- It is for the first time that MFIs/NBFCs/SHG Banks have been allowed in a scheme for the urban poor due to their ground level presence and proximity to the urban poor including the street vendors.
- A digital platform with web portal/mobile app is being developed to administer the scheme with end-to-end solution.

Details:

- Urban Local Bodies will play a pivotal role in the implementation of the scheme.
- This is for the first time in India's history that street vendors from peri-urban/rural areas have become beneficiaries of an urban livelihood programme.
- The scheme is expected to help street vendors resume work and earn livelihoods in the light of the difficulties endured during the COVID-19 crisis and the lockdown.
- Over 50 lakh people, including vendors, hawkers, thelewalas, rehriwala, theliphadwala, etc. in different areas/contexts are likely to benefit from this scheme.
 - The goods supplied by them range from vegetables, fruits, ready-to-eat street foods, tea, pakodas, breads, eggs, textiles, apparel, footwear, artisan products, books/stationaries, etc.
 - The services include barber shops, cobblers, paan shops, laundry services, etc.

One Nation One Ration Card Scheme

About

Three more States included in One Nation One Card scheme.

Details:

- The facility so far is enabled in 17 States/UTs, namely – Andhra Pradesh, Bihar, Dadra & Nagar Haveli and Daman & Diu, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Punjab, Telangana, Tripura and Uttar Pradesh.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 6 Easy to PICK—"PIB Monthly Magazine "June -2020

- By August 2020, three more States namely – Uttarakhand, Nagaland and Manipur will also be added to the national cluster.
- Three more states – Odisha, Sikkim and Mizoram have been included in the scheme on 'Integrated Management of Public Distribution System' (IM-PDS).
- Under this system, nation-wide portability of the benefits under NFSA through "One Nation One Ration Card" plan is implemented to enable the NFSA ration card holders to lift their entitled quota of subsidised foodgrains from any ePoS enabled Fair Price Shop of their choice anywhere in the country, by using the existing/same ration card after Aadhaar authentication on ePoS device.
- It also has catalytic converter to ensure environment-friendly exhaust i.e., only oxygen and water.
- The system is in compliance with International Standards of Industrial, Occupational, Personal and Environmental Safety.
- The Ultra Swachh comes in two variants namely, Ozonated Space and Trinetra Technology.
 - Trinetra technology is the combination of Ozonated space and radical dispenser.
 - Treatment is optimised with automation for quick disinfection cycle.
- Operating on 15 Ampere, 220 Volts, 50 Hertz power supply, the system has been provided with various safety features such as emergency shutdown, door interlocks, dual door, delay cycle, and leak monitors, etc. to ensure safe operations for longer duration.
- It is available in different sizes.

Ultra Swachh

About

DRDO develops Ultra Swachh for disinfection of PPEs and other materials.

About Ultra Swachh:

- The system has been developed by the Institute of Nuclear Medicine & Allied Sciences (INMAS), the Delhi-based laboratory of DRDO in partnership with M/s Gel Craft Healthcare Private Ltd, Ghaziabad.
- The system uses an advanced oxidative process comprising of multiple barrier disruption approach using Ozonated Space Technology for disinfection.
- The system is double layered with specialised Ozone sealant technology assuring trapping of ozone for the necessary disinfection cycle.

Central Employment Guarantee Council (CEGC)

Detail

21st Meeting of the Central Employment Guarantee Council (CEGC).

• Role of the CEGC:

- Establish a central evaluation and monitoring system.
- Advise the Central Government on all matters concerning the implementation of the MGNREGA.
- Review the monitoring and redressal mechanism from time to time and recommend improvements required.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 7 Easy to PICK—"PIB Monthly Magazine "June -2020

- Promote the widest possible dissemination of information about the Schemes made under this Act.
- Monitoring the implementation of this Act.
- Preparation of annual reports to be laid before Parliament by the Central Government on the implementation of this Act.
- Any other duty or function as may be assigned to it by the Central Government.
- Undertake evaluation of the various Schemes made under this Act and for that purpose collect or cause to be collected statistics pertaining to the rural economy and the implementation of the Schemes.
- The council is also entrusted with the task of monitoring and redressal mechanism, as well as recommending improvements required.
- The CEGC's role is advisory and supervisory in nature.

Science, Technology, and Innovation Policy (STIP)

Detail

Consultation process for new Science, Technology, and Innovation Policy (STIP) initiated.

About STIP:

- The Office of the Principal Scientific Adviser to the Government of India (Office of PSA) and the Department of Science and Technology (DST) have jointly initiated a decentralized, bottom-up, and inclusive process for the formulation of a new national Science Technology and Innovation Policy (STIP 2020).
- This is the fifth S&T policy of India that is being initiated.
- The STIP 2020 formulation process is organised into 4 highly interlinked tracks:
 - Track I involves an extensive public and expert consultation process through the Science Policy Forum – a dedicated platform for soliciting inputs from larger public and expert pool during and after the policy drafting process.
 - Track II comprises experts-driven thematic consultations to feed evidence-informed recommendations into the policy drafting process. Twenty-one focused thematic groups have been constituted for this purpose.
 - Track III involves consultations with Ministries and States.

About the CEGC:

- The Central government constituted the CEGC through a notification in September 2006 to discharge the functions and perform duties assigned to it by or under the provisions of the National Rural Employment Guarantee Act, 2005.
- Headquartered in New Delhi, the Council consists of a Chairperson, representatives from the various ministries, representatives of state governments, non-official members representing Panchayati Raj institutions, organisations of workers and disadvantaged groups.
- The Council is headed by the Rural Development Minister.
- The CEGC is responsible for a central monitoring and evaluation system for the MGNREGA scheme, besides advising the government on its implementation.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 8 Easy to PICK—"PIB Monthly Magazine "June -2020

- Track IV constitutes apex level multi-stakeholder consultation.

Decisions taken in the Cabinet Meeting

About

Several decisions were taken by the Cabinet which met on 3rd June.

Decisions taken:

- The Cabinet approved the amendments to the Essential Commodities Act
 - The freedom to produce, hold, move, distribute and supply will lead to harnessing of economies of scale and attract private sector/foreign direct investment into the agriculture sector. It will help drive up investment in cold storages and modernization of food supply chain..
 - With the amendment, commodities like cereals, pulses, oilseeds, edible oils, onion and potatoes will be removed from the list of essential commodities. This will remove fears of private investors of excessive regulatory interference in their business operations.
 - It has been provided in the Amendment, that in situations such as war, famine, extraordinary price rise and natural calamity, such agricultural foodstuff can be regulated.
 - However, the installed capacity of a value chain participant and the export demand of an exporter will remain exempted from such stock limit imposition so as to ensure that investments in agriculture are not discouraged.
- The amendment announced is expected to help both farmers and consumers while bringing in price stability. It will create competitive market environment and also prevent wastage of agri-produce that happens due to lack of storage facilities.
- Cabinet approved 'The Farming Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020'.
 - The Ordinance will create an ecosystem where the farmers and traders will enjoy freedom of choice of sale and purchase of agri-produce. It will also promote barrier-free inter-state and intra-state trade and commerce outside the physical premises of markets notified under State Agricultural Produce Marketing legislations.
 - It will open more choices for the farmer, reduce marketing costs for the farmers and help them in getting better prices. It will also help farmers of regions with surplus produce to get better prices and consumers of regions with shortages, lower prices.
 - The ordinance also proposes an electronic trading in transaction platform for ensuring a seamless trade electronically.
 - The ordinance basically aims at creating additional trading opportunities outside the APMC market yards to help farmers get remunerative prices due to additional competition. This will supplement the existing MSP procurement system which is providing stable income to farmers.
 - It is intended to create a 'One India One Agricultural Market'.

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 9 Easy to PICK—"PIB Monthly Magazine "June -2020

- Cabinet approved 'The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020'.
 - It will reduce cost of marketing and improve income of farmers.
 - It is expected to attract private sector investment for building supply chains for supply of Indian farm produce to global markets.
 - The ordinance is expected to empower farmers for engaging with processors, wholesalers, aggregators, wholesalers, large retailers, exporters etc., on a level playing field without any fear of exploitation.
 - It will transfer the risk of market unpredictability from the farmer to the sponsor and also enable the farmer to access modern technology and better inputs.

time balance while ensuring optimal utilization of the available surplus capacity in the system.

- It will also help manage diversity in the demand pattern in the country with an organized market at national level.

• How it works?

- On the other hand, generators would also benefit by participating in the real time market with their un-requisitioned capacity.
- A mechanism has been provided for generators having long-term contract and participating in this market to share the net gains with the Discoms.
- National Load Despatch Centre-POSOCO is facilitating necessary automation in coordination with power exchanges to ensure faster transactions and settlements in the real time market framework.
- The real time market would be for every 30 minutes in a day based on double sided closed auction with uniform price.
- The concept of "Gate Closure" has been introduced for bringing in the desired firmness in schedules during the hours of market operation.
- Buyers/sellers shall have the option of placing buy/sell bids for each 15-minute time block.
- The proposed real time market would provide an alternate mechanism for Discoms to access larger market at competitive price.

• Benefits:

- The distribution companies would be able to manage their power purchase portfolio optimally and need not tie up excess capacity. It would lead to cost optimization of power purchase and

Pan-India Real Time Market in Electricity

About

Union Power Minister launches pan-India Real Time Market in electricity.

Details:

- This move has placed the Indian electricity market amongst a league of few electricity markets in the world, which have real time market.
- The real time market is an organized market platform to enable the buyers and sellers pan-India to meet their energy requirement closer to real time of operation.
- Introduction of real time market will bring the required flexibility in the market to provide real

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 10 Easy to PICK—"PIB Monthly Magazine "June -2020

serving the consumers with reliable supply as any last minute requirement of power can easily be bought from the Real Time market.

- The earlier regime of managing the grid by load shedding due to last minute changes can be easily avoided.
- The real time market would help to mitigate challenges to the grid management due to intermittent and variable nature of renewable energy generation and therefore, help to integrate higher quantum of renewable energy resources into the grid.
- It is expected that shorter bidding time, faster scheduling, and defined processes (e.g. gate closure) are expected to enable the participants to access resources throughout the all India grid, promoting competition. It would lead to better portfolio management by the utilities with efficient power procurement planning, scheduling, despatch, and imbalance handling.

- The SWADES Skill Form (online) was made live on 30th May 2020 and has garnered around 7000 registrations.
- Amongst the data gathered so far, the top countries from where the citizens are returning are UAE, Oman, Qatar, Kuwait and Saudi Arabia.
- As per the skill mapping, these citizens had been primarily employed in sectors such as oil & gas, construction, tourism & hospitality, Automotive and Aviation.
- The data also suggests that the States which have shown highest returning labour are Kerala, Tamil Nadu, Maharashtra, Karnataka and Telangana.
- The GOI has launched SWADES (Skilled Workers Arrival Database for Employment Support) to conduct a skill mapping exercise of the returning citizens under the Vande Bharat Mission.
- This is a joint initiative of the Ministry of Skill Development & Entrepreneurship, the Ministry of Civil Aviation and the Ministry of External Affairs.
- It aims to create a database of qualified citizens based on their skillsets and experience to tap into and fulfil demand of Indian and foreign companies.
- The collected information will be shared with the companies for suitable placement opportunities in the country.
- The returning citizens are required to fill up an online SWADES Skills Card. The card will facilitate a strategic framework to provide the returning citizens with suitable employment opportunities through discussions with key stakeholders including State Governments, Industry Associations and Employers.

SWADES (Skilled Workers Arrival Database for Employment Support)

About

Government to conduct skill mapping of citizens returning from overseas.

About SWADES:

- MSDE's implementation arm, the National Skill Development Corporation (NSDC) is supporting the implementation of the project.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 11 Easy to PICK—"PIB Monthly Magazine "June -2020

World Environment Day 2020

About

The Indian Navy observes the World Environment Day 2020.

About the World Environment Day:

- Since 1974, WED has been celebrated every year on 5 June; engaging governments, businesses, celebrities and citizens to focus their efforts on a pressing environmental issue.
- Every World Environment Day is hosted by a different country, in which official celebrations take place. This year's host is Colombia in partnership with Germany.
- The WED has been a flagship campaign for raising awareness on issues ranging from emerging environmental issues to marine pollution, human overpopulation, and global warming, to sustainable consumption and wildlife crime.
- World Environment Day has grown to become a global platform for public outreach, with participation from over 143 countries annually.
- The World Environment Day (WED) is celebrated on 5th June every year.
- The theme for the WED is decided by the United Nations Environment Programme (UNEP).
- The theme for 2020 is 'Biodiversity'.
- In view of the prevalent situation due to COVID-19, the Union Ministry of Environment, Forest & Climate Change will be holding virtual celebrations of World Environment Day on this year's theme with focus on Nagar Van (Urban Forests).

Periodic Labour Force Survey (PLFS) – Annual Report [July, 2018 – June, 2019]

Details:

- Considering the importance of availability of labour force data at more frequent time intervals, the National Statistical Office (NSO) launched the Periodic Labour Force Survey (PLFS) in April 2017.
- **Objectives of PLFS:**
 - To estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in the short time interval of three months for the urban areas only in the Current Weekly Status (CWS).
 - To estimate employment and unemployment indicators in both usual status (ps+ss) and CWS in both rural and urban areas annually.
- This is the second annual report of the PLFS. The first one was out in May 2019.
- This report is based on the survey that was carried out during July 2018-June 2019.

You can read about the key findings of the report in CNA dated 5th July 2020.

Conceptual Framework of Key Employment and Unemployment Indicators:

The PLFS gives estimates of key employment and unemployment Indicators like the Labour Force Participation Rates (LFPR), Worker Population Ratio (WPR), Unemployment Rate (UR), etc. These indicators are defined as follows:

- **Labour Force Participation Rate (LFPR):** LFPR is defined as the percentage of persons in labour force (i.e. working or seeking or available for work) in the population.

Periodic Labour Force Survey (PLFS)

About:

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 12 Easy to PICK—"PIB Monthly Magazine "June -2020

- Worker Population Ratio (WPR): WPR is defined as the percentage of employed persons in the population.
- Unemployment Rate (UR): UR is defined as the percentage of persons unemployed among the persons in the labour force.
- Activity Status – Usual Status: The activity status of a person is determined on the basis of the activities pursued by the person during the specified reference period. When the activity status is determined on the basis of the reference period of the last 365 days preceding the date of survey, it is known as the usual activity status of the person.
- Activity Status – Current Weekly Status (CWS): The activity status determined on the basis of a reference period of the last 7 days preceding the date of survey is known as the current weekly status (CWS) of the person.
- While the clearing operations were going on at the well site, the well caught fire on 9th June 2020 around noon time, spreading the fire in an area of about 200 meters around the well site.
 - The cause of the fire has not been ascertained till now.
- The fire in around 200 meters periphery has completely burnt about 15 houses, while another 10-15 houses have been partially affected.
- It is also reported that two firemen of Oil India Ltd have died.
- The affected families will be given relief and compensation as decided by the State Government of Assam.
- It has been reported that except at the well plinth area, the fire around the site has mostly extinguished.

- However, the burning of gas at the well mouth will continue till the well is capped.
- Gas has been spewing uncontrollably from the Baghjan well since the blowout on May 27.
- The debris of burnt rig, fire engines and other material around the well site will be removed before any operation can be started to cap the well.
- Arrangements of continuous water supply will have to be made before activities are undertaken at the site which is likely to take 5-6 days to make these arrangements, and all the operations will take about 4 weeks to complete.
- Around one thousand six hundred families had already been evacuated from the nearby affected areas and are camped in relief camps set up at nearby safe areas.
- OIL has decided to provide an amount of Rs. 30,000/- to each of the affected families as an immediate relief.

Blowout in Gas Well

About :

Oil India Ltd (OIL), a PSU, reported that while carrying out workover operations in the Gas Producing Well Baghjan-5 under Baghjan Oilfield in Tinsukia district of Assam, the well suddenly became active on a day in May 2020 and a blowout occurred.

Details:

- The blowout led to uncontrolled flow of gas from the well.
- OIL India sought support from ONGC, which immediately deployed their Crisis Management Team (CMT).
- OIL also mobilized a Singapore based firm for disaster control.

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 13 Easy to PICK—"PIB Monthly Magazine "June -2020

- The well is located in the vicinity of Dibru-Saikhowa National Park and Maguri Motapung Beel, a wetland.
 - OIL has engaged an accredited agency to carry out environment impact in and around Dibru-Saikhowa National Park and Maguri Motapung Beel.
 - Due to seepage of crude, condensate and other chemicals from the gas well, there has been large-scale damage to the ecology of the area, according to environmentalists and various groups.
- Firefighters arrive as quickly as possible and use machinery to remove the damaged rig and associated debris so they can assess the situation and choose the best method to fight the blowout.
- In the early days of fighting oil well fires, the most common technique to smother a blowout was to snuff it with a dynamite blast.
 - The intention is to blast fuel and oxygen away from the flame, effectively eliminating the fuel source, similar to snuffing out a candle.
- Although the first instance of this method dates back to 1913, dynamite blasting continues to be one of the most frequently employed methods.
- Another common method employed by oil well firefighters involves drilling a "relief" well or wells into and intersecting the blowing well. This intersection gives the kill fluid a conduit to the surface, enabling what is called a "subsurface kill."
- A more complicated method for bringing a blown-out well under control involves carefully capping the well with a new blowout preventer, or "BOP."
- BOPs are essentially large valves on the surface of the well that quickly shut off the well as a last ditch precaution to prevent a blowout from occurring.

What is a Blowout?

- A blowout is the uncontrolled release of crude oil and/or natural gas from an oil well or gas well after pressure control systems have failed.
- If not properly monitored, changes in pressure that can occur while the well is being drilled can cause combustible hydrocarbons to flow unchecked and at high pressures and flow rates.
- If this flow of hydrocarbons is not stopped in time, the hydrocarbons can ignite into a deadly firestorm called a blowout.
- Because of the immense cost and danger associated with oil well blowouts, the bulk of the well control industry revolves around the prevention and avoidance of blowouts.
- Unfortunately, because a blowout only takes a brief moment to occur, it is necessary that there be methods in place to combat them when the need arises.
- Blowouts are a hazard to life, the ecology and environment and also cause huge economic losses. The oil well is also lost since the resource is burnt out.

How are blowouts controlled?

- Most commonly, when a well is lost to a blowout, the drilling package will have collapsed around the well, making proper assessment of the situation difficult.

Commercial coal mining

About :

Government of India to launch auction for commercial coal mining on 18th June 2020.

Details:

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 14 Easy to PICK—"PIB Monthly Magazine "June -2020

- The commercialisation of coal mining was announced in tranche 4 of the Atmanirbhar Bharat Abhiyan.
- The government had announced that it would remove the government monopoly on coal mining by introducing commercial mining on a revenue sharing basis.
- The private sector would be allowed to bid for 50 coal blocks. Private players would also be allowed to undertake exploration activities.
- The commercial coal mining auctions are completely different from the earlier regime of restricted sectors, use and price. Now there are no such restrictions at all.
- The proposed auctions have terms and conditions which are very liberal allowing new companies to participate in the bidding process, reduced upfront amount, adjustment of upfront amount against royalty, liberal efficiency parameters to encourage flexibility to operationalize the coal mines, transparent bidding process, 100% FDI through automatic route allowed and reasonable financial terms and revenue sharing model based on **National Coal Index**.
 - The Coal Ministry is developing a National Coal Index to fix the price of coal for commercial mining, which would include a weighted combination of monthly prices of coal in various channels of transaction.
- The successful bidders also will have flexibility in coal production unlike in the past and have provision for incentives for early production and coal gasification.
- It is a joint initiative between the Ministry of Earth Sciences (MoES) and Brihanmumbai Municipal Corporation (BMC)
- The warning system will be able to relay alerts of possible flood-prone areas anywhere between six to 72 hours in advance.
 - The system can provide all information regarding possible flood-prone areas, likely height the floodwater could attain, location-wise problem areas across all 24 wards and calculate the vulnerability and risk of elements exposed to flood.
- Mumbai is only the second city in the country after Chennai to get this system.
- Similar systems are being developed for Bengaluru and Kolkata.

How will it work?

- The primary source for the system is the amount of rainfall, but with Mumbai being a coastal city, the system also factors in tidal waves and storm tides for its flood assessments.
- The system has provisions to capture the urban drainage within the city and predict the areas of flooding. The system comprises seven modules- Data Assimilation, Flood, Inundation, Vulnerability, Risk, Dissemination Module and Decision Support System.
- The system incorporates weather models from the National Centre for Medium Range Weather Forecasting (NCMRWF), India Meteorological Department (IMD), field data from the rain gauge network of 165 stations set up by Indian Institute of Tropical Meteorology (IITM), BMC and IMD.

Why was this system needed in Mumbai?

- Mumbai has been experiencing floods with increased periodicity.
- The flood in 2017 had brought the city to a standstill. In 2019, post-monsoon and

IFLOWS-Mumbai

- It is an Integrated Flood Warning System

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 15 Easy to PICK—"PIB Monthly Magazine "June -2020

unseasonal rainfall as late as October, two tropical cyclones in the Arabian Sea had caught authorities off guard and left a trail of destruction.

- In 2005 the city received a rainfall of 94 cm, a 100 year high in a span of 24 hours, which had paralyzed the city completely.
- Urban flooding is common in the city from June to September, resulting in the crippling of traffic, railways and airlines.
- As a preparedness for floods before they occur, the system will help in warning the citizens so that they can be prepared in advance for flooding conditions.

How will it be beneficial for Mumbai?

- Based on the amount of rain recorded, time, location, topography and forecast, the system is designed to generate flood warnings for specific geographical areas of the city. All this information will then be routed to authorities.
- The early warning forecast would include alerts on rainfall information, tide levels, storm surge for low-lying areas anticipated to be affected, thereby minimizing the damage from cyclones and heavy rain events in Mumbai by evacuating people to safe areas.
- The system, initially only to be accessed by the civic body will enable them to issue alerts for citizens who can then avoid such zones.
- It will be very useful, especially if people need to be evacuated from low-lying areas as the system would be able to forecast 12 hours in advance that a particular spot may get flooded.

Context

- The Office of the Principal Scientific Adviser to the Government of India (Office of PSA) and the Department of Science and Technology (DST) have started a consultative process for the formulation of a new National Science Technology and Innovation Policy (STIP 2020) reaching out to a wide range of stakeholders.
- The fifth S&T policy of the country is being formulated at a crucial juncture when India and the world are tackling the COVID-19 pandemic.

Details

The STIP 2020 formulation process is organised into 4 highly interlinked tracks, which will reach out to a large number of stakeholders for consultation in the policy formulation.

- Track I involves an extensive **public and expert consultation process** through Science Policy Forum – a dedicated platform for soliciting inputs from larger public and expert pool during and after the policy drafting process.
- Track II comprises **experts-driven thematic consultations** to feed evidence-informed recommendations into the policy drafting process.
 - Twenty-one (21) focused thematic groups have been constituted for this purpose.
- Track III involves consultations with **Ministries** and States.
 - For track III, nodal officers are being nominated in states and in ministries, departments and agencies of the Government of India for extensive intra-state and intra-department consultation.
- Track IV constitutes apex level **multi-stakeholder consultation**.
 - For track IV, consultation with industry bodies, global partners and inter-ministerial and inter-state consultations

Science, Technology and Innovation
Policy (STIP) 2020

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

represented at the highest levels are being carried out.

awareness about the demand for new technologies.

Aarogyapath

- It is a web-based solution for the healthcare supply chain that provides real-time availability of critical healthcare supplies.
- AarogyaPath would serve manufacturers, suppliers and customers.

Significance

- This integrated public platform that provides single-point availability of key healthcare goods can be helpful to **customers** in tackling a number of routinely experienced issues.
 - These issues include dependence on limited suppliers, time-consuming processes to identify good quality products, limited access to suppliers who can supply standardized products at reasonable prices within desired timelines, lack of awareness about the latest product launches, etc.
- It also helps **manufacturers and suppliers** to reach a wide network of customers efficiently, overcoming gaps in connectivity between them and potential demand centres like nearby pathological laboratories, medical stores, hospitals, etc.
 - It will also create opportunities for business expansion due to an expanded slate of buyers and visibility of new requirements for products.
 - Over time, analytics from this platform is expected to generate early signals to manufacturers on overcapacity as well as on looming shortages.
 - This would help to reduce wastage of resources due to inefficient forecasting and excess manufacturing, generate

Raja Parba

Context:

PM greets people of Odisha on Raja Parba.

About Raja Parba:

- Raja Parba is a festival celebrated in Odisha.
- The second day signifies beginning of the solar month of "Mithuna" marking the beginning of rains.
- The festival falls in mid-June.
- The first day is called Pahili Raja, second day is called Mithuna Sankranti, and the third day is Bhu daaha or Basi Raja.
- It is believed that the mother Goddess Earth or the divine wife of Lord Vishnu undergoes menstruation during the first three days.
- The fourth and final day is called Vasumati snana (bathing of Mother Earth). Women worship a stone that symbolises the Mother Earth. They give her a bath with turmeric paste, offer her flowers and smear her with Sindoor.
- The term Raja has come from Rajaswala (meaning a menstruating woman) and during medieval period the festival became more popular as an agricultural holiday remarking the worship of Bhudevi, who is the wife of lord Jagannath.
- During the first three days, women are given a break from household work and time to play indoor games. Girls adorn traditional saree and apply alatha on foot. All people abstain from walking barefoot on earth.
- During the Parba, Odia people do not undertake any construction works or tilling that requires the earth to be dug. And by not doing such

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 17 Easy to PICK—"PIB Monthly Magazine "June -2020

activities, they pay ode to the Mother Earth who needs a break from routine work.

Amoebiasis

Context:

New drug for amoebiasis in the offing.

Details:

- A team of researchers from the Jawaharlal Nehru University (JNU) has developed new drug molecules against the protozoa that causes amoebiasis.
- This protozoan is anaerobic or micro-aerophilic in nature such that it cannot survive high concentrations of oxygen. However, during infection, it faces a high surge of oxygen inside the human body.
- The organism synthesizes large amounts of cysteine to counter oxidative stress.
- This pathogen deploys cysteine as one of the essential molecules in its defence mechanism against high oxygen levels.
- Entamoeba expresses two crucial enzymes for synthesizing cysteine. Researchers from JNU has characterized and determined the molecular structures of both these crucial enzymes.
- The researchers have also successfully screened for potent inhibitors for one of the enzymes, O-acetyl L-serine sulfhydrylase (OASS). Some of these inhibitors can check the growth of this organism with high efficacy.

About Amoebiasis:

- Amoebiasis is a common infection of the gastrointestinal tract.
- Amoebiasis is caused by the protozoan parasite *Entamoeba histolytica*. Only about 10% to 20% of people who are infected with *E. histolytica* become sick from the infection.

- Acute amoebiasis can present as diarrhoea or dysentery with frequent, small and often bloody stools. Chronic amoebiasis can lead to gastrointestinal symptoms plus fatigue, weight loss and occasional fever.
- The disease occurs worldwide but is more common in areas or countries with poor sanitation, particularly in the tropics.
- There is no vaccine available for this disease according to the WHO.

Global Partnership on Artificial Intelligence (GPAI)

Context:

India joins Global Partnership on Artificial Intelligence (GPAI) as a founding member to support the responsible and human-centric development and use of AI.

Details:

- India joined the league of leading economies including the USA, the UK, the EU, Australia, Canada, France, Germany, Italy, Japan, Mexico, New Zealand, Republic of Korea and Singapore to launch the Global Partnership on Artificial Intelligence (GPAI or Gee-Pay).

About GPAI:

- GPAI is an international and multi-stakeholder initiative to guide the responsible development and use of AI, grounded in human rights, inclusion, diversity, innovation, and economic growth.
- This is also a first initiative of its type for evolving better understanding of the challenges and opportunities around AI using the experience and diversity of participating countries.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 18 Easy to PICK—"PIB Monthly Magazine "June -2020

- In order to achieve this goal, the initiative will look to bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI-related priorities.
- In collaboration with partners and international organizations, GPAI will bring together leading experts from industry, civil society, governments, and academia to collaborate to promote responsible evolution of AI.
- It will also evolve methodologies to show how Artificial Intelligence can be leveraged to better respond to the present global crisis around COVID-19.
- GPAI will be supported by a Secretariat, to be hosted by the Organization for Economic Cooperation and Development (OECD) in Paris, as well as by two Centers of Expertise – one each in Montreal and Paris.
- exchange, removing the requirement for buyers and sellers to find each other.
- This means that buyers will not have to contact multiple dealers to ensure they find a fair price.
- The exchange also allows much shorter contracts – for delivery on the next day, and up to a month – while ordinarily contracts for natural gas supply are as long as six months to a year. This, experts say, will allow buyers and sellers greater flexibility.
- The platform is fully automated with web-based interface to provide seamless trading experience to the customers.
- As there will be a market driven pricing mechanism, the IGX is expected to play a bigger role towards realizing a free market for gas.
- **The price of domestically produced natural gas is decided by the government. It will not be sold on the gas exchange.**

Indian Gas Exchange

Context:

The Minister for Petroleum and Natural Gas launched the Indian Gas Exchange.

About the Indian Gas Exchange (IGX):

- The IGX is the first nationwide online delivery-based gas trading platform.
- Incorporated as a wholly-owned subsidiary of the IEX – India's energy market platform, IGX will enable market participants to trade in standardised gas contracts.
- The IGX is a digital trading platform that will allow buyers and sellers of natural gas to trade both in the spot market and in the forward market for imported natural gas across three hubs – Dahej and Hazira in Gujarat, and Kakinada in Andhra Pradesh.
- Imported Liquefied Natural Gas (LNG) will be regassified and sold to buyers through the

Composite Regional Centres (CRC)

Context:

Composite Regional Centre (CRC) – Ranchi inaugurated.

About Composite Regional Centres (CRC):

- CRCs are centres for persons with disabilities set up under the Ministry of Social Justice and Empowerment.
- They provide rehabilitation services for people with disabilities.
- Services include physical medicines, physiotherapy, occupational therapy, audiology and speech therapy, psychology, prosthetics and orthotics, special education, early intervention and treatment, etc.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 19 Easy to PICK—"PIB Monthly Magazine "June -2020

- These centres also implement various schemes of the Department of Empowerment of Persons with Disabilities including skill development programmes.
- The targeted disabled persons include persons with low vision, blindness, mental retardation, locomotor disability, hearing impairment, mental illness, cerebral palsy, leprosy and autism spectrum disorder.

Annular Solar Eclipse

Context:

An annular solar eclipse will occur on 21 June, 2020.

Details:

- From India, the annular phase will be visible in the morning from some places within a narrow corridor of the northern part of the country (parts of Rajasthan, Haryana and Uttarakhand).
- It will be seen as a partial solar eclipse from the rest of the country.
- A few prominent places within this narrow annularity path are Dehradun, Kurukshetra, Chamoli, Joshimath, Sirsa, Suratgarh, etc.
- In India, the obscuration of the Sun by the Moon at the time of the greatest phase of the annular eclipse will be nearly 98.6%.
- Considering the Earth as a whole, the partial phase of the eclipse will begin at 9 h 16 m IST. The annular phase will begin at 10 h 19 m IST. The annular phase will end at 14 h 02 m IST. The partial phase will end at 15h 04 m IST.
- The annular path passes through Congo, Sudan, Ethiopia, Yemen, Saudi Arabia, Oman, Pakistan, northern parts of India and China.
- The Moon's penumbral shadow produces a partial eclipse, visible in the region covering Africa (except Western and Southern parts) S. E.

Europe, Asia (except North and East Russia) and northern parts of Australia.

Workshop tomorrow on Good Governance Practices in a Pandemic for International Civil Servants

Context:

Union Minister of State for Personnel, PG and Pensions will deliver the inaugural address at the ITEC-NCGG Two-day Workshop on COVID-19 – Good Governance Practices in a Pandemic.

Details:

- The conference would be attended by participants through webinar.
- It would be attended by Chief of Staff of the Sri Lankan Army, Senior Secretaries to Government from Bangladesh, Senior officials from Bhutan, Kenya, Morocco, Myanmar, Nepal, Oman, Somalia, Thailand, Tunisia, Tonga, Sudan and Uzbekistan.
- The workshop is jointly organised by the Indian Technical and Economic Cooperation (ITEC), Ministry of External Affairs and the National Centre for Good Governance (NCGG), Department of Administrative Reforms and Public Grievances.

About the Indian Technical and Economic Cooperation (ITEC):

- The Indian Technical and Economic Cooperation (ITEC) Programme was instituted by a decision of the Indian Cabinet in 1964 as a bilateral programme of assistance of the Government of India.
- The Programme is fully funded by the GOI and works under the External Affairs Ministry.
- Although essentially bilateral in nature, the ITEC resources have also been used for

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 20 Easy to PICK—"PIB Monthly Magazine "June -2020

cooperation programmes conceived in regional and inter-regional context such as Economic Commission for Africa, Commonwealth Secretariat, UNIDO, Group of 77 and G-15.

- Off late, its activities have been associated with regional and multilateral organisations such as the ASEAN, BIMSTEC, African Union, Mekong-Ganga Cooperation (MGC), WTO, etc.
- Under ITEC and its sister programme SCAAP (Special Commonwealth African Assistance Programme), 161 countries in Asia, Africa, East Europe, Latin America, the Caribbean as well as Pacific and Small Island countries are invited to share in the Indian developmental experience acquired over six decades of India's existence as a free nation.
- As a result of different activities under this programme, there is now a visible and growing awareness among other countries about the competence of India as a provider of technical know-how and expertise as well as training opportunities, consultancy services and feasibility studies.
- These programmes have generated immense goodwill and substantive cooperation among the developing countries.
- **Programmes under ITEC/SCAAP:**
 - Training (civilian and defence) in India of nominees from ITEC partner countries;
 - Projects and project related activities such as feasibility studies and consultancy services;
 - Deputation of Indian experts abroad;
 - Study Tours;
 - Gifts/Donations of equipment at the request of ITEC partner countries; and
 - Aid for disaster relief.

About the National Centre for Good Governance (NCGG):

- The NCGG is an autonomous institute of the Department of Administrative Reforms & Public Grievances, GOI.
- Its head office is at New Delhi and branch office at Mussoorie.
- The NCGG has been set up to assist in bringing about governance reforms through studies, training, knowledge sharing and promotion of good ideas.
- It seeks to carry out policy relevant research and prepare case studies; curate training courses for civil servants from India and other developing countries; provide a platform for sharing of existing knowledge and pro-actively seek out and develop ideas for their implementation in the government, both at the national & international levels.
- The NCGG was originally set up in 1995 by the Lal Bahadur Shastri National Academy of Administration (LBSNAA) as the National Institute of Administrative Research (NIAR).
- The institute's name was changed to its present NCGG with an expanded mandate in 2014.

Khelo India State Centres of Excellence (KISCE)

About :

The Sports Ministry will establish KISCE under the Khelo India Scheme.

Details:

- One KISCE will be identified in each state and union territory, with an effort to create a robust sporting ecosystem in the entire country.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 21 Easy to PICK—"PIB Monthly Magazine "June -2020

Garib Kalyan Rojgar Abhiyaan

About :

PM to launch Garib Kalyan Rojgar Abhiyaan in June to boost livelihood opportunities in rural India.

About Garib Kalyan Rojgar Abhiyaan:

- In the first leg, the Ministry has identified state-owned sports facilities in eight states of India, including, Karnataka, Odisha, Kerala, Telangana and the north east states of Arunachal Pradesh, Manipur, Mizoram and Nagaland which will be upgraded into Khelo India State Centre of Excellence (KISCE).
- This move is expected to help India achieve success in Olympic Games and other international tournaments.
- In order to upgrade the existing centre to the KISCE, the government will extend a 'Viability Gap Funding' in sports science and technology support for sports disciplines practiced at the centre and also bridge the gaps in requirement of sports equipment, expert coaches and high performance managers.
- The support extended will be to Olympic sports, though support can be extended in sports science and allied fields in other sporting disciplines being run in the centre.
- The state and UT will run the centre and build capacity to turn it into a world-class sporting facility, and will be responsible for all aspects of management of the centre including boarding, lodging and maintenance, while funds for critical gaps such as expert coaches, support staff, equipment and infrastructure will be extended through the Khelo India Scheme.
- The eight centres will be given a grant based on the actual amount finalised as per the requirement indicated after a comprehensive gap analysis study.
- In a bid to broad-base talent identification, the states and UTs will also identify and develop talent in each sport for which funding is received at the centre.
- The Sports Authority of India will extend expertise, resources and a monitoring system to ensure that the level of performance of the athletes improve to international standards.
- It is a rural public works scheme to empower and provide livelihood opportunities to the returnee migrant workers and rural citizens.
- Under this scheme, within 125 days, for 116 districts, nearly 25 schemes of the government will be brought together.
- Villages across 116 districts in the six states will join the programme through the Common Service Centres and Krishi Vigyan Kendras.
- The scheme entails creating infrastructure in the rural areas, apart from providing employment opportunities.
- Funds to the tune of Rs.50000 crore has been allocated for this scheme.
- The central and state governments have mapped the skill sets of migrant workers who have returned to the 116 districts.
- According to the government, at least 25000 migrant workers have returned to each of the 116 districts.
- Some of the works included under this are provision of gas pipelines, works under District Mineral Fund, waste management works, rural roads, Anganwadi centres, rural housing, railway works, RURBAN mission in rural areas, solar pump sets, laying of fibre optic cables, Jal Jeevan, etc.
- The programme will be launched from village Telihar in Khagaria district of Bihar.
- Coordinating ministries/departments: Rural Development, Panchayati Raj, Road Transport & Highways, Mines, Drinking Water & Sanitation, Environment, Railways, Petroleum

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

& Natural Gas, New & Renewable Energy,
Border Roads, Agriculture and Telecom.

Umifenovir

About :

CSIR-CDRI's candidate drug Umifenovir secures DCGI approval for Phase III Clinical Trial against COVID-19.

Details:

- CSIR constituent lab CSIR-Central Drug Research Institute (CDRI) Lucknow, has received permission for carrying out Phase III randomised, Double blind, Placebo controlled trial of efficacy, safety and tolerability of antiviral drug Umifenovir.
- This drug has a good safety profile and acts by preventing the entry of virus into human cells and also by priming the immune system.
- Umifenovir is mainly used for treatment of influenza and is available in China and Russia, and has recently come into prominence due to its potential use for COVID-19 patients.
- To evaluate its efficacy in Indian patients, CSIR-CDRI has taken up the clinical trial.
- Further, it has developed the process technology for Umifenovir in record time and licensed the economical process technology for manufacturing and marketing the drug to a private company based in Goa, who have already received test license from DCGI.
- Notably, all the raw materials for the drug are indigenously available.

Earthquakes in Delhi-NCR

About :

Recent Delhi-NCR tremors do not signal of a big event, though a strong earthquake cannot be ruled out: WIHG

Details:

- In the wake of the recent series of tremors in Delhi-NCR, the Wadia Institute of Himalayan Geology (WIHG), an autonomous institute of the Department of Science and Technology, has said that such tremors are not unusual in the Delhi-NCR region, but indicate that strain energy is built up in the region.
- They have said that since the seismic network is quite good, present micro to minor earthquakes in and around Delhi-NCR could be recorded.
- Though our understanding in terms of when, where and with how much energy (or magnitude) an earthquake can occur is not clear, but the vulnerability of a region can be understood from the past seismicity, calculation of strain budget, mapping of active faults, etc.
- **The Delhi-NCR region has been identified as the second highest seismic hazard zone (Zone IV).**
- Sometimes, a vulnerable zone remains quiet, experiences small magnitude earthquakes that do not indicate any bigger earthquake, or receives a sudden jolt by a big earthquake without any call.
- The recent events cannot be defined as the 'foreshocks'.
 - If a big earthquake takes place in a region, all smaller events that occurred in the immediate past in that region are categorized as the **foreshocks**.
- There is no mechanism to predict an earthquake.

Why earthquakes happen in Delhi-NCR?

- All the earthquakes in Delhi-NCR are due to the release of strain energy, which have been accumulated as a result of the northward movement of the Indian plate and its collision

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 23 Easy to PICK—"PIB Monthly Magazine "June -2020

with the Eurasian plate, through fault or weak zones.

- There are many weak zones and faults in the Delhi-NCR: Delhi-Haridwar ridge, Mahendragarh-Dehradun subsurface fault, Moradabad fault, Sohna fault, Great boundary fault, Delhi-Sargodha ridge, Yamuna river lineament, Ganga river lineament, etc.
- The Himalayan seismic belt, where the Indian plate collided with the Eurasian plate and underthrust beneath the Himalayan wedge, accumulates strain energy at the plate boundary due to relative movement of plates against each other causing crustal shortening and deformation of rocks.
- This energy can be released through the weak zones and faults in the form of earthquakes ranging from micro (<3.0), minor (3.0-3.9), light (4.0-4.9), moderate (5.0-5.9), strong (6.0-6.9), major (7.0-7.9) or great (>8.0) earthquake, defined as per the amount of energy released.
- The small magnitude earthquakes are frequent, but large magnitude earthquakes are rare to very rare.

Impact of earthquakes in the Himalayas to Delhi-NCR:

- The rupture areas due to large earthquakes show gaps along the Himalayan arc, which have not experienced great earthquakes for a long time, and are identified as the future potential zones for great earthquakes.
- Three main seismic gaps have been identified in the Himalaya:
 - The Assam Gap between the 1950 Assam earthquake and the 1934 Bihar-Nepal earthquake;
 - The Kashmir Gap between the 1905 Kangra earthquake and the 1975 Kinnaur earthquake;

- The 700 km long Central Gap between the 1905 Kangra earthquake and the 1934 Bihar-Nepal earthquake.

- The entire NW-NE Himalayan belt lies in the highest seismic potential zone V and IV, where major to great earthquakes can take place.
- There are so many faults, ridges, and lineaments transverse to the Himalayan arc, large sediment thickness in the Ganga Alluvium Plains to the north of Delhi-NCR.
- Again, the Delhi-NCR is ~200 km away from the Himalayan arc. Therefore, a major earthquake in the Himalayan seismic belt may also be a threat to Delhi-NCR.

World Sickle Cell Day

About :

Union Minister for Tribal Affairs addresses webinar 'National Sickle Cell Conclave' to mark the World Sickle Cell Day, organized by FICCI, jointly with Ministry of Tribal Affairs, Apollo Hospitals and Novartis.

About World Sickle Cell Day:

- World Sickle Cell Day is a United Nation's recognised day to raise awareness of sickle cell at a national and international level.
- In 2008, the United Nations General Assembly adopted a resolution that recognises sickle cell disease as a public health problem and "one of the world's foremost genetic diseases." The resolution calls for members to raise awareness of sickle cell on June 19th of each year at national and international level.

About Sickle Cell Disease:

- Sickle cell disease is a group of disorders that affects haemoglobin, the molecule in red blood

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 24 Easy to PICK—"PIB Monthly Magazine "June -2020

cells that delivers oxygen to cells throughout the body.

- People with this disorder have atypical haemoglobin molecules called haemoglobin S, which can distort red blood cells into a sickle, or crescent shape.
- The signs and symptoms of sickle cell disease are caused by the sickling of red blood cells.
- When red blood cells sickle, they break down prematurely, which can lead to anaemia.
 - Anaemia can cause shortness of breath, fatigue, and delayed growth and development in children.
- The rapid breakdown of red blood cells may also cause yellowing of the eyes and skin, which are signs of jaundice.
- Painful episodes can occur when sickled red blood cells, which are stiff and inflexible, get stuck in small blood vessels.
- People with sickle cell are also at risk of complications like stroke, acute chest syndrome, blindness, bone damage and priapism.
- Mutations in the HBB gene cause sickle cell disease.
- Sickle cell is a genetic disease. Treatment of sickle cell mostly focuses on preventing and treating complications.

Atal Innovation Mission

What's in News?

Coal India Limited (CIL) has agreed to partner with Atal Innovation Mission (AIM), NITI Aayog to support proactively the flagship mission's innovation and entrepreneurship initiatives across the country.

- The collaboration between CIL and AIM intends to conduct various activities / programs to support greater awareness and promotion of the innovation ecosystem through the AIM programmes and newer initiatives.

Atal Innovation Mission:

- AIM has various innovation programs and entrepreneurial ecosystem building initiatives such as Atal Tinkering Labs (ATL) at a school level, Atal Incubation Centres (AIC) at institutional levels, Atal Community Innovation Centres (ACIC) for Tier-2, Tier3 cities and rural India, Atal New India Challenges (ANIC) at industry level and Applied Research and Innovation (ARISE) for stimulating innovations in the MSME industry.

Pokhran potteries

About:

KVIC starts reviving ancient glory of Pokhran potteries.

Details:

- The Khadi and Village Industries Commission (KVIC) distributed 80 electric potter wheels to 80 potter families in Pokhran which has a rich heritage in terracotta products.
- Pokhran, in Jaisalmer district of Rajasthan, has over 300 potters' families that have been engaged with pottery for several decades, but potters had started looking for other avenues due to heavy drudgery in the work and no market support.
- Apart from the electric wheels, the KVIC also distributed 8 blunger machines, used for mixing the clay which can produce 800 kg clay in just 8 hours. Manually it takes 5 days to prepare 800 kg mud for pottery making.
- The 80 potters were also given 15-days' training to help them come up with exquisite pottery.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 25 Easy to PICK—"PIB Monthly Magazine "June -2020

About Rajasthan potteries:

- Rajasthan is famous for terracotta items. Diverse forms of pottery are made in different regions of Rajasthan.
- Alwar is known for producing paper-thin Kagazi pottery, while Pokhran is renowned for white and red clay articles with geometric designs. Bikaner is home to painted pottery, tinted with lac colours. Jaisalmer is famous for stoneware pottery.
- Rajasthan is also known for its Blue Pottery.
 - Turko-Persian in origin, the art of blue pottery is said to have flourished in Jaipur under the 19th century ruler Maharaja Ram Singh II.
 - The special feature of blue pottery is that, unlike others, it is made of ground quartz stone and clay is not used at all. The traditionally used colours are blue (extracted from oxide of cobalt), green (from the oxides of copper) and white.
 - Some pottery is semi translucent and in addition to the traditional colours, other combinations have now been evolved, such as canary yellow, dark blue and brown.
 - The conventional designs are floral or arabesque patterns, sometimes with figures of animals.

Stellar evolution in the Milky Way Galaxy

About :

Study showing stars of varied ages can co-exist in open clusters, provides clue to stellar evolution in the Milky Way Galaxy.

Details:

- Stars in the Milky Way Galaxy are formed from the molecular clouds present in the galaxy.
- Star clusters are important clues to understand the mechanism of star formation because it is believed that a majority of stars in the Milky Way are formed in star clusters.
 - Star clusters are groups of stars which are gravitationally bound.
 - Open star clusters are a system of stars bound by gravity in which stars are born from the same molecular clouds.
 - All the stars in a cluster follow the evolutionary sequence as per their initial masses at the time of formation of these stars.
 - Open clusters are also important in probing the formation and evolution of the Milky Way Galaxy as they are distributed throughout the Galactic disk.
- Astronomers at the Aryabhata Research Institute of Observational Sciences (ARIES), an autonomous science institute under the Department of Science and Technology (DST) Govt. of India, have found that stars of varied ages can co-exist in open clusters. This challenges earlier understanding that stars in an open cluster have the same age.
- The scientists measured the light from three poorly studied open clusters NGC 381, NGC 2360, and Berkeley 68 (observed using the 1.3-m telescope at Devasthal Observatory situated in Nainital) for studying the evolution of stars in these clusters.
 - They found two different stellar evolutionary sequences in the cluster NGC 2360, which has been observed in very few open clusters in the Milky Way Galaxy until now.
- Other than the stellar evolution, the researchers also studied the dynamical evolution of these clusters for the first time.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 26 Easy to PICK—"PIB Monthly Magazine "June -2020

- The mass distributions of stars belonging to the clusters have shown the preferential distribution of massive stars in the inner part of the clusters while low mass stars are found towards outer region of the clusters.
- It is believed that some of the very low mass stars have in fact, left their parent clusters and may be roaming as a free star like our own Sun.
- Their study lent important insight about the stellar and dynamical evolution of these clusters.

Extreme Helium Stars

About :

Detection of fluorine in hot Extreme Helium Stars solves their evolution mystery.

What is an Extreme Helium Star?

- An extreme helium star or EHe is a low-mass supergiant that is almost devoid of hydrogen, the most common chemical element of the universe.
- There are 21 of them detected so far in our galaxy.
- The origin and evolution of these Hydrogen deficient objects have been shrouded in mystery.
- Their severe chemical peculiarities challenge the theory of well-accepted stellar evolution as the observed chemical composition of these stars do not match with that predicted for low mass evolved stars.

The study:

- A study by the Indian Institute of Astrophysics (IIA), an autonomous institute of the DST, which detected the presence of singly ionised fluorine for the first time in the atmospheres of hot Extreme Helium Stars makes a strong case that the main formation of these objects involves

a merger of a carbon-oxygen (CO) and a Helium (He) white dwarf.

- The research published in the Astrophysical Journal which showed fluorine abundances determined from singly ionized fluorine (F II) lines, suggest a very high enrichment of fluorine, about a factor of 100 to 10000 times higher than normal stars.
- Clues to evolution of extreme helium stars require accurate determinations of their chemical composition, and the peculiarities, if any, become very important. Fluorine plays a very crucial role in this regard to determine the actual evolutionary sequence of these hydrogen deficient objects.
- Severe fluorine enrichment w.r.t normal stars was observed in the cool EHes along-with the cooler classical hydrogen deficient stars, the RCB variables (R Coronae Borealis Stars) hinting at close evolutionary connection between them.
- By comparing the observed fluorine abundances with other abundances of the key elements, the scientists could determine the formation channels responsible for fluorine enrichment.
- The varied range of observed fluorine abundance across stars having similar atmospheric parameters points out the difference in the individual star's evolution and the ensuing nucleosynthesis.
- Particularly, the enrichment of fluorine in the atmospheres of carbon-rich EHes and absence of the same in carbon-poor EHes suggest that fluorine is profusely produced during the merger of a He-CO WD resulting in a carbon-rich EHe, whereas He-He WD merger that results in carbon-poor EHes does not account for fluorine overabundance.
- The detection of enhanced fluorine abundances in the atmospheres of hot EHes solves a decade-old mystery about their formation.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 27 Easy to PICK—"PIB Monthly Magazine "June -2020

- It firmly places hot EHes in an evolutionary sequence with cool EHes and other hydrogen-deficient stars, and zeros in on the evolutionary scenario, which involves the merger of two double degenerate white dwarfs (WDs).

INS Airavat

About :

Indian Navy's INS Airavat brings back 198 Indian citizens from Maldives under operation Samudra Setu.

About INS Airavat:

- INS Airavat, commissioned in the Indian Navy in 2010, is one of the biggest and heaviest naval ships of the Indian Navy.
- It is capable of carrying 10 battle tanks, more than 500 troops, and 11 combat trucks.
- INS Airavat provides a comfortable platform to Sea King and Dhruv helicopters.
- It is also equipped with two indigenous rocket launchers to provide support in amphibious operations.
- The Indian Navy in January 2020 conducted "Operation Vanilla", with INS Airavat delivering relief material such as food, clothing, medicines, and water to Madagascar devastated by a cyclone and the subsequent rainfall and landslide.

Operation Samudra Setu is part of the GOI's initiative to repatriate Indians stranded in foreign countries due to the coronavirus pandemic.

International Comparison Program (ICP)

About :

Results from the 2017 International Comparison Program.

Details:

- The World Bank has released new Purchasing Power Parities (PPPs) for reference year 2017, under the International Comparison Program (ICP), that adjust for differences in the cost of living across economies of the world.
- Globally, 176 economies participated in the 2017 cycle of ICP.

About ICP:

- The ICP is the largest worldwide data-collection initiative, under the guidance of UN Statistical Commission (UNSC), with the goal of producing Purchasing Power Parities (PPPs) which are vital for converting measures of economic activities to be comparable across economies.
- Along with the PPPs, the ICP also produces Price Level Indices (PLI) and other regionally comparable aggregates of GDP expenditure.
- India has participated in almost all ICP rounds since its inception in 1970.
- The Ministry of Statistics and Programme Implementation is the National Implementing Agency (NIA) for India, which has the responsibility of planning, coordinating and implementing national ICP activities.
- India was also a co-chair of the ICP Governing Board along with Statistics Austria for the ICP 2017 cycle.

Results:

- The PPP of Indian Rupee per US\$ at GDP level is now 20.65 in 2017 from 15.55 in 2011.
- The Exchange Rate of US Dollar to Indian Rupee is now 65.12 from 46.67 during the same period.
- The Price Level Index (PLI), used to compare the price levels of economies, of India is 47.55 in 2017 from 42.99 in 2011.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 28 Easy to PICK—"PIB Monthly Magazine "June -2020

- PLI is the ratio of a PPP to its corresponding market exchange rate.
- In 2017, India retained and consolidated its global position, as the **third largest economy**, accounting for 6.7 percent of global Gross Domestic Product (GDP) in terms of PPPs as against China (16.4%) and United States (16.3%), respectively.
- India is also third largest economy in terms of its PPP-based share in global Actual Individual Consumption and Global Gross Capital Formation.
- In the Asia-Pacific region, India in 2017 retained its regional position as the second largest economy accounting for 20.83% of regional GDP in terms of PPPs where China was first and Indonesia was in third position.
- India is also second largest economy in terms of its PPP-based share in regional Actual Individual Consumption and regional Gross Capital Formation – in the Asia-Pacific region.

What is Purchasing Power Parity (PPP)?

Purchasing power parity (PPP) is a metric used by macroeconomic analysts that compares different countries' currencies through a "basket of goods" approach. PPP allows for economists to compare economic productivity and standards of living between countries.

Annual TB Report 2020

About :

Union Health Minister releases the Annual TB Report 2020.

Details:

- The Minister also released a Joint Monitoring Mission (JMM) report, a manual on Direct

Benefit Transfer (DBT) to TB patients under NIKSHAY system.

- The Annual TB Report is prepared and published by the Central TB Division, Ministry of Health and Family Welfare, GOI.

Highlights of the Report:

- There were 20.04 lakh notified TB patients in 2019 in India, which is a 14% increase from 2018.
- The country is achieving near-complete on-line notification of TB patients through the NIKSHAY system.
- There has been a reduction in the number of missing cases to 2.9 lakh cases as against more than 10 lakhs in 2017.
- Private sector notifications increased by 35% with 6.78 lakh TB patients notified.
- Due to easy availability of molecular diagnostics, the proportion of children diagnosed with TB increased to 8% in 2019 compared to 6% in 2018.
- Provision of HIV testing for all notified TB patients increased from 67% in 2018 to 81% in 2019.
- Expansion of treatment services has resulted in a 12% improvement in the treatment success rate of notified patients. For 2019, it is 81% compared to 69% in 2018.
- More than 4.5 lakh DOT Centres provide treatment covering almost every village across the country.
- NIKSHAY also expanded the provision of four Direct Benefit Transfers (DBT) schemes of the programme:
 - Nikshay Poshan Yojana (NPY) to TB patients
 - The incentive to Treatment Supporters
 - Incentive to Private Providers and

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N. Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 29 Easy to PICK—"PIB Monthly Magazine "June -2020

- Transport incentive to TB patients in the notified tribal areas
- The GOI is committed to achieving the SDG goal of eliminating TB in the country by 2025, five years ahead of the global target.
- To align with the ambitious goal, the programme has been renamed from Revised National Tuberculosis Control Program (RNTCP) to National Tuberculosis Elimination Program (NTEP).

About the National Tuberculosis Elimination Program (NTEP):

- It is a Centrally Sponsored Scheme being implemented under the aegis of the National Health Mission with resource sharing between the State Governments and the Central Government.
- The goal of the program is to achieve a TB-free India with zero deaths, disease and poverty due to tuberculosis.

About the Nikshay system:

- It is an information management system that acts like a one-stop solution for managing patients' information and monitor program activity and performance all over the country.
- It is developed and maintained by the Central TB Division (CTD), Ministry of Health and Family Welfare, Government of India, in collaboration with the National Informatics Centre (NIC), and the World Health Organization Country office for India.
- Nikshay is used by health functionaries at various levels across the country both in the public and private sector, to register cases under their care, order various types of tests from labs across the country, record treatment details, monitor treatment adherence and to transfer cases between care providers.

- It also functions as the National TB Surveillance System and enables reporting of various surveillance data to the Government of India.

Animal Husbandry Infrastructure Development Fund

About :

The Cabinet approved the setting up of the Rs. 15000 crore Animal Husbandry Infrastructure Development Fund (AHIDF).

About the AHIDF:

- This Fund is expected to incentive infrastructure investments in dairy, meat processing and animal feed plants.
- The eligible beneficiaries under the Scheme would be Farmer Producer Organizations (FPOs), MSMEs, Section 8 Companies, Private Companies and individual entrepreneur with only 10% margin money contribution by them.
- The balance 90% would be the loan component to be made available to them by scheduled banks.
- GOI will provide 3% interest subvention to eligible beneficiaries.
- There will be 2 years moratorium period for repayment of the loan with 6 years repayment period thereafter.
- GOI would also set up a Credit Guarantee Fund of Rs. 750 crore to be managed by NABARD which would provide credit guarantee to the projects which are covered under the MSME defined ceilings. Guarantee Coverage would be up to 25% of the Credit facility of the borrower.
- **Benefits:**
 - The AHIDF with the interest subvention scheme for private investors will ensure the availability of capital to meet

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

upfront investment required for these projects and also help enhance overall returns/pay back for investors.

- Such investments in processing and value addition infrastructure by eligible beneficiaries would also promote exports.
- This is also expected to add to farmers' incomes.

to a decrease in its accumulation inside the parasite, which is necessary for the drug to kill the parasite.

- Specific types of protein molecules, called transporter proteins, play a major role in carrying miltefosine into and out of the parasite's body, which comprises a single cell.
- A protein called 'P4ATPase-CDC50' is responsible for intake of the drug by the parasite, and another protein, called 'P-glycoprotein' is responsible for throwing this drug out from within the parasite's body.
- A decrease in the activity of the former protein, and an increase in the activity of the latter results in less amounts of miltefosine being accumulated inside the parasite's body, thus causing it to become resistant to the drug.

Kala-azar

About :

Team of scientists unveils new biomolecules to fight drug resistance in Kala-azar.

About Kala-azar:

- Kala-azar, also called, visceral leishmaniasis, is the most severe form of leishmaniasis and, without proper diagnosis and treatment, is associated with high fatality.
- Leishmaniasis is a disease caused by protozoan parasites of the genus *Leishmania*.
- It is transmitted through the bite of sand bites.
- Leishmaniasis is a neglected tropical disease affecting almost 100 countries including India.
- There are three main forms of leishmaniasis:
 - Visceral, which affects multiple organs and is the most serious form of the disease
 - Cutaneous, which causes skin sores and is the most common form
 - Mucocutaneous, which causes skin and mucosal lesion
- The only drug available against leishmaniasis, miltefosine, is rapidly losing its effectiveness because of emerging resistance to this drug due

Role of ancient algae in building a healthy global marine ecosystem

About :

A study of a microscopic ancient marine algae (Coccolithophores) led by the NCPOR has found that there is a decrease in the concentration of oceanic calcium carbonate (CaCO_3) in the Southern Indian ocean.

Details:

- This decrease in CaCO_3 is attributed to the increase in the concentration of another single-celled algae known as diatoms.
- This, in turn, will affect the growth and skeleton structure of coccolithophores, with potential significance for the world ocean ecosystem.

Coccolithophores:

- Coccolithophores are single-celled algae living in the upper layers of the world's oceans.

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 31 Easy to PICK—"PIB Monthly Magazine "June -2020

- They have been playing a key role in marine ecosystems and the global carbon cycle for millions of years.
- Coccolithophores calcify marine phytoplankton that produces up to 40% of open ocean calcium carbonate and responsible for 20% of the global net marine primary productivity.
- Coccolithophores build exoskeletons from individual CaCO_3 plates consisting of chalk and seashells building the tiny plates on their exterior.
- Though carbon dioxide is produced during the formation of these plates, coccolithophores help in removing it from the atmosphere and ocean by consuming it during photosynthesis.
- At equilibrium, coccolithophores absorb more carbon dioxide than they produce, which is beneficial for the ocean ecosystem.

About the study:

- The research team has revealed that the abundance and diversity enrichment of coccolithophores in the southern Indian Ocean is highly dependent on time and influenced by various environmental factors such as silicate concentrations, calcium carbonate concentration, diatom abundance, light intensity and availability of macro and possibly micronutrient concentrations.
- The research team's analysis revealed that the reduction of coccolithophore diversity in the early summer and late summer periods is due to an increase in the presence of diatom algae, which occurs after sea ice breakdown with climate change and ocean acidification, and increases the silicate concentration in the waters of the Southern Ocean.
- The scientists also analyzed the maximum coccolithophore diversity during mid-summer in the Subtropical Zone (STZ) and Sub-Antarctic Zone (SAZ), which is controlled by elevated

silicate, low temperature, and low salinity conditions.

- Scientists found that the biogeographic boundaries of coccolithophores in the southern Indian Ocean are highly variable, controlled by environmental factors in early and mid-austral summer, and grazing pressure in late austral summer.
- Also, physical forcing may play an important role in the transport of coccoliths and coccospheres at high latitudes, indicating that the southward extension of coccolithophores is important and may occur for short periods during hot summer.
- The results of the study point to climate change as a major reason for the altered coccolithophore calcification rate.
- Different environmental factors and the ability of the species to adapt to those environmental changes would ultimately determine the future coccolithophore calcite production.
- These investigations are important for future intervention to bring positive changes in the marine ecosystem and global carbon cycle.

Gravel geometry of the Indus river

About :

Gravel geometry of the Indus river unravels its paleoclimatic history.

Details:

- Researchers from Wadia Institute of Himalayan Geology (WIHG), Dehradun, an autonomous institute under the Department of Science and Technology, Govt. of India, have traced the paleoclimatic history of the Indus River in Ladakh Himalaya with the help of geometric data from overlapping gravels of channel fills.
- They studied the discharge during periods in which the river experienced an increase in land

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

elevation, due to the deposition of sediment, and its incision.

- River Terraces are ubiquitous in mountains that nourish and help sustain past, present, and future human societies.
 - These terraces are part of valley-wide aggradations, which have been studied extensively in the Himalaya to understand the processes driving such a periodic increase in river valley land elevation and incision.
 - Scientists are still debating whether wetter climate intervals with increased rainfall and glacial melting promote river aggradation through increased discharge and enhanced sediment load, or instead, is it during drier conditions when aggradation occurs through increased sediment to water ratio.
- The study shows that aggradation took place in the Indus River when sediment to water ratio was higher during MIS-3 and incision initiated when sediment to water ratio reduced during post-glacial climatically wet phase (early Holocene).
 - Marine isotope stages (MIS): Marine oxygen-isotope stages are alternating warm and cool periods in the Earth's paleoclimate, deduced from oxygen isotope data reflecting changes in temperature derived from data from deep-sea core samples.

Nasha Mukht Bharat: Annual Action Plan (2020-21)

In The News

Nasha Mukht Bharat: Annual Action Plan (2020-21) for 272 most affected districts was e-Launched

on International Day against Drug Abuse & Illicit Trafficking.

Details

- The Ministry of Social Justice and Empowerment is the nodal Ministry for drug demand reduction, which coordinates and monitors all aspects of drug abuse prevention (which includes the assessment of the extent of the problem, preventive action, treatment and rehabilitation of addicts, dissemination of information and public awareness).
- The Plan for 2020-21 would focus on 272 most affected districts.
- It would be a three-pronged attack combining efforts of:
 - Narcotics Bureau,
 - Outreach/Awareness by Social Justice and
 - Treatment through the Health Dept.

The Action Plan has the following components:

- Awareness generation programmes;
- Focus on Higher Educational institutions, University Campuses and Schools;
- Community outreach and identification of dependent population;
- Focus on treatment facilities in hospital settings;
- Capacity Building Programmes for Service Provider.

International Day against Drug Abuse & Illicit Trafficking:

- International Day against Drug Abuse and Illicit Trafficking is observed on the **26th of June** every year since 1989.
- The day is also meant to commemorate **Lin Zexu's** efforts towards the strategic dismantling of the opium trade in Humen,

Aspire IAS *The name associated with excellence*

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 33 Easy to PICK—"PIB Monthly Magazine "June -2020

Guangdong in China right before the First Opium War on the Chinese Mainland.

- The theme of World Drug Day 2020 is **Better Knowledge for Better Care.**
- The International Day against Drug Abuse and Illicit trafficking is used as a day **to stimulate a sense of responsibility among people around the world**, especially youngsters and teenagers.
- The UN with the aid of its **anti-drug abuse arm, United Nations Office on Drugs and Crime (UNODC)** spreads awareness, urges governments to **avoid stimulating the Narco economy** and deal with the Illicit trafficking of drugs in the disguise of legal pharmaceutical businesses.

Note:

- According to the **World Drug Report 2017**, released by the **United Nations Office on Drugs and Crime (UNODC)**, about **a quarter of a billion people used drugs at least once in 2015.**
- Drug abuse, **does not only include consumption of drugs** such as cocaine, hallucinogens, cannabis, opiates among others, but **also includes prescription medications** such as **painkillers and sleeping pills.**

National Productivity Council

In The New

The 49th Governing Council Meeting of the National Productivity Council was held under the Chairmanship of the Minister of Commerce and Industry.

National Productivity Council:

- National Productivity Council (NPC) is an **autonomous body under the Department for Promotion of Industry & Internal Trade (DPIIT).**
- It is a mission-oriented apex organization to promote the cause of productivity in all sectors of the Indian economy.
- It is a **tri-partite non-profit organization** with equal representation from the government, employers and workers' organizations, apart from technical and professional institutions including members from local productivity councils and chamber of commerce on its Governing Body.
- NPC is a constituent of the **Tokyo-based Asian Productivity Organisation (APO)**, an Intergovernmental Body, of which the Government of **India is a founder member.**

Suggestions made in the meeting:

- Sector formulation of specific action plans by NPC, especially in agriculture and logistics sectors.
- Identification of champion sectors which have the potential to drive the economy.
- Adoption of technology to increase productivity and delivering cost-effective solutions for the marginalised sector.
- Interlinking of academia and industry for the creation of a highly skilled labor force.
- Financing of specific products to support MSMEs and increase their productivity.
- National audit on security impact, etc.

Banking Regulation (Amendment) Ordinance, 2020

In The News

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 34 Easy to PICK—"PIB Monthly Magazine "June -2020

In pursuance of the commitment to ensure the safety of depositors across banks, the President has promulgated the Banking Regulation (Amendment) Ordinance, 2020.

- The Ordinance amends the Banking Regulation Act, 1949 as applicable to Cooperative Banks.
- The Ordinance seeks to protect the interests of depositors and strengthen cooperative banks by improving governance and oversight by extending powers already available with RBI in respect of other banks to Cooperative Banks as well.
- The amendments do not affect existing powers of the State Registrars of Co-operative Societies under state co-operative laws.
- The amendments do not apply to Primary Agricultural Credit Societies (PACS) or co-operative societies whose primary object and principal business is long-term finance for agricultural development.
- The Ordinance also amends Section 45 of the Banking Regulation Act, to enable the making of a scheme of reconstruction or amalgamation of a banking company for protecting the interest of the public, depositors and the banking system and for securing its proper management, even without making an order of moratorium, so as to avoid disruption of the financial system.

TRIBES India products on the Government e-Marketplace (GeM)

Context:

Union Minister of Tribal Affairs launches Tribes India products on GeM and a new website of TRIFED through video conference.

About TRIFED:

- TRIFED stands for the Tribal Cooperative Marketing Development Federation of India.
- It is under the Ministry of Tribal Affairs of the GOI.
- TRIFED is the apex national organisation involved in the improvement of the livelihood and empowerment of tribal people.
- It is the nodal agency for the implementation of the Van Dhan scheme.
- TRIFED was established in August 1987 under the Multi-State Cooperative Societies Act, 1984 by the Government of India as a National level Cooperative body.
- TRIFED is mandated to bring about the socio-economic development of tribals of the country by institutionalising the trade of Minor Forest Produce (MFP) & Surplus Agricultural Produce (SAP) collected/cultivated by them.
- It plays the dual role of both a market developer and a service provider, empowering the tribal people with knowledge and tools to better their operations in a systematic, scientific manner and also assist them in developing their marketing approach.
- TRIFED is actively involved in capacity building of the tribal people through sensitisation and the formation of Self Help Groups (SHGs). TRIFED is engaged in training the tribals in several activities so that they can effectively carry them out.
- The organisation also assists them in exploring and creating opportunities to market the developed products in national and international markets on a sustainable basis.
- TRIBES India is the brand under which the sourced handcrafted products from the tribal people are sold.
- There are 120 brick-and-mortar TRIBES India outlets across the country. It

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 35 Easy to PICK—"PIB Monthly Magazine "June -2020

NOC for power, oil and gas exploration projects

About

Defence Minister launched online portal for issue of NOC for power, oil and gas exploration projects.

Details:

- The new portal was launched for the issue of No Objection Certificate (NOC) for power projects and Research Survey Exploration Exploitation (RSEE) activities in the Indian Territorial Waters (TW) and Exclusive Economic Zone (EEZ).
- The Ministry of Defence (MoD) accords security clearances to various private/Public Sector Undertakings (PSUs)/Government organisations for power/wind/solar projects in areas nearby defence installations and also RSEE activities in the Indian TW and EEZ for applications received through different Ministries like Ministry of New and Renewable Energy (MNRE), Ministry of Power, Ministry of Petroleum & Natural Gas, Ministry of Shipping, Director General of Hydrocarbons, etc.
- To ensure ease of business and transparency in issuing NOC for such projects, the Ministry has developed the online application portal with the assistance of National e-Governance Division (NeGD), Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG) and National Informatics Centre (NIC).
- The newly developed MoD web portal will facilitate the applicants in submitting their proposals online for seeking MoD Security Clearance for undertaking Power Projects/RSEE activities. The Online System will establish an effective, speedy and transparent mechanism to process these proposals.
- The Ministry had earlier launched a similar portal for grant of NOC for aerial survey.

PM Formalization of Micro Food Processing Enterprises (PM FME)

About

The Union Minister for Food Processing Industries launched the PM Formalization of Micro Food Processing Enterprises (PM FME) scheme.

Background:

- The unorganised food processing sector faces a number of challenges which limit their performance and their growth.
- These challenges include lack of access to modern technology & equipment, training, access institutional credit, lack of basic awareness on quality control of products; and lack of branding & marketing skills, etc.
- The unorganized food processing sector comprising nearly 25 lakh units contributes to 74% of employment in the food processing sector.
- Nearly 66% of these units are located in rural areas and about 80% of them are family-based enterprises supporting the livelihood of rural household and minimizing their migration to urban areas.
- These units largely fall within the category of micro-enterprises.

About the PM FME Scheme:

- The scheme was launched as part of the Atmanirbhar Bharat Abhiyan.
- The Minister said that the Scheme would generate a total investment of Rs 35,000 crore and generate 9 lakh skilled and semi-skilled employment and benefit 8 lakh units through access to information, training, better exposure and formalization.
- It is a Centrally Sponsored Scheme wherein the expenditure would be shared in 60:40 ratio

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 36 Easy to PICK—"PIB Monthly Magazine "June -2020

between Central and State Governments, in 90:10 ratio with North Eastern and the Himalayan States, 60:40 ratio for UTs with legislature and 100% by Centre for other UTs.

- It is to be implemented over a period of five years from 2020-21 to 2024-25 with an outlay of Rs 10,000 crore.
- The main goal of the scheme is to provide financial, technical and business support for the upgradation of existing micro food processing enterprises.
- The Scheme adopts One District One Product (ODOP) approach to reap benefits of scale in terms of procurement of inputs, availing common services and marketing of products.
 - The States would identify food product for a district keeping in view the existing clusters and availability of raw material.
 - The ODOP product could be a perishable produce-based product or cereal-based products or a food product widely produced in a district and their allied sectors.
 - An illustrative list of such products includes mango, potato, litchi, tomato, tapioca, kinnow, bhujia, petha, papad, pickle, millet-based products, fisheries, poultry, meat as well as animal feed among others.
 - Preference would be given to those producing ODOP products. However, units producing other products would also be supported.
 - Support for common infrastructure and branding & marketing would be for ODOP products.
 - The Scheme also places focus on waste to wealth products, minor forest products and Aspirational Districts.

- Existing individual micro food processing units desirous of upgrading their unit can avail credit-linked capital subsidy @35% of the eligible project cost with a maximum ceiling of Rs.10 lakh per unit.

- Seed capital @ Rs. 40,000/- per SHG member would be provided for working capital and purchase of small tools.
- FPOs/SHGs/producer cooperatives would be provided credit-linked grant of 35% for capital investment along the value chain.
- Support would be provided through credit-linked grant @ 35% for development of common infrastructure including common processing facility, lab, warehouse, cold storage, packaging and incubation centre through FPOs/SHGs/cooperatives or state-owned agencies or private enterprise to use by micro-units in the cluster.
- Support for marketing & branding would be provided to develop brands for micro-units and groups with 50% grant at State or regional level which could benefit a large number of micro-units in clusters.

Gold Nanoparticles

Context:

The National Centre for Polar and Ocean Research (NCPOR) and the Goa University (GU) have successfully synthesized gold nanoparticles (GNPs) using psychrotolerant Antarctic bacteria through a non-toxic, low-cost, and eco-friendly way.

Details:

- The study has established that 20-30-nm-sized spherical-shaped GNPs could be synthesized in a controlled environment.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 37 Easy to PICK—"PIB Monthly Magazine "June -2020

- These GNPs can be used as a composite therapeutic agent in clinical trials, especially in anti-cancer, anti-viral, anti-diabetic, and cholesterol-lowering drugs.
- The NCPOR-GU study revealed the genotoxic effect of GNPs on a sulphate reducing bacteria (SRB).
- The GNPs displayed enough anti-bacterial properties by inhibiting the growth of SRB and its sulphide production by damaging the genetic information of the DNA of the bacterial cell.
- Genotoxicity describes the property of a chemical agent that is capable of damaging the genetic information of DNA and thus causing a mutation of the cell, which can lead to cancer.

About Gold Nanoparticles (GNPs):

- Gold nanoparticles (AuNPs) are small gold particles with a diameter of 1 to 100 nm which, once dispersed in water, are also known as colloidal gold.
- GNPs are found to have greater solar radiation absorbing ability than the conventional bulk gold, which makes them a better candidate for use in the photovoltaic cell manufacturing industry.
- GNPs have unique optical properties too. For example, particles above 100 nm show blue or violet colour in water, while the colour becomes wine red in 100 nm gold colloidal particles. They can thus be used in therapeutic imaging.
- GNPs also have unique physicochemical properties. Their biocompatibility, high surface area, stability, and nontoxicity make them suitable for various applications in therapeutic use including detection and diagnosis of diseases, bio-labelling, and targeted drug delivery.
- As nano-carriers, GNPs are capable of transferring various drugs made out of peptides, proteins, plasmid DNAs, small interfering

RNAs, and chemotherapeutic agents to target diseased cells of the human body.

- GNPs are also found to be useful in the electronics industry.
 - Scientists have constructed a transistor known as NOMFET (Nanoparticle Organic Memory Field-Effect Transistor) by embedding GNPs in a porous manganese oxide as a room temperature catalyst to break down volatile organic compounds in air and combining GNPs with organic molecules.
 - NOMFETs can mimic the feature of the human synapse known as plasticity, or the variation of the speed and strength of the signal going from neuron to neuron.
 - These novel transistors can now facilitate better recreation of certain types of human cognitive processes, such as recognition and image processing and have their application in artificial intelligence.

Loan Agreements between Government of India and World Bank

About:

The Government of India, the Government of Tamil Nadu and the World Bank signed legal agreements to help low-income groups in the state of Tamil Nadu get access to affordable housing.

Details:

- The legal agreements were signed for two projects – \$200 million **First Tamil Nadu Housing Sector Strengthening Programme** and \$50 million **Tamil Nadu Housing and Habitat Development Project** – to strengthen the state's housing sector policies, institutions, and regulations.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

pg. 38 Easy to PICK—"PIB Monthly Magazine "June -2020

- Nearly half of Tamil Nadu's population is urban, and this is expected to increase to 63 percent by 2030. An estimated 6 million people are currently living in slums (representing 16.6 percent of the state's urban population).

- **First Tamil Nadu Housing Sector Strengthening Programme:**

- This programme supports the government's ongoing efforts to increase the availability of affordable housing by gradually shifting the role of the state from being the main provider to an enabler.
- It will also aim to unlock regulatory barriers and incentivise private sector participation in affordable housing for low-income families.

- **Tamil Nadu Housing and Habitat Development Project:**

- This project will support innovations in housing finance and strengthen housing sector institutions in the state.
- It will finance the newly created Tamil Nadu Shelter Fund (TNSF) – an innovation in housing finance in India – by providing an equity contribution of \$35 million.
- This initial support to TNSF will enable cross-subsidisation opportunities where higher returns from commercial and high-income developments will compensate for lower returns from affordable housing.
- This will make affordable housing commercially viable for potential investors.
- The project will also strengthen the capacity of key housing institutions including the Tamil Nadu Slum Clearance Board, the state's main provider of affordable housing; Chennai

Metropolitan Development Authority, the land use planning authority for the Chennai Metropolitan Area; and Tamil Nadu Infrastructure Fund Management Corporation Limited, the asset management company of TNSF.

- The loans of \$200 million and \$50 million from the International Bank for Reconstruction and Development (IBRD) have a maturity of 20 years including a grace period of 3.5 years.

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved

All the Best
Jai Hind ☺

UPSC PREPARATION @HOME- 2020-21

One decision, a lifetime opportunity





HIGH PERFORMANCE CLASSES



OBSERVATION LEARNING



LEAD IN PRELIMS TEST





MAINS EXAMINATION



ANALYTICAL & CONTEMPORARY KNOWLEDGE



INTERACTIVE CLASSROOM



OVERCOMING CHALLENGE OF MAINS



PERSONALITY TEST



INTELLECTUAL CONVERSATION



FULFILL YOUR ASPIRATIONS



Nandani KR Rank-1



Saloni Rai Rank-22



Aditya Vikram Hirani Rank-60



Sagar Setia Rank-66

MOST PRODUCTIVE COURSES & CLASSES

G.S MAPPING(Optional+GS) GEOGRAPHY+ MAPPING NEWSPAPER ANALYSIS(1000 Days) ENVIRONMENT	Optional Geography Test	Free Modules DNA MCQ's PIB RSTV
--	--------------------------------	--

For More Information Visit Our Website www.aspireias.com and click on ONLINE CLASSES

ENROLL NOW!

For More Information, Kindly Contact

Office No. - 4, Below Ground Floor, Apsara Arcade Building,
Near Karol Bagh Metro Gate No-7, New Delhi-110060
Email : aspireias.ins@gmail.com, 011-47561070, 9999801394

JOIN ON TELEGRAM [FODO PT 2020](#) | FODO MAINS 2020

FOR DEMO



ENVIRONMENT



GEOGRAPHY GS



MAPPING



NEWSPAPER ANALYSIS

Aspire IAS

The name associated with excellence

10/70 Old Rajender Nagar N.Delhi

www.aspireias.com 8010068998/9999801394

©2020 ASPIRE IAS. All rights reserved