

**INDIAN HERITAGE AND CULTURE, HISTORY****Paramahansa Yogananda**

The Union Minister for Finance Nirmala Sitharaman released a special commemorative coin on Paramahansa Yogananda to mark his 125th birth anniversary.

**About:**

- Paramahansa Yogananda (1893 –1952) was an Indian monk, yogi and guru who introduced millions to the teachings of meditation and Kriya Yoga through his organization Self-Realization Fellowship (SRF) / Yogoda Satsanga Society (YSS) of India.
- Yogananda was the first major Indian Yoga teacher to settle in America. His long-standing influence in the American yoga movement, and especially the yoga culture of Los Angeles, led him to be considered by yoga experts as the "Father of Yoga in the West."
- Autobiography of a Yogi: In 1946, Yogananda published his life story, "Autobiography of a Yogi". It is regarded as one of the Most Important Spiritual Books of the 20th Century. The Book has been an inspiration for many people including George Harrison, Ravi Shankar and Steve Jobs.

**GEOGRAPHY****Danakil Depression**

A recent study stated that an active and naturally occurring life cannot be sustained at Danakil, Ethiopia. The two barriers to the survival of life in the Danakil region are:

- Magnesium-dominated brines that cause cells to break down
- An environment having simultaneously very low pH and high salt, a combination that makes adaptation highly difficult.

**Danakil Depression**

- It is located in northeastern Ethiopia.
- At the northern end of the Great Rift Valley, and separated by live volcanoes from the Red Sea.
- Danakil is one of the world's lowest places at 100 metres below sea level.
- The plain was formed by the evaporation of an inland water body.
- All the water entering Danakil evaporates, and no stream flows out from its extreme environment.
- It is covered with more than 10 lakh tonnes of salt.

**GOVERNANCE- WELFARE SCHEMES, E-GOVERNANCE, SERVICES ETC.****Skills Build Platform**

Directorate General of Training (DGT), under the aegis of Ministry of Skill Development & Entrepreneurship (MSDE), announced the launch of Skills Build platform in collaboration with IBM.

**About:**

- As part of the programme, a two-year advanced diploma in IT, networking and cloud computing, co-created and designed by IBM, will be offered at the Industrial Training Institutes (ITIs) & National Skill Training Institutes (NSTIs).
- This initiative is part of IBM's global commitment to create a job-ready workforce and to build the next generation of skills needed for new collar careers.
- The platform is deployed with the support of leading NGOs like Unnati and Edunet Foundation. IBM Volunteers along with the NGOs will offer students personalised coaching and experiential learning opportunities.

**Do you know**

- IBM joined hands with Ministry of Skill Development & Entrepreneurship (MSDE) in early 2018 to launch a first-of-its kind 'New Collar' Curriculum. Post the successful completion of the course, in September 2019, 19 students were offered a five month paid internship at IBM.

### Draft Wage Code Rules

Government of India has released draft wage code rules which are now available in public domain for comments.

#### Key highlights of the draft:

- It has not spelled out a National Minimum Wage yet and said expert committees will suggest a minimum wage to the government in the future.
- The number of hours which shall constitute a normal working day shall be of 9 hours.
- HRA will be 10% of the minimum wage but will not classify whether it will be based on the category of the cities people live in.
- The floor wage will be revised every five years or less.
- While deciding the minimum wage the country will be divided into three geographic categories -- metropolitan area having population of 40 lakhs or more, non-metropolitan area having a population of between 10 lakhs to 40 lakhs and rural areas.
- House rent will be 10% of the minimum wage but does not classify whether it will be higher based on the category of the cities people live. Expenditure on fuel, electricity and other miscellaneous items will constitute 20% of minimum wage, an existing rule.
- While calculating wage, an intake of 2,700 calories per day, 66 meters clothe per annum for a standard family will be taken into account. All these are part of the minimum wage calculation first done in 1957.

#### Related Info :

- An internal panel of the Union labour ministry had said in its report in January 2019 that “the single value of the national minimum wage for India should be set at Rs. 375 per day as of July 2018”.
- In addition to the minimum monthly wage of Rs.9,750, the seven-member panel had also suggested that a housing allowance of Rs. 1,430 should be provided for city-based workers.

### **INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS**

#### RCEP (Regional Comprehensive Economic Partnership)

Prime Minister Narendra Modi announced that India was dropping out of the RCEP (Regional Comprehensive Economic Partnership), citing its negative effects on “farmers, MSMEs and the dairy sector”.

#### About:

- **Members:** The RCEP is a proposed Free Trade Agreement (FTA) between sixteen countries namely 10 countries of ASEAN (Brunei, Cambodia, Indonesia, Lao, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam) and their six FTA partners (also known as AFP’s or ASEAN FTA Partners) namely Australia, China, India, Japan, Korea and New Zealand.
- **Background:** RCEP negotiations were formally launched in 2012 at the ASEAN Summit in Cambodia.
- **Objective:** The 16-member RCEP bloc aims to cover among the issues related to goods, services, investments, economic and technical cooperation, competition and intellectual property rights.
- **Reasons for India walking out of it:**
  - The present form of the RCEP agreement does not address satisfactorily India’s outstanding issues and concerns. Indian farmers, traders, professionals and industrialists have protested against the government’s decision to go ahead with the negotiations.
  - Because Indian products face high non-tariff barriers (NTBs) like food-related and other standards, as well as technical barriers in Japan, Australia and New Zealand, exports are difficult.

- At the same time, NTBs are lower in India. When tariffs are reduced, Australia, New Zealand, and ASEAN countries will be the major beneficiaries.

## **INDIAN ECONOMY**

### **ICEDASH; ATITHI**

Finance Minister Nirmala Sitharaman unveiled two new IT Initiatives - ICEDASH and ATITHI for improved monitoring and pace of customs clearance of imported goods and facilitating arriving international passengers.

#### **About:**

- ICEDASH is an Ease of Doing Business monitoring dashboard of the Indian Customs helping the public see the daily Customs clearance times of import cargo at various ports and airports. This dashboard has been developed by CBIC in collaboration with NIC.
- The ATITHI app will facilitate hassle-free and faster clearance by Customs at the airports and enhance the experience of international tourists and other visitors at the airports. Passengers can use this app to file declaration of dutiable items and currency with the Indian Customs even before boarding the flight to India.

### **NBFC Liquidity Norms**

The Reserve Bank of India (RBI) has introduced 'liquidity management framework' for Non-Banking Financial Companies (NBFCs). The RBI move has come following liquidity crunch among some NBFCs in meeting their recent repayment obligations after the collapse of the Infrastructure Leasing and Financial Services (IL&FS) group.

#### **Liquidity Coverage Ratio**

- All non-deposit taking NBFCs (NBFC-NDs) with asset size of Rs 10,000 crore and above and all deposit-taking NBFCs have to maintain a liquidity buffer in terms of Liquidity Coverage Ratio (LCR).
  - However Type I - NBFC-ND entities are exempt from the applicability of LCR norms.
  - Type I - NBFC-ND entities are those which do not accept public funds and do not have customer interface and do not intend to engage in such activities.
- The LCR requirement will be binding on NBFCs from 1st December, 2020 with the minimum HQLAs to be held being 50% of the LCR, progressively reaching up to the level of 100% by 1st December, 2024.
- Assets to be included as HQLA include cash, government securities and marketable securities issued or guaranteed by foreign sovereigns. These assets should be free of any financial liability.
- Significance: The presence of liquid reserve will prevent a NBFC from going into a default loss if some inflows get delayed.
- NBFCs should adopt liquidity risk monitoring tools and metrics in order to capture strains in liquidity position.

## **ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES**

### **Brown Blotched Bengal Tree Frog**

A new frog species named Polypedates bengalensis has been found in a residential area of West Bengal. The discovery has now been recognised by Zootaxa, a peer-reviewed international journal.

#### **About:**

- The Polypedates bengalensis frog is also known as the Brown Blotched Bengal Tree Frog.
- It was found in two places in West Bengal – Badu, North 24 Parganas District and Khordanahala, South 24 Parganas District.
- It is named Brown Blotched Bengal Tree Frog from the series of six to nine dark brown blotches that extend laterally from behind the frog's eye to the vent. The frog's body colour is yellowish-brown to greenish-brown.

- It belongs to the genus Polypedates. There are 25 other Polypedates species (Polypedates bengalensis is the 26th) around the world.

### **Punjab's Water Law Linked to Air Pollution in Delhi**

The severe air pollution crisis in NCR-Delhi region is found to be related to the timing of stubble burnings in the neighbouring states of Punjab, Haryana. Farmers in these states have been setting fire to their fields after harvesting of paddy since the 1980s. But “the timing” of stubble burning has significantly changed after Punjab Preservation of Subsoil Water Act, 2009 (PPSW) came into effect.

#### **Practice Prior to the PPSW Act, 2009**

- The farmers in Punjab were sowing paddy nurseries from mid-to-late April and transplanting the seedlings from mid-May to late-May.
  - For the first three weeks after transplanting, the plants have to be irrigated almost daily to ensure water-logged conditions to prevent weed growth.
  - But nursery sowing and transplanting, during peak summer, led to massive groundwater depletion.
- As a result, the paddy, including 155-day varieties such as Pusa-44, got harvested by early October — and the burning of the stubble used to get over around mid-October.
  - The stubble burning period and the onset of winter in Northern India had a considerable time gap which avoided the air pollution crisis in the area.

#### **Implementation of PPSW Act, 2009**

- The act was brought in to prevent the groundwater crisis during summer.
- The Act barred any nursery sowing and transplanting of paddy before May 15 and June 15, respectively.
- This ensured that a significant part of the crop’s water requirement is met from monsoon rains and also, lesser water loss due to evaporation after mid-June.
- Late transplanting left farmers with little time between harvesting and preparing the field for the next crop and hence farmers are resorting to the burning of stubble.

#### **Positives of PPSW Act, 2009**

- The delayed paddy transplantation has been helping to save 1,000 billion liters.
- It is equal to the total water consumption of Ludhiana, an industrial town, for two years.

#### **Impact of PPSW Act, 2009**

- Implementation of the PPSW Act (2009) made the time period of stubble burning coincident with the onset of winter in Northern India.
- Also, wind movement remains very slow and moisture levels in the lower atmosphere remain high during this period.
- It creates a layer, due to which all the particulate matter and gases from the burnt stubble, as well as vehicles and industries, get accumulated, instead of moving away.
- At this time of the year, winds in Punjab generally blow from the northwest to the southeast.
  - Haryana and Delhi are to the south and southeast of Punjab.
  - Also, these northwesterly winds are calm with a speed of less than 2 kmph which results in ‘air locking’ at many places.

Thus, the PPSW Act (2009) may have helped arrest the rapid decline in the groundwater table and aquifers, but it has contributed to the unprecedented deterioration in Air Quality Index (AQI) in the National Capital Region

**SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR,  
DEFENCE ETC**

### **World’s First Drug for Alzheimer’s Disease**

Recently, China has approved the world's first multi-targeting and carbohydrate-based drug GV-971 for Alzheimer's disease. Multi-target drugs hit several targets in the body, which is often necessary to do in order to yield a therapeutic effect in complex diseases like Parkinson's or Alzheimer's. This is different from most drugs which target only a single biological substance, like a protein or enzyme.

#### GV-971

- It has been extracted from brown algae and can treat mild to moderate forms of the disease and improve cognition.
- This is the only drug out of more than 320 developed by pharmaceutical companies around the globe to survive clinical trials for treating Alzheimer's.
- The medicine can be taken orally by the patients.

#### Alzheimer's Disease

- It is an irreversible and progressive brain disorder.
- The disease slowly destroys memory, thinking ability and the capability to carry out simple tasks.
- The possibility of Alzheimer's increases as the age of the population increases.
- Nearly 50 million people are affected by the disease and the number is expected to increase.
  - China has the highest Alzheimer's affected the population in the world.

### **ODISHA DEVELOPMENT**

#### **International Jagannath Festival To Be Held In Delhi**

An international Jagannath festival will be organised in Delhi next month in which devotees from across the globe are expected to take part.

#### About

- Debates, deliberations, and exhibitions on culture, traditions, heritage and consciousness associated with the Lord will be organised during the six-day 'Shree Jagannath Mahotsav' to be held in Delhi from December 8 to 13.
- Around 50 Jagannath temples and over 200 socio-cultural organisations from across the globe have come together for the event which will be inaugurated by Gajapati Maharaj of Puri, Dibyasingha Deb,.
- The festival will be hosted by Shree Jagannath Chetna Samanvaya Samiti of Gurugram, a unit of Kalinga Bharati Foundation, Delhi in association with Bhubaneswar-based Shree Jagannath Sanskruti Parishad along with an US-based foundation.

### **QUOTE OF THE DAY**

**The best way to predict the future is to invent it**

## DAILY ANSWER WRITING PRACTICE

**Qns: Critically examine the root causes of air pollution in Delhi. What initiatives can be taken to curb or at least reduce the intensity of Air Pollution in the national capital?**

**Ans:**

Air pollution in Delhi's National Capital Region (NCR) is comprised of a complex mix of pollution from human activities (vehicle emissions, industry, construction and residential fuel burning) as well as natural sources like dust and sea salt. The heavy concentration of particulate matter is greatly affected by meteorological conditions –in the winter, cool air causes “inversions” that stagnate the air and trap pollution close to the ground

- **Vehicles:** These are the second largest source of particulate matter, particularly PM2.5. According to the report, vehicular pollution grew from 64 per cent to 72 per cent between 1990 and 2000. In winter, on average vehicles can contribute 25 per cent to PM2.5 and at certain locations this could be above 35 per cent. There is a significant contribution of diesel vehicles to PM10 and
- **Road dust:** The silt load on some of Delhi's roads is very high and silt can become airborne with the movement of vehicles. The estimated PM10 emission from road dust is over 65 tonnes per day. Soil from open fields too gets airborne in summer. In some parts of the city, roads are broken, poorly maintained and partially paved surfaces and the study found that movement of vehicles may cause non-exhaust road dust emission in significant amounts. PM10 and PM2.5 emission from road dust is 79,626 kg/day and 22,165 kg/day respectively.
- **Concrete batching:** During the study period massive construction activities were found that required concrete batching, including at 60 DMRC locations where construction was under progress. It was assumed that there will be 40 concrete batching plants of 120 cu.m/hr capacities operating for 16 hours. Several medium and small construction activities were also observed in the city. PM10 and PM2.5 emissions from concrete mix plants is estimated at 14.37 tonnes/day and 3.5 tonnes/day respectively. A few hundred plants in NCR may contribute to this.
- **Hotels and Restaurants:** The average consumption of coal in tandoors based on the survey was 30 kg/day. The number of hotels and restaurants was 36,099 (Delhi Statistical Handbook, 2014). The study assumes 25% of these enterprises use tandoors for food preparation.
- **Municipal solid waste burning:** The contribution of burning MSW may surprise many. A study in 2015 in Delhi has estimated 190 to 246 tonnes/day of MSW burning.
- **Stubble burning in neighboring states:** NASA image suggests that burning of crop stubble is considerably impacting the pollution levels. Farmers in neighbouring Punjab and Haryana have been setting fire to paddy stubble in their fields after cultivating the crop as part of the slash and burn. As per an NYT report, farmers are burning around 32 million tons of leftover straw.
- **Meteorological:** During the winter months, cool air stagnates over the city, keeping pollution close to the ground where people breathe. Delhi's persistent winter fog only worsens the problem. Stagnant air explains why pollution levels vary less widely over the day in winter than in spring, as is evident in the chart above. In spring, warm, rising air moves pollution out, so the average pollution at ground level follows more closely the profile of polluting activities throughout the day. During the afternoon when people are at work, it drops, only to rise again with the evening rush hour. It stays relatively high overnight, likely due to the practice of trucking goods, not only in and out but through Delhi.

**What needs to be done to improve the air quality in Delhi?**

- A robust public transport system is one of the bare essentials. Several studies have shown that public transport provides more than 65% of Delhi's commuting needs but occupies less than five per cent of road space.
- Public transport in itself, however, might not be enough. Economists believe that the middle classes are likely to remain enamoured with cars unless there are strong disincentives to using personal transport. They advocate a combination of pollution taxes, car free days/areas, robust public transport and better urban planning.
- Congestion tax can also be considered. London, Milan, Oslo, Stockholm and Singapore have introduced congestion taxes to curb cars.
- An odd-even trial in the summer months might be more useful to isolate its impact.
- The government could also resort on other measures including temporary controls on industry and construction, and banning the use of fireworks.
- In the long run, an essential step would be to draft a new transportation policy, without emphasising only economic aspects as was done earlier.
- Consulting urban planners, logisticians, sociologists, environmentalists, civil society groups including doctors, teachers and lawyers, the police and the military, apart from economists would be essential.
- CSIR's proposal- mid-week work-from-home- can be a game changer too. According to this formula, instead of commuting to work and school, employees and students could work and study from home for a day.
- Delhi government implemented the Odd-even formula in the National Capital Region on a trial basis. But, there has not been any credible data to support the Delhi government's claim that the odd-even trial has reduced pollution or improved air quality.
- The government, in partnership with non-governmental organizations, technical specialists and research organizations, needs to initiate a clean air campaign. This needs to take the form of legislation as well as behavior-changing approaches.
- Governments, both at the Central and state level, need to reassess their production and consumption of energy and work with partners for a low-carbon future — one that is more efficient, has more natural gas and a growing share of renewable energy, such as solar and bio-gas.
- Public policy must address the various factors that contribute to toxic air, without damaging the core activities that are crucial to economic growth, which requires coordination across sectors, from industry and power to transport and cooking.
- Governments at the Centre and local levels must also demonstrate the political will to tackle what is a catastrophic public health problem. Local governments must clamp down on the specific pollutants that are pushing their respective cities into the danger zone.

**DAILY CURRENT AFFAIRS MCQs**

1. Danakil Depression is located in which of the following country?  
(a) Australia (b) Yemen (c) **Ethiopia** (d) Russia
2. Consider the following statements:
  1. Alzheimer's disease is an irreversible brain disorder.
  2. Alzheimer's is a progressive disease wherein symptoms worsen over time.Which of the statements given above is/are correct?  
(a) 1 only (b) 2 only (c) **Both 1 and 2** (d) Neither 1 nor 2
3. Consider the following statements:
  1. Liquidity Coverage Ratio (LCR) is the ratio of a bank's capital in relation to its risk-weighted assets and current liabilities.
  2. LCR is part of the Basel III norms.Which of the statements given above is/are correct?  
(a) 1 only (b) **2 only** (c) Both 1 and 2 (d) Neither 1 nor 2
4. With reference to the Paramahansa Yogananda, consider the following statements:
  1. Kriya Yoga was brought to international awareness by Paramahansa Yogananda's book Autobiography of a Yogi.
  2. He is considered by yoga experts as the "Father of Yoga in the West".Which of the statements given above is/are correct?  
(a) 1 only (b) 2 only (c) **Both 1 and 2** (d) Neither 1 nor 2
5. With reference to the draft wage code rules, consider the following statements:
  1. It has spelled out a National Minimum Wage and the number of hours which shall constitute a normal working day shall be of 9 hours.
  2. While deciding the minimum wage the country will be divided into three geographic categories -- metropolitan area having population of 40 lakhs or more, non-metropolitan area having a population of between 10 lakhs to 40 lakhs and rural areas.Which of the statements given above is/are correct?  
(a) 1 only (b) **2 only** (c) Both 1 and 2 (d) Neither 1 nor 2
6. What is 'ICEDASH', recently seen in news?  
(a) **It is an Ease of Doing Business monitoring dashboard of the Indian Customs.**  
(b) It is a group of bacteria that can cause foodborne illnesses.  
(c) The new mineral, which has been discovered inside a diamond.  
(d) None of the above.
7. A new frog species named Polypedates bengalensis has recently been found in which of the following states?  
(a) Uttar Pradesh  
(b) Himachal Pradesh  
(c) Assam  
(d) **West Bengal**
8. With reference to the Regional Comprehensive Economic Partnership (RCEP), consider the following statements:
  1. It is a proposed Free Trade Agreement (FTA) between sixteen countries namely 10 countries of ASEAN and their six FTA partners namely France, China, India, Japan, Germany and U.S.A.
  2. India recently decided to pull out of the Regional Comprehensive Economic Partnership (RCEP).Which of the statements given above is/are correct?  
(a) 1 only  
(b) **2 only**  
(c) Both 1 and 2  
(d) Neither 1 nor 2