

## 09 June 2019: UPSC Exam Comprehensive News Analysis

### TABLE OF CONTENTS

#### A. GS1 Related

#### B. GS2 Related

##### **POLITY AND GOVERNANCE**

1. [Govt. notifies farmers of PM-KISAN extension](#)
2. [Golden langur to get fruits of MGNREGA](#)

##### **INTERNATIONAL RELATIONS**

1. [India, Maldives sign six key agreements](#)
2. [India, Portugal to join hands in setting up maritime museum](#)

#### C. GS3 Related

##### **SCIENCE AND TECHNOLOGY**

1. [Scientists create a global map of where groundwater meets oceans](#)

#### D. GS4 Related

#### E. Editorials

##### **SCIENCE AND TECHNOLOGY**

1. [How will a 5G network power the future?](#)

##### **POLITY AND GOVERNANCE**

1. [What is the three-language formula?](#)

##### **INTERNATIONAL RELATIONS**

1. [Tweaking visa norms](#)

#### F. Tidbits

1. [IIT Mandi observes zero resistance at high temperatures in gold-silver nanostructures](#)

#### G. Prelims Facts

1. [U.P.'s Chaukhandi Stupa declared 'protected area'](#)
2. [Media awards for Yoga Day campaigns](#)

#### H. UPSC Prelims Practise Questions

#### I. UPSC Mains Practise Questions

### A. GS1 Related

*Nothing here for today!!!*

### B. GS2 Related

#### Category: POLITY AND GOVERNANCE

##### 1. Govt. notifies farmers of PM-KISAN extension

##### Context:

The government has notified its decision to extend the benefit of six thousand rupees per year to eligible farmers under the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme.

##### Details:

- PM-KISAN scheme was announced in the interim budget, under which the government decided to provide 6,000 rupees per year to about 12.5 crore small and marginal farmers.
- Now, the revised scheme is expected to cover two crore more farmers with an estimated expenditure of over 87 thousand crore rupees in the current financial year

### PM-KISAN Scheme:

- Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme aims to supplement the financial needs of the farmers in procuring various inputs to ensure proper crop health and appropriate yields, commensurate with the anticipated farm income.
- It is a Central Sector Scheme.
- Earlier, under this programme, landholding farmer families, having cultivable land upto 2 hectares, will be provided direct income support at the rate of Rs. 6,000 per year.
- The recent decision will benefit all 14.5 crore farmers, irrespective of the size of their landholding, in the country.
- This income support will be transferred directly into the bank accounts of beneficiary farmers, in three equal installments of Rs. 2,000 each.
- The scheme has immediate impact on reducing hunger, rural poverty and increasing investments in agricultural inputs.

## 2. Golden langur to get fruits of MGNREGA

### Context:

For the first time since it became law in 2005, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) will have non-human beneficiaries — the rare golden langur (*Trachypithecus geei*) in a reserve forest in western Assam's Bongaigaon district.

### Issue:

- Several golden langurs have died due to electrocution and in road accidents while looking for food beyond the reserve forests.
- Community-based conservation by local NGOs helped the low golden langur population in Kakoijana rise to 500 by 2015.
- But scarce food saw some of them set up colonies in forest patches such as Malegarh, Nigamghola and Bhumeswar nearby.

### Details:

- The district authorities launched a ₹27.24-lakh project under the MGNREGA to plant guava, mango, blackberry and other fruit trees to ensure that the resident golden langurs of the 17 sq.km. Kakoijana Reserve Forest do not have to risk their lives to find food.
- This is the first time MGNREGA is being used with a focus on food for a primate species.
- The project entails planting 10,575 saplings and seedlings of fruit-bearing trees

### Golden Langur:

- Gee's golden langur (*Trachypithecus geei*), or the golden langur, is an Old World monkey found in a small region of western Assam, India and in the neighbouring foothills of the Black Mountains of Bhutan.
- It is one of the most endangered primate species of India.

- It is considered sacred by many Himalayan people.
- IUCN conservation status: Endangered

## **Category: INTERNATIONAL RELATIONS**

### **1. India, Maldives sign six key agreements**

#### **Context:**

Prime Minister Narendra Modi's visit to the Maldives, his first state visit abroad since being re-elected to office, was marked by the signing of six key agreements, and substantive bilateral level talks, reaffirming cooperation between the two countries.

#### **Details:**

- Addressing the Maldivian Parliament, the Majlis, Mr. Modi said relations between India and Maldives are older than history. And that every Indian is with them for the strengthening of democracy in the Maldives.
- He also stressed the need for global cooperation in combating terror.
- The Memorandums of Understanding (Mou) covered areas such as hydrography, health, passenger and cargo services by sea, capacity building in customs and civil service training.
- A technical agreement on sharing 'White Shipping Information' between the Indian Navy and the Maldives National Defence Force was also signed, enabling exchange of prior information on the movement of commercial, non-military vessels.
- Modi and Maldivian President Solih jointly inaugurated a 'Coastal Surveillance Radar System' and a training facility of the Maldives National Defence Force.
- The leaders stressed the need to work towards expeditious implementation of people-centric and socio-economic projects.
- The two countries have agreed to start a ferry service between Kochi and the Maldives.

#### **India- Maldives relations, a shift from the past:**

- After years of witnessing souring relations during President Abdulla Yameen's term from 2013-2018, New Delhi and Male reset ties last year after President Solih was elected.
- This has strengthened prospects for continuity in strong ties, a stark shift from Mr. Yameen's time when New Delhi grew increasingly concerned over his apparent "China tilt".
- While Mr. Modi's visit is seen as underscoring his government's "neighbourhood first policy", President Solih reaffirmed his "India-First Policy", pledging his government's full support towards deepening the multifaceted, mutually beneficial partnership between India and the Maldives.

#### **Highest honour for PM**

- In a gesture of goodwill, showing Male's regard for the Indian Prime Minister, the Maldivian government honoured Mr. Modi with 'The Most Honourable Order of the Distinguished Rule of Nishan Izzuddeen'.
- It is the highest honour conferred by Male on foreign dignitaries.

### **2. India, Portugal to join hands in setting up maritime museum**

**Context:**

India and Portugal will cooperate in the setting up of a national maritime heritage museum at Lothal in Gujarat.

**Details:**

- The Indian Navy is keen to be a stakeholder in the project and the Portuguese Navy has agreed to assist with their experience of administering the maritime museum in Lisbon.
- Portugal Navy looks after their museum in Lisbon so it was discussed that we in India could follow a similar model.
- A Defence Ministry-led delegation would visit Portugal to study the existing museum.
- The Government of India has allocated a grant for building the maritime museum.
- The project is being implemented by the Ministry of Shipping through its Sagarmala programme, with the involvement of the Archaeological Survey of India (ASI), the State government and other stakeholders.

## C. GS3 Related

**Category: SCIENCE AND TECHNOLOGY****1. Scientists create a global map of where groundwater meets oceans****Context:**

Scientists have created high-resolution maps of points around the globe where groundwater meets the oceans.

**Details:**

- In a study, researchers from The Ohio State University in the U.S. showed that nearly one-half of fresh submarine groundwater discharge flows into the ocean near the tropics.
- They also found that regions near active fault lines send greater volumes of groundwater into the ocean than regions that are tectonically stable.
- They found that dry, arid regions have very little groundwater discharge, opening the limited groundwater supplies in those parts of the world to saltwater intrusion.
- The team worked with researchers at NASA's Jet Propulsion Laboratory and the University of Saskatchewan to combine topographical data from satellites and climate models to show the flow of groundwater around the world's coasts.
- The study found that in some parts of the world, groundwater could be polluting oceans and lakes with nutrients and other chemicals.
- Groundwater, for example, can carry higher concentrations of nitrates — a key contributor of the types of harmful algal blooms, as well as high concentrations of mercury.
- The study also found that climate heavily influences groundwater flow, and that cities in dry areas are especially vulnerable to salt water contamination of aquifers.

**Significance:**

- The first such analysis of its kind that may help protect both drinking water and the seas.
- The findings may help coastal communities better protect and manage their drinking water.

- It could give scientists better clues about where to monitor groundwater discharge.
- Understanding how and where groundwater gets to surface water could help policy-makers create better plans to improve those bodies of water.

## D. GS4 Related

*Nothing here for today!!!*

## E. Editorials

### Category: SCIENCE AND TECHNOLOGY

#### 1. How will a 5G network power the future?

##### Background:

- The Union Communications Minister Ravi Shankar Prasad has announced that the government will be holding auction for spectrum, which includes airwaves that will be used to offer 5G or fifth-generation services, in the current calendar year.
- While some countries such as South Korea and the U.S. have begun rolling out commercial 5G services, India is yet to begin trial for these even as the government is targeting 2020 as the launch year for 5G in the country.
- However, during his first address after taking charge of the ministry, Mr. Prasad said the government plans to start 5G trials in the next 100 days or by mid-September.

##### What is 5G?

- It is the next generation cellular technology that will provide faster and more reliable communication with ultra low latency.
- A government panel report points out that with 5G, the peak network data speeds are expected to be in the range of 2-20 Gigabit per second (Gbps).
- This is in contrast to 4G link speeds in averaging 6-7 Megabit per second (Mbps) in India as compared to 25 Mbps in advanced countries.

##### Who does it benefit?

- With 5G technology, consumers will be able to download data heavy content such as 8K movies and games with better graphics in just a few seconds.
- However, it is likely that the primary use of the technology will go beyond delivery of services on personal mobiles devices.
- 5G is expected to form the backbone of emerging technologies such as the Internet of Things (IoT) and machine to machine communications, thereby supporting a much larger range of applications and services, including driverless vehicles, tele-surgery and real time data analytics.
- The ultra low latency offered by 5G makes the technology desirable for such use cases. Latency is the amount of time data takes to travel between its source and destination.
- A government panel on 5G says the technology will extend the use of wireless technologies — for the first time — across completely new sectors of the economy from industrial to commercial, educational, health care, agricultural, financial and social sectors.



- One of the primary applications of 5G will be implementation of sensor-embedded network that will allow real time relay of information across fields such as manufacturing, consumer durables and agriculture.
- 5G can also help make transport infrastructure more efficient by making it smart.
- 5G will enable vehicle-to-vehicle and vehicle-to-infrastructure communication, making driverless cars, among other things, a reality.

### **What will be the economic impact?**

- 5G is expected to create a cumulative economic impact of \$1 trillion in India by 2035, according to a report by a government-appointed panel.
- According to a separate report by telecom gear maker Ericsson, 5G-enabled digitalisation revenue potential in India will be above \$27 billion by 2026.
- Additionally, global telecom industry GSMA has forecast that India will have about 70 million 5G connections by 2025.

## **Category: POLITY AND GOVERNANCE**

### **1. What is the three-language formula?**

#### **Background:**

- A 50-year-old controversy got a new lease of life recently when a paragraph in the Draft New Education Policy 2019 referred to the mandatory teaching of Hindi in States where Hindi is not spoken.
- This was a reiteration of the Central government's three-language formula, but it set off a storm in Tamil Nadu, which stoutly opposes any attempt to impose Hindi and adheres to a two-language formula.
- The Union government sought to neutralise the hostile reaction by dropping the controversial reference to Hindi in the draft policy.

#### **What is the formula?**

- It is commonly understood that the three languages referred to are Hindi, English and the regional language of the respective States.
- Though the teaching of Hindi across the country was part of a long-standing system, it was crystallised into a policy in an official document only in the National Policy on Education, 1968.
- This document said regional languages were already in use as the media of education in the primary and secondary stages.
  - It said that, at the secondary stage, State governments should adopt and vigorously implement the three-language formula, which includes the study of a modern Indian language, preferably one of the southern languages, apart from Hindi and English in the Hindi-speaking States.
  - In the 'non-Hindi speaking States', Hindi should be studied along with the regional language and English.
  - It added: "Suitable courses in Hindi and/or English should also be available in universities and colleges with a view to improving the proficiency of students in these languages up to the prescribed university standards."
- On promotion of Hindi, the NPE 1968 said every effort should be made to promote the language and that "in developing Hindi as the link language, due care should be taken to ensure that it will serve, as provided for in Article 351 of the Constitution, as a medium of expression for all the elements of the composite culture of India.
- The establishment, in non-Hindi States, of colleges and other institutions of higher education which use Hindi, as the medium of education should be encouraged".

### What is the backdrop to the Hindi imposition row?

- Tamil Nadu has been traditionally opposed to any attempt to introduce Hindi as a compulsory language of learning or administration.
- The origin of the linguistic row, however, goes back to the debate on official language.
- In the Constituent Assembly, Hindi was voted as the official language by a single vote.
- However, it added that English would continue to be used as an associate official language for 15 years.
- The Official Languages Act came into effect on the expiry of this 15-year period in 1965.
- This was the background in which the anti-Hindi agitation took place.
- However, as early as in 1959, Jawaharlal Nehru had given an assurance in Parliament that English would continue to be in use as long as non-Hindi speaking people wanted it.

### What is Tamil Nadu's stand on this?

- The State has been following the two-language formula for many decades, under which only English and one regional language are compulsory in schools.
- In 2006, facing criticism that many manage to avoid learning Tamil by opting for Hindi or Sanskrit in private schools, the State government enacted The Tamil Nadu Tamil Learning Act under which Tamil has to be compulsorily learnt in schools operating in the State.
- An important aspect of the opposition to Hindi imposition is that many in Tamil Nadu see it as a fight to retain English.
- English is seen as a bulwark against Hindi as well as the language of empowerment and knowledge.
- There is an entrenched belief that the continued attempts to impose Hindi are essentially driven by those who want to eliminate English as the country's link language.

## Category: INTERNATIONAL RELATIONS

### 1. Tweaking visa norms

#### Background:

- On May 31, 2019, the U.S. Department of State introduced a change in online visa forms for immigrant (form DS-260) and non-immigrant visas (form DS-160) requiring applicants to register their social media handles over a five-year period.
- The newly released DS-160 and DS-260 forms ask, "Do you have a social media presence?" A drop-down menu provides a list of some 20 options, including Facebook, Instagram, Sina Weibo and Twitter.
- There is also a "NONE" option. Applicants are required to list their handles alone and not passwords.
- The policy does not cover those eligible for the visa waiver programme and those applying for diplomatic visas and certain categories of official visas.

#### How did it come about?

- The policy is part of U.S. President Donald Trump's intent to conduct "extreme vetting" of foreigners seeking admission into the U.S.
- In March 2017, Mr. Trump issued an Executive Order asking the administration to implement a programme that shall include the development of a uniform baseline for screening and vetting standards and procedures for all immigrant programs.
- In September 2017, the Department of Homeland Security started including social media handles, aliases, associated identifiable information, and search results information in the files it keeps on each

immigrant. The notice regarding this policy said those impacted would include Green Card holders and naturalised citizens.

- In March 2018, the State Department proposed a similar policy, but for all visa applicants — this is the policy now in effect. Earlier, only certain visa applicants identified for extra screening were required to provide such information.
- Asking visa applicants to volunteer social media history started during the Obama administration which was criticised for not catching Tashfeen Malik, one of those who carried out a mass-shooting in San Bernardino, California, in 2015. Malik had come to the U.S. on a K-1 fiancé visa, and had exchanged social media messages about jihad prior to her admission to the U.S.

### How will it impact India?

- Most Indians applying for U.S. visas will be covered by this policy.
- So at least 10 lakh Indians i.e, who are successful in their visa applications and not all applicants will be directly impacted by the policy.

### What lies ahead?

- The new policy is expected to impact 14 million travellers to the U.S. and 700,000 immigrants worldwide according to the administration's prior estimates.
- In some individual cases it is possible that the visa policy achieves what it is (ostensibly) supposed to allow the gathering of social media information that results in the denial of a visa for an applicant who genuinely presents a security threat.
- However, the bluntness of the policy and its vast scope raise serious concerns around civil liberties including questions of arbitrariness, mass surveillance, privacy, and the stifling of free speech.
- First, it is not unusual for an individual to not recall all their social media handles over a five-year period. Consequently, even if acting in good faith, it is entirely possible for individuals to provide an incomplete social media history. This could give consular officers grounds for denying a visa.
- Second, there is a significant degree of discretion involved in determining what constitutes a visa-disqualifying social media post and this could stifle free speech.
  - For instance, is criticising the President of the United States or posting memes about him could be the grounds for visa denial
  - Criticising U.S. foreign policy could become a ground for not granting someone a visa.
- Third, one can expect processing delays with visas as social media information of applicants is checked. It is possible that individuals impacted by the policy will bring cases against the U.S. government on grounds of privacy or on grounds of visa delays.

### Conclusion:

The strength of these cases depends on a number of factors including whether they are brought by Green Card holders and naturalised citizens or non-immigrants. The courts could examine the intent of the U.S. government's policy and ask whether it has discriminatory intent.

## F. Tidbits

### 1. IIT Mandi observes zero resistance at high temperatures in gold-silver nanostructures



- New results from IIT Mandi indicate that nanostructures made of gold embedded with silver show zero resistance to the flow of electric current through them.
- This happens at the relatively high temperatures, between 240 K and 275 K, that is, approximately between -33 degrees Celsius (minus 33 degrees C) and 2 degrees Celsius.
- A superconductor is a material that, for one, allows electricity to pass through it with zero resistance.
- Though six gold-silver nanostructure samples were studied, the team was able to see such a fall in resistance only in one sample.
- They also did not observe the other important property of superconductors, namely, when a superconductor is cooled below the critical temperature in the presence of a magnetic field, it suddenly expels the magnetic flux from its insides below the critical temperature. This is because it turns into what is called a diamagnet at this temperature. A perfect diamagnet does not allow magnetic fields to penetrate its bulk.
- The researchers found that the control and stabilization of the correct phase of Au-Ag nanostructure present in thin film was the most challenging part of the work.
- But they are excited that their results will generate further interest in Au-Ag and other nanostructure systems in the quest of superconductivity at ambient conditions (that is, room temperature and normal pressure).
- While there are questions, such as difficulty in reproducibility of the microstructure, it is an interesting phenomenon that the IIT Mandi researchers have come up with.

## G. Prelims Facts

### 1. U.P.'s Chaukhandi Stupa declared 'protected area'

- An ancient Buddhist site in Uttar Pradesh's Sarnath known as Chaukhandi Stupa has been declared to be "of national importance" by the Archaeological Survey of India.
- The Chaukhandi Stupa is thought originally to have been built as a terraced temple during the Gupta period between the 4th and 6th centuries to mark the site where Lord Buddha and his first disciples met traveling from Bodh Gaya to Sarnath.
- Later Govardhan, the son of a Raja, modified the stupa to its present shape by building the octagonal tower to commemorate the visit of Humayun, the powerful Mughal ruler.

### 2. Media awards for Yoga Day campaigns

- The government will award media houses for campaigns on the benefits of yoga ahead of the International Day of Yoga on June 21.
- The awards are open to media firms operating in 22 Indian languages and English.
- There are 11 awards each in print, TV and radio categories.
- Yoga is considered India's foremost gift to the world.
- It is hoped that all media houses would participate to make sure "healthy living" became a way of life in a new India.

## H. UPSC Prelims Practise Questions

**Q1) Consider the following statements**

1. Himalayas is the youngest and highly unstable landmass of India.
2. Brahmaputra marks the eastern border of the Himalayas.

Which of the given statement/s is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

[su\_dropcap]See[/su\_dropcap][su\_spoiler title="Answer"]

**Answer: c**

**Explanation:** Self-explanatory[/su\_spoiler]

**Q2) Orsang, the Barna and the Kolar are the tributaries of River**

- a. Yamuna
- b. Ganga
- c. Krishna
- d. Narmada

[su\_dropcap]See[/su\_dropcap][su\_spoiler title="Answer"]

**Answer: d**

**Explanation:**

Hiran, the Orsang, the Barna and the Kolar are the right bank tributaries of River Narmada. Other tributaries are the Burhner, the Banjar, the Sher, the Shakkar, the Dudhi, the Tawa, the Ganjal, the Goi etc.

[/su\_spoiler]

**Q3) Consider the following statements**

1. Birsa Munda was a tribal freedom fighter
2. He converted to Christianity in order to receive an education from a missionary school.
3. Birsa declared his declaration against the British and the Dikus (outsiders) and began the Munda Rebellion

Which of the given statement/s is/are correct?

- a. 1 only
- b. 1 and 3 only
- c. 2 only
- d. 1, 2 and 3

[su\_dropcap]See[/su\_dropcap][su\_spoiler title="Answer"]

**Answer: d**

**Explanation:**

Birsa Munda was born at Ulihatu in the Bengal Presidency (presently in Jharkhand). His childhood was spent in a typical Munda fashion amidst poverty. He converted to Christianity and became Birsa David/Daud in order to receive an education from a missionary school. He spent a great part of his childhood in Chaibasa. He was influenced by the national movement there. His father withdrew him the missionary school. Birsa developed a strong anti-government and anti-missionary stamp on his mind from there. During the 1890s, he started speaking to his people about the exploitation done by the British. The British agrarian policies were stifling the tribal people and disrupting their way of life which was hitherto peaceful and in tune with nature. Another problem was that of cultural belittlement of the tribal people by the Christian missionaries. In 1894, Birsa declared his declaration against the British and the Dikus (outsiders) and thus began the Munda Ulgulan/ rebellion. [/su\_spoiler]

## I. UPSC Mains Practise Questions

1. What do you understand by 5G? What are its benefits to India? (10 Marks, 150 Words)
2. Where non-violence is practised, democracy is honoured. Elucidate with examples. (15 Marks, 250 Words)