

26 Dec 2021: UPSC Exam Comprehensive News Analysis

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A. GS 1 Related

Nothing here for today!!!

B. GS 2 Related

Category: POLITY AND GOVERNANCE

1. Poverty key factor in determining institutional delivery: study

Topic: Issues relating to poverty and hunger.

Mains: Poverty as a Key factor in determining institutional delivery

Context: –

Recently, research was released on utilization of institutional delivery in the country.

A. Findings of the Research: –

- In determining whether a mother will be able to have a safe delivery in a medical institution, poverty, education, and exposure to a community health worker are more essential than age at marriage.
- The study looks into socio-demographic characteristics as well as impediments to low institutional delivery coverage, which is a critical intervention in reducing maternal mortality from problems after childbirth.
- It focuses on Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh, and Uttarakhand, which are all low-performing states with high maternal death rates.

B. Access barriers:

- As far as barriers in accessing institutional deliveries were concerned, about 17% of women expressed distance or lack of transportation.
- 16% women cited costs, to be some of the challenges.
- Other reasons were facility closures (10%), poor service or trust issues (6%).

C. Recommendations: –

- Increase the number of public health facilities and enhance the accompanying quality of care are recommended as state-specific measures.
- It emphasizes that poor clinical training and qualified human resources have an impact on the quality of accessible maternity services, resulting in low institutional delivery coverage.

Know More about [Poverty – A Multidimensional Challenge](#)

C. GS 3 Related

Category: SCIENCE AND TECHNOLOGY

1. 'Biometric fraud' hits Tihar

Topic: Science and Technology- developments and their applications and effects in everyday life.

Mains: Critical Evaluation of Biometric fraud in India.

Context: –

Recently, a mismatch was detected in their biometric verification of The Tihar Prison Department.

A. What is biometrics?

- The measuring and statistical analysis of people's unique physical and behavioral features is known as biometrics.
- The technology is mostly used for identification and access control, as well as identifying those who are being watched.

B. How do biometrics work?

- Biometric authentication is becoming more popular in corporate and public security systems, consumer gadgets, and point-of-sale applications.
- In addition to security, convenience has been a driving force for biometric verification, as there are no passwords to memorize or security tokens to carry.

C. Biometric fraud in India: –

- In India, Biometrics is primarily utilized for fraudulent purposes.
- Forgery, counterfeiting, and outright theft of Aadhaar card information are the most common cases.
- This may be done for a variety of purposes, including acquiring SIM cards, obtaining loans, transferring assets, and collecting government subsidies.
- The most serious privacy concern with biometrics is that physical characteristics, such as fingerprints and retinal blood vessel patterns, are often static and cannot be changed.

D. Possible Reasons for Biometric fraud: –

- A major number of these scams are the result of people's ignorance of their privacy and identification rights.
- Centralized government-controlled biometric and genetic data databases pose a significant societal concern.
- Any breach of such a database is virtually irrevocable for the rest of a person's life: no one can update their genetic data or fingerprints as a result of a leak.
- No government can claim that its flood prevention or public health system will never fail due to weather or disease. The purpose of policy is risk management, not risk aversion.
- In the case of Aadhaar, we have seen no adoption of industry-accepted standard security procedures to address exploits, flaws, or vulnerabilities.
- The database's misuse for governmental monitoring and targeted coercion is likewise unavoidable.

E. Conclusion: –

- Its multiplicity of security flaws has left billions of people's biometric data susceptible to external and internal exploitation.
- It has also given the government unjustified powers to spy on its citizens and deprive them fundamental liberties.
- The link and future contribution of biometrics to state-controlled machine learning systems would also weaken democratic values.

2. Study of distant magnetar reveals facets of the exotic star

Topic: Science and Technology- developments and their applications and effects in everyday life.

Mains: What is Magnetar? How are they formed?

Context: –

An international group of researchers has succeeded in measuring for the first time the characteristics of a flare on a distant magnetar.

A. What is magnetar?

- A magnetar is a rare compact type of neutron star teeming with energy and magnetism.
- Magnetars are relatively rare objects, with only about thirty having been spotted within the Milky Way so far.

B. How do magnetars form?

- Massive stars, which have masses between 10 and 25 times that of the Sun, eventually collapse and shrink to produce neutron stars, which are very compact objects.
- Magnetars, a type of neutron star with a strong magnetic field, are a subgroup of these neutron stars.

Stellar fireworks

The study characterised a short-lived flare which briefly lit up this star

- Stars having around 10-25 times the solar mass eventually shrink to form neutron stars
- A small number of neutron stars become the so-called magnetars which possess intense magnetic fields
- Magnetars are relatively rare objects, with only about thirty having been spotted within the Milky Way so far
- Magnetars emit violent flares. It is only during a flare that they can be observed, and these flares are so short-lived that it presents a major challenge
- The observed giant flare lasted approximately 160 milliseconds and during this time the flare spewed as much energy that our Sun will radiate in 1,00,000 years



Distant star: An artist's illustration of the magnetar which is about 13 million light years away, in the direction of NGC 253, a prominent galaxy in the Sculptor group of galaxies.

■ BIRKELAND CENTRE FOR SPACE SCIENCE, UNIVERSITY OF BERGEN AND MOUNT VISUAL

C. What are the Features of magnetar?

- Magnetars contain extremely strong magnetic fields, ranging from 10¹⁵ gauss to 10¹⁵ gauss.
- Furthermore, these magnetars produce powerful flares.
- Instabilities in a magnetar's magnetosphere, or "starquakes," are thought to cause eruptions in the crust, a stiff, elastic material roughly one kilometre deep.
- In the magnetosphere, this creates waves, and the interaction between these waves causes energy dissipation.
- When magnetars remain quiet, they are extremely difficult to notice.
- They can only be seen during a flare, and these flares are so short-lived that they pose a significant threat.

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: ECONOMY

1. What are the head and tailwinds in the economy?

Topic: *Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.*

Mains: Impact of the Coronavirus pandemic on the Economy of India.

Context: –

This article discusses the impact of the Coronavirus pandemic on the Economy of India.

Background: –

- The country's Gross Domestic Product (GDP) growth had dipped to a mere 3% in the fourth quarter of 2019-2020.
- The pandemic-related lockdowns sent the stalling economy into free fall, causing output to shrink by 24.4% and 7.4% in the first two quarters of 2020-21, respectively.
- The resultant destruction meant that job and income losses coincided with the unfolding health crisis.

Indian Economy After Pandemic: –

1. An ambitious target was set for disinvestment from public sector enterprises backed by a new policy to retain a 'bare minimum' presence of state-owned firms even in strategic sectors.
2. The government explained that higher capital spending would trigger multiplier effects by nudging up demand in several sectors and spur job creation and consumption.
3. A K-shaped recovery is unfolding thanks to a divergence between those who needed to protect their lives and livelihoods.
4. While manufacturing and construction recovered, the economy's overall output remained far below even the low pre-pandemic levels.
5. The recovery remains uneven and fragmented with economists also unconvinced about its sustainability.
6. Demand and investments were yet to see a meaningful and durable pick-up and any improvements were expected to be limited.
7. Gradual domestic economy had been grappling with low demand and a subdued investment climate.

Sectors during Pandemic: –

- Agriculture is the only sector to record positive growth throughout the pandemic.
- Sectors like manufacturing, mining, electricity, recovered above pre-COVID levels by September.
- Employment-intensive sectors like construction, the contact-intensive trade and hotels industry, as well as financial services and real estate, continue to languish below their pre-pandemic levels.
- There are some other interesting aspects of this year's economic trajectory.
- Wholesale price inflation has also hit an all-time high in the current series of the index, making input costs the number one worry for businesses.

Way Forward: –

- Global growth is expected to fall to 4.5 percent in 2022, down from 5.6 percent this year, according to the OECD, with India's growth forecasted to be 8.1 percent in 2022-23.
- Returning to normal consumption patterns should boost industrial capacity utilisation rates and pave the way for a broad-based investment rebound by the end of 2022.
- According to economists, the largest risk for the next year is greater inflation, as supply chain difficulties in essential components, unpredictable commodity and energy prices, and shipping interruptions are all expected to worsen at least in the first half of the year.

Category: HEALTH

1. How has India responded to SARS-CoV-2 variants?

Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Mains: India's response to Covid-19 and the set of challenges

Context:-

This article examines India's response to [Covid-19](#) and the set of challenges brought by the Omicron variant.

What is the vaccine strategy?

- The necessity to inoculate India's frontline physicians and nurses, followed by the remainder of the adult population, prompted the rush for vaccinations.
- With Covishield, developed by the Serum Institute of India in Pune, Bharat Biotech received an "emergency use permission" from India's Drugs Controller General.
- Covishield was based on the Oxford University-developed ChAdOx1 vaccine, which has been authorized in the United Kingdom following phase-3 clinical trial findings.
- Phase 3 studies for Covaxin were still ongoing, and authorities authorised it based on data from phase 1 and phase 2 trials that indicated it was safe and generated an immunogenic response.

What brought the second wave?

- The [World Health Organization](#) had highlighted three prominent variants of concern —the 'UK' variant, South Africa variant and the Brazil variant now known as the Alpha, Beta and Gamma variants.
- India acknowledged and classified a variant, B.1.617, that came to be known as 'Delta', after a new naming convention adopted by the WHO.
- The genome consortium body, [INSACOG](#), later revealed that the variant had actually been first known in India.

How did the second wave devastate India?

- The Delta infection was characterized by pronounced respiratory illness and a need for oxygen supplementation which meant that India's hospitals were overwhelmed.
- Oxygen tanks had to be imported and airlifted.

What about the pace of vaccination?

- India chose to ship vaccinations to a few countries as part of the 'Vaccine Maitri' effort earlier this year, not anticipating that a destructive wave would result in a higher demand for vaccines.
- In addition, India had not secured vaccine supplies beyond Covishield and Covaxin, and the latter was ill-equipped to ramp up supply quickly.
- The Center first refused to extend immunizations to all adults, but as public outrage rose, it agreed and attempted to delegate procurement to states.
- While numerous countries provided free vaccinations to their populations, Covishield and Covaxin were among the most costly vaccines available in the retail market. Stocks were restricted at public hospitals, where they were offered for free.
- The immunization programme only became stable once the Center stepped in as a single buyer once more.

How is India facing up to Omicron?

- Though findings from South Africa imply that Omicron is not as dangerous as Delta, the outbreak of illnesses, particularly among the vaccinated in Europe and the United States, has alarmed India.
- If the number of cases and hospitalizations rises, states will create containment zones and enforce mobility restrictions.
- Despite the fact that India has multiple indigenous producers in advanced phases of vaccine testing, Covaxin's experience implies that delivering at scale is a hurdle.

Category: INTERNATIONAL RELATIONS

1. On the brink

Topic: *India and its neighbourhood- relations.*

Mains: humanitarian disaster in Afghanistan

Context: – After the U.S. pulled back its troops from Afghanistan, which led to the return of the Taliban to power. While the Taliban now has the whole country under their control, the country is on the brink of a humanitarian disaster.

Background: –

- According to the United Nations [World Food Programme](#), the situation has the potential to become the world's greatest humanitarian disaster.
- According to UN estimates, around 23 million of Afghanistan's almost 40 million people are suffering from severe food shortages.
- Humanitarian aid has been supplied from other countries, notably the United States, European nations, and India, to help alleviate the situation.
- A resolution facilitating humanitarian relief to Afghanistan was unanimously endorsed by the United Nations Security Council.

How are the Taliban ruling?

- The Haqqanis, who have deep links to al-Qaeda and the Pakistani intelligence services, control the Taliban rule.
- The hardliners appear to have the upper hand in decision-making, as seen by the appointment of a Pashtun-only Cabinet and actions such as keeping girls out of elementary school.
- Extrajudicial executions occurred despite the Taliban's announcement of a nationwide amnesty after seizing control.

What are the Concerns with the Humanitarian Crisis?

- **No Aid:** – Almost 80% of the fallen Afghan Government's budget came from international development assistance. After the Taliban took over Kabul most of the donors suspended government aid.
- **Sanctions from US:** – The U.S. has also frozen nearly \$9.5 billion of Afghan central bank assets, and American financial institutions. The Taliban remain on the U.S. Treasury Department's sanctions list.
- **No road for Aid:** – As most commercial flights to Kabul are still suspended, aid is being sent by road to the landlocked country, mainly through Pakistan, Iran and Central Asia.

Does the Taliban regime have international recognition?

- No country has publicly recognised the Taliban rule.
- Pakistan, China, Russia, and Central Asian republics, for example, have maintained their diplomatic posts in Kabul open.
- Qatar, which sponsored the Taliban-US discussions that resulted in the US pullout from Afghanistan, portrays itself as a link between the West and the Taliban.
- The UAE just opened an embassy in Kabul to reach out to the Taliban.
- The UAE told the Taliban that former Afghan President Ashraf Ghani, who has sought asylum in the UAE, would not be allowed to engage in political activities.
- All of this suggests that a bigger collection of countries is prepared to confront the Taliban this time.

Conclusion: –

- The Taliban now dominate practically the whole nation, including the Panjshir Valley in the north, which had previously resisted both the Soviets and the Taliban.
- The Panjshir militants, on the other hand, were not beaten and fled to the mountains. The Taliban, on the other hand, are currently facing a security threat from the Islamic State-Khorasan, the IS's Afghan branch. Since the Taliban's takeover, the IS-K has carried out a number of bombs.

F. Prelims Facts

1. Telangana tops in Rurban Mission

Context: –

Telangana stood first in the implementation of the Shyama Prasad Mukherji Rurban Mission (SPMRM).

Shyama Prasad Mukherji Rurban Mission (SPMRM)

2. Marriage age at 21: Lado Panchayat puts U.P. parties on notice

Context: –

A “Lado Panchayat” of girls in Meerut decided that women would not vote for candidates in the coming Assembly election who are opposed to the Prohibition of Child Marriage (Amendment) Bill, 2021.

What is ‘Lado Panchayat’?

- Sunil Jaglan created the country’s first Lado Panchayat, in which hundreds of girls and women took part.
- Participants came from Delhi, Himachal Pradesh, Punjab, Bihar, and Chandigarh, in addition to Haryana’s Mewat area.
- Hundreds of girls from various villages attended the ‘Lado Panchayat,’ which finished with debates and speeches in which the girls recounted their experiences.

3. Call to give Tai Khamti resistance its due

Context: –

Arunachal Pradesh’s Deputy Chief Minister said that India’s first war of independence took place in 1839 between the Tai Khamti people and the British.

Tai Khamtis

- The Tai-Khampti are one of Arunachal Pradesh’s most populous tribes. The term ‘Khampti’ literally means ‘golden land.’
- The Tai Khamti people, who dwell in Arunachal Pradesh and Assam, practise Theravada Buddhism.
- The Khampti’s Buddhist practices may be classified as a progressive kind of Buddhism.
- The Tai-Khamti have their own language script, known as ‘Lik Tai,’ which is derived from Myanmar’s Shan (Tai) script.

4. ‘Every third informal worker is now registered on e-Shram’

Context: –

Every third informal sector worker in India is now registered on the e-Shram portal.

e-Shram

5. A telescope on million-mile voyage

Context: –

The James Webb telescope has left Earth on its mission to show the first stars to light up the Universe.

The James Webb Space Telescope

- The James Webb Space Telescope (JWST) is NASA’s flagship infrared observatory.
- NASA’s main infrared observatory is the James Webb Space Telescope (JWST).

- It's a NASA-built space telescope that also includes contributions from the European Space Agency and the Canadian Space Agency.
- Webb is the successor of the Hubble telescope, named after one of the architects of the Apollo Moon landings.
- It will offer scientists the opportunity to observe galaxy evolution, the formation of stars and planets, exoplanetary systems, and our own solar system, in ways never before possible.

G. Tidbits

Nothing here for today!!!

H. UPSC Prelims Practice Questions

Q1. Consider the following statements with respect to Chilika Lake:

1. It is the largest coastal lagoon in the world
2. It was designated the first Indian wetland of international importance under the Ramsar Convention
3. It is the largest wintering ground for birds in the Indian subcontinent

Which of the above statements is/are correct?

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

Answer: b

Explanation

- Lake Chilika is Asia's biggest brackish water lagoon and the world's **second-largest coastal lagoon**. The lagoon is located near the mouth of the Daya River on India's east coast. **Hence Statement 1 is not correct.**
- In 1981, the Ramsar Convention classified Lake Chilika as the first Indian wetland of international significance. **Hence Statement 2 is correct.**
- With 225 bird species at weddings, Lake Chilika is also the greatest wintering place on the Indian subcontinent. **Hence Statement 3 is correct.**

Q2. Chillai-Kalan, a weather phenomenon, is related to

- a. Dreaded evening thunderstorms in Bengal and Assam
- b. Dry and oppressing winds blowing in Northern Plains
- c. Period of harsh cold conditions in Kashmir
- d. Violent dust squalls that occur after monsoon in the north-western parts of the Indo-Gangetic Plain

Answer: c

Explanation

- Chillai Kalan is a period of forty extremely cold days starting from 21st of December, the date on which Winter Solstice is observed in the Northern Hemisphere.
- Chillai Kalan is followed by a period of another 20 days of Chillai Khurd and 10 days of Chillai Bacha.
- As for its impact on J&K, the period of Chillai Kalan is accompanied by temperate cyclonic conditions of Western Disturbances.
- Collectively, Chillai Kalan and Western Disturbances render J&K both cold and wet (snowy) during winters.
- **Hence Option C is correct.**

Q3. With respect to financial powers of the Governor, which of the following statements is/are correct:

1. Money bills can be introduced in the State legislature only with his prior recommendation.
2. He can make advances out of the Consolidated Fund of the State to meet any unforeseen expenditure.

Options:

- a. 1 only
- b. 2 only
- c. Both
- d. None

Answer: a

Explanation

- A Money Bill can be introduced in the state legislature on the recommendation of the Governor. A Money Bill shall be introduced only in a Legislative Assembly, not in the Legislative council. **Hence Statement 1 is correct.**
- The Contingency Fund of each State Government is established under Article 267(2) of the Constitution. This is in the nature of an imprest placed at the disposal of the Governor to enable him/her to make advances to meet urgent unforeseen expenditure, pending authorization by the State Legislature. **Hence Statement 2 is not correct.**

Q4. Which of the following statements about the Right to Information Act is/are incorrect?

1. The act orders that public authorities have to publish the information to the public on regular intervals voluntarily
2. If information sought concerns the life or liberty of a person, it shall be supplied within 72 hours.

3. If information is required from intelligence organizations, alleging corruption or human rights violation, these organizations are bound to provide such information

Options:

- a. 1 only
- b. 1 and 3 only
- c. 2 only
- d. None

Answer: c

Explanation

- Right to Information Act, 2005 orders the public authorities to publish the information to the public on regular intervals voluntarily and not on the demand of the public. **Hence Statement 1 is correct.**
- The public information officer (PIO) is bound to furnish information sought under the Right to Information (RTI) Act, **within 48 hours** if it concerns the life or liberty of a person. **Hence Statement 2 is not correct.**
- If information is required from intelligence organizations, alleging corruption or human rights violation, these organizations are bound to provide such information. **Hence Statement 3 is correct.**

Q5. The terms 'Event Horizon', 'Singularity', 'String Theory' and 'Standard Model' are sometimes seen in the news in the context of

- a. Observation and understanding of the Universe
- b. Study of the solar and the lunar eclipses
- c. Placing satellites in the orbit of the Earth
- d. Origin and evolution of living organisms on the Earth

Answer: a

Explanation

- A black hole's basic structure is a singularity hiding behind an event horizon. Within the event horizon, the escape velocity surpasses the speed of light, trapping an item indefinitely.
- The Higgs mechanism, electromagnetism, and the strong and weak nuclear forces are all described by the standard model of particle physics. String theory is a concept that is utilized in quantum physics to explain quantum events.
- As a result, all of the concepts are connected to seeing and comprehending the Universe.
- **Hence Option A is correct.**

I. UPSC Mains Practice Questions

1. Examine the threat posed by the Omicron variant of SARS-COV-2. What measures could help India and the world overcome the challenges? (250 words; 15 marks)[GS-2, Health]
2. Evaluate how the Indian economy fared this year? Is it out of the post-pandemic depression? (250 words; 15 marks)[GS-3, Economy]

