

WHAT IS A QUASAR?

The Hubble Space Telescope recently discovered a pair of quasars from the early universe.



About Quasar:

- A quasar is an extremely **active and luminous type of active galactic nucleus (AGN)**.
 - An AGN is nothing more than a supermassive black hole that is active and feeding at the center of a galaxy.
 - The brightest **quasars can outshine all of the stars in the galaxies** in which they reside, which makes them visible even at distances of billions of light-years.
 - Quasars are thought to **form in regions of the universe where the large-scale density of matter is much higher than average**.
 - Most quasars have been **found billions of light-years away**.
 - Quasars **emit energies of millions, billions, or even trillions of electron volts**. This energy exceeds the total of the light of all the stars within a galaxy.
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WHAT IS HIKIKOMORI?

Hikikomori, a phenomenon of social withdrawal, is spreading rapidly in Japan.



About Hikikomori:

- It is a term used to **describe people who have withdrawn from society**, often for a period of six months or longer.
 - It is **associated with feelings of anxiety, depression, and social phobia**.
 - It is thought to be a **response to the pressures of modern society**, including high academic expectations, intense competition, and social isolation.
 - Effects:
 - It can **lead to further mental health problems**, including depression and anxiety, and can make it difficult for individuals to reintegrate into society.
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- Hikikomori can also have **long-term effects on individuals' social and economic prospects**, making it harder for them to find work or form relationships.
- Hikikomori can **lead to reduced productivity** and can make it harder for individuals to contribute to the wider economy.
- It can also **exacerbate demographic challenges**, including an aging population and a declining birth rate.

PARAKH: GOVT PLANS CADRE TO SET BOARD QUESTION PAPERS FOR PARITY IN ASSESSMENT

Why in News?

- The Union government plans to form **in each state a cadre of dedicated professionals** on the same lines of the newly set-up body **PARAKH** (Performance Assessment, Review and Analysis of Knowledge for Holistic Development).
- This cadre will be drawn from the existing pool of teachers and academics in schools engaged with the SCERTs, **to set question papers of board exams and develop standard marking schemes.**

What is PARAKH?

- **Background:**
 - The National Education Policy 2020 proposed of **developing a benchmark framework** to ensure consistency between state and central boards
 - As a result, the **Union Ministry of Education** recently invited bids to establish a regulator - PARAKH.

About PARAKH:

- The benchmark assessment framework - PARAKH - functions as **a standard-setting body** for student assessment and evaluation for all school boards in the country and to put an end to the emphasis on rote learning.
- While the NCERT is an autonomous organisation under the Ministry of Education, the regulator - PARAKH - will act as **a constituent unit of the NCERT** and will be tasked with -
 - **Setting norms, standards and guidelines** for student assessment and evaluation.

- Holding **periodic learning outcome tests** like the National Achievement Survey (NAS), etc.
- **Managing India's participation in international assessments** such as the Program for International Student Assessment (PISA), etc.
 - It will consist of leading assessment experts and will eventually become the **national single-window source** for all assessment-related information and expertise.
- **Significance:**
 - **Uniformity:** To bring “equivalence” in assessment.
 - **Standardisation:** It will establish and implement technical standards for test design, administration, analysis and reporting at all levels of schooling.
 - **Skill development:** It will encourage and help school boards to shift their assessment patterns towards meeting the skill requirements of the 21st century.

PARAKH: THE NEW REGULATOR	
Here are the major objectives of student assessment and evaluation which is planned for all recognised school boards	
<ul style="list-style-type: none"> ● Set uniform norms, standards and guidelines for student assessment and evaluation for all school boards ● Ensure standardisation of benchmarks as each state follows different standards of evaluation ● Conduct nation-wide periodic tests such as National Achievement Survey & State Achievement Survey. 	<ul style="list-style-type: none"> ● State's concerns ● Will go against the modern concepts of education and evaluation followed by the state ● Uniform method of evaluation would be unscientific and neglect diversity ● Suspects non-academic interests behind the move to 'centralise' school education

News Summary Regarding Cadre at the State Level:

- Just like the NCERT at the national level, the SCERTs, which come under the state governments, **are engaged in developing curriculum, manuals** for teachers and evaluation and assessment at the school education level.
- The plan is to have a **dedicated cadre in every state** for setting question papers and developing the standard rubric for marking.
- The rubric will define **which types of answers merit a certain score**.
- **The cadre will be trained** for this purpose of developing higher order thinking skills questions as opposed to the current model where teachers with some years of experience are thought to be ready to set question papers.

WHAT IS W12+ BLUEPRINT?

Recently, in the United Nations, the 2023 Water Conference was held in New York on March 22-24 in which participant members were informed about W12+ Blueprint and its potential.



About W12+ Blueprint:

- It is a UNESCO platform that hosts city profiles and case studies of programs, technologies, and policies that address common water security challenges.
- It is **an informational database** for solutions to **urban water challenges**.
- **Aim:** To create a tool that provides insight into how to address common urban water challenges through easy-to-read case studies.
- Lessons learned from the other W12+ Programs will be incorporated and highlighted within the Blueprint.
- It will house information on best practices, encourage further knowledge exchange, and become a "virtual Hub" for urban water security solutions globally.
- Cities listed under this blueprint from India are **Chennai, Bengaluru, Mumbai and Pune**.

WHO IS LORD MAHAVIR?

Mahavir Jayanti which marks the birth of Lord Mahavir was recently celebrated.



About Lord Mahavir:

- Lord Mahavir was the **twenty-fourth and the last Tirthankara of the Jain religion**.
- He was **born in 599 B.C.** as a prince in **Bihar, India**.
- **At the age of 30, he left his family** and royal household, gave up his worldly possessions, including clothing and become a monk.
- He **organized his followers, into a four fold order**, namely **monk (Sadhu), nun (Sadhvi), layman (Shravak), and laywoman (Shravika)**. Later on they are known as **Jains**.
- The ultimate **objective of his teaching is how one can attain the total freedom from the cycle of birth**, life, pain, misery, and death, and achieve the permanent blissful state of one's self. This is also known as **liberation, nirvana, absolute freedom, or Moksha**.

- He explained that from eternity, every living being (soul) is in bondage of karmic atoms, that are accumulated by its own good or bad deeds.
- He preached that right faith (samyak-darshana), right knowledge (samyak-jnana), and right conduct (samyak-charitra) together will help attain the liberation of one's self.

Who are Tirthankaras?

- In Jainism, those who have conquered their passions are called Jins.
- Those Jins who have founded religious orders are called Tirthankaras.

'UNDUE DELAY' IN TRIALS

Why in News?

- In a judgement, recently, the Supreme Court held that “undue delay” in a trial can be a ground for granting bail to an accused.

What was the Case?

- In March 2023, a two-judge bench of the Supreme Court directed that an undertrial booked under the Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985 nearly seven-and-a-half years ago for possession of cannabis be released on bail.
- NDPS is an exception to the ordinary rules for granting bail.
- Under Section 37 of the Act, for a court to grant bail it has to be satisfied that “that there are reasonable grounds for believing that he is not guilty of such an offence” and that upon release, isn't likely to commit any offence.
- This high bar, requiring the accused to prove innocence at the time of seeking bail, ensures getting bail under the law is virtually impossible for certain offences.
- However, the Court in its recent ruling said that the condition seeking the court's satisfaction to the extent that an accused is not guilty of an offence “has to be interpreted reasonably.”

What is the Meaning of 'Undue Delay' in Law?

- Section 436A of the Code of Criminal Procedure requires an accused to be granted bail if the trial is not concluded within specified periods.
- Section 436A also requires that no person shall be detained during the period of investigation, inquiry, or trial for more than the maximum period of imprisonment provided for the offence.

- In the current case, the SC recorded that the accused Mohammad was in custody “for over 7 years and 4 months” and the progress of the trial had been at a snail’s pace, “with 34 witnesses remaining to be examined still”.
- The Court said that the stringent conditions under Section 37 of the NDPS Act cannot override the general law for granting bail for undue delay in the trial.

What is ‘Bail’?

- Bail refers to the provisional release of the accused in a criminal case in which the court is yet to announce the judgment.
- The term ‘bail’ means the security that is deposited in order to secure the release of the accused.

Types of Bail in India:

- The **Code of Criminal Procedure** (CrPC) does not define the word bail.
 - The CrPC was first drafted in **1882** and continues to be in use with amendments from time to time.
 - Depending upon the stage of the criminal matter, there are commonly three types of bail in India:
 - **Regular Bail** –
 - A regular bail is generally granted to a person who has been arrested or is in police custody.
 - A bail application can be filed for the regular bail under section 437 and 439 of CrPC.
 - **Interim Bail** –
 - This type of bail is granted for a short period of time and it is granted before the hearing for the grant of regular bail or anticipatory bail.
 - **Anticipatory Bail** –
 - Anticipatory bail is granted under section 438 of CrPC either by session court or High Court.
 - An application for the grant of anticipatory bail can be filed by the person who discerns that he may be arrested by the police for a non- bailable offence.

SUBANSIRI DAM PROJECT

Recently, the contentious Subansiri Lower Dam project was hit by a landslide during pre-monsoon rain in the region.



About the Subansiri Dam project:

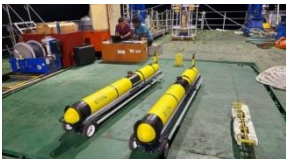
- It is the biggest hydroelectric project undertaken in India so far.
- It is a **run-of-river scheme** on river **Subansiri**.
- **Location:** The Project is located near North Lakhimpur on the border of **Arunachal Pradesh and Assam**.
- **Capacity:**2000MW
- It is a **concrete gravity dam** 116 m high from river bed level.
- It is being developed by the state-run **National Hydro Power Corporation (NHPC)**.

Key facts about the Subansiri River

- It originates in the **Tibet Plateau** and is the largest tributary of the **Brahmaputra River**.
- The high topographic variation makes this river a potential zone for harnessing it for the hydropower.

What is a Gravity dam?

- Gravity dams are massive structure dams which are constructed of **concrete or stone masonry**.
- This type of structure is **durable** and requires very **little maintenance**.



WHAT ARE SLOCUM GLIDERS?

Recently, the Indian National Centre for Ocean Information Services (INCOIS), under the Ministry of Earth Sciences (MoES), has just launched two fresh modern deep seas ‘Slocum’ gliders in the Bay of Bengal.

About Slocum gliders:

- Slocum gliders are a type of autonomous underwater vehicle (AUV) that are capable of carrying out long-duration missions, spanning several months or even years, to collect scientific data from the ocean.
- **Objective:** To study the **physical and biogeochemical parameters** of the sea and get an insight into **climate change**.

Features of the gliders

- The state-of-the-art gliders are equipped with **sensors to track temperature**, salinity, chlorophyll, dissolved oxygen, and PAR – photosynthetic active radiation in the seawater among others.
- The gliders have been deployed from the Ocean Research Vehicle ‘**Sagar Manjusha**’ of the National Institute of Ocean Technology (NIOT) off the Chennai coast outside of the EEZ - exclusive economic zone boundary
- These gliders can go underwater **up to a depth of about 1,000 metres** and will surface four to five times a day.
- These gliders which **run on the lithium-ion battery** is they come with an extended battery life of nine months and more to cover both the north and south transect of the **Bay of the Bengal**.
- They can travel up to 15 km a day.
- The project comes under the ‘**Deep Ocean Mission** of the **Ministry of Earth Science**

What is INCOIS?

- It was established as an autonomous body in 1999 under the **Ministry of Earth Sciences (MoES)**.
- **Mandate:** To provide the best possible ocean information and advisory services to society, industry, government agencies and the scientific community through sustained ocean observations and constant improvements through systematic and focused research.

SC LIFTS BAN ON MEDIAONE

Why in news?

- The Supreme Court quashed the Union government’s telecast ban on Malayalam news channel MediaOne.
- The matter pertains to the Centre’s January 31 directive revoking the licence of the news channel and banning its telecast on security grounds.

What is the background of the case?

- **Media One went off air**
 - The channel got security clearance from the Home Ministry in 2011. Later, it got permission to uplink for 10 years.

- On January 31, 2022, I & B Ministry revoked the permission after the Home Ministry refused to grant fresh security clearance.
 - The MHA cited the channel promoters' alleged links with the Jamaat-e-Islami Hind.
 - Following the revoking of its licence, Media One went off air.
 - **Matter goes to High Court**
 - The channel challenged the Centre's action before the Kerala High Court which upheld the ban on the channel.
 - The HC relied on material that the Home Ministry submitted in a sealed cover.
 - **Appeal in SC**
 - The promoters of the channel contended that they did not get a chance to defend themselves.
 - This was because the national security reasons cited to deny renewal of licence were given only to the HC in a sealed cover.
 - Finally, the SC set aside both the January 31, 2022 order of I & B Ministry and the Kerala HC order upholding the government action.
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