2024 DAILY CURRENT AFFAIRS





Daily Current Affairs from The Hindu, The Indian Express & The Assam Tribune

26 th Nov 2024			
CONTENT LIST			
GS 2: POLITY, GOVERNANCE, SOCIAL JUSTICE, INTERNATIONAL RELATIONS/INSTITUTIONS			
	Topics	Syllabus	Page No:
1	Cabinet clears PAN 2.0, card to feature QR code	Governance (IE)	1
2	The Constitution still thrives, let it show India the way	Constitution (TH)	4
3	Cabinet approves new scheme for research journals on one platform	Governance (IE)	10
GS 3: ECONOMY, ECOLOGY, SCIENCE & TECHNOLOGY, DEFENCE, SECURITY AND			
DISASTER MANAGEMENT			
	Topics	Syllabus	Page No:
4	MACE in Ladakh opens its one-of-a-kind eye to cosmic gamma rays	Science & technology (TH)	9
5	Significance of the European solar mission, which ISRO will launch	Science & technology (IE)	13

GS 2: POLITY, GOVERNANCE, SOCIAL JUSTICE, INTERNATIONAL RELATIONS/INSTITUTIONS 1. Cabinet clears PAN 2.0, card to feature QR code

Context: An upgrade of existing Permanent Account Number (PAN) with an additional feature of QR code on the cards along with a proposal to make PAN the common identifier for businesses was approved by the Union Cabinet on Monday. The Cabinet approved the PAN 2.0 project of the Income tax department, with the cost of Rs. 1435 crore, under which the existing system will be upgraded completely, the digital backbone will be revamped, and PAN will be made as a common business identifier for all digital systems of specified government agencies and the upgrade for existing PAN holders will be free of cost.

Ke<mark>y points</mark>

- **Overview:** With the upgrade, PAN is expected to become a strong source of identification and information for the authorities, as it is already linked to the other identification number of Aadhaar.
- **PAN 2.0 Project:** PAN 2.0 is an e-Government initiative aimed at upgrading the digital experience for taxpayers. It involves redesigning taxpayer registration processes, including PAN and TAN services, through technology-driven improvements.

Budget and Goals of PAN 2.0 - With an allocated budget of ₹1,435 crore, the initiative is designed to:

- > Transform taxpayer registration services through technology.
- > Deliver faster, more accessible, and high-quality services.
- > Implement eco-friendly practices and cost optimization.
- > Enhance infrastructure agility, security, and data consistency.
- <u>Concepts Similar to PAN Card:</u> TAN (Tax Deduction and Collection Account Number) This is a unique 10-digit number that is issued to individuals and entities who must collect or deduct tax on payments made as part of tax Deducted at Source (TDS) under the Income Tax Act. TAN must be quoted when applying for TDS or Tax Collected at Source (TCS) challans made to disburse the refund as well as on certificates. Failure to quote the TAN would result in a fine of Rs. 10, 000.

TIN (Taxpayer Identification Number) - TIN number is a unique 11-digit number that is used to identify dealers who are registered under Value Added Tax. Allotted by individual states, it is compulsory for all manufacturers, traders and dealers to register for a TIN number. This number is to be quoted when generating invoices, orders or quotations by both the issuing as well as the receiving company. It is also used to identify assesses under the Income tax Act of 1961.A.

GS 2: POLITY, GOVERNANCE, SOCIAL JUSTICE, INTERNATIONAL RELATIONS/INSTITUTIONS 2. The Constitution still thrives; let it show India the way

Context: This month marks the 75th anniversary of the adoption by the Constituent Assembly of the draft Constitution of India, on November 26, 1949. The drafters had made provision for relatively easy amendment, to permit the document to keep up with the needs of the times. But the rest depended on the way successive generations of its custodians chose to implement it. Today, 75 years later, it is well worth asking what progress we have made to achieve the aims of the Constitution's drafters, and to fill the lacunae that Dr. Ambedkar identified. Equality has advanced, no doubt, with the abolition of untouchability being accompanied by the world's oldest and farthest-reaching affirmative action programme, in the form of reservations, initially for Scheduled Castes and then for the Other Backward Classes (OBC).

Key points

- The Constitution Day, also known as National Law Day or Samvidhan Diwas, is celebrated in India on 26th November every year to commemorate the adoption of the Constitution of India.
- The Ministry of Social Justice and Empowerment on 19th November 2015, notified the decision of the Government of India to celebrate 26 November as 'Constitution Day'.
- <u>Constitution of India</u>: The Constitution of India is the longest-written constitution of any sovereign country in the world. The Constitution of India was handwritten by Prem Behari Narain Raizada in a calligraphy font, and each page was decorated by artists from Shantiniketan under the guidance of Nandalal Bose.
 - > The basic structure of the Indian Constitution stands on the Government of India Act, 1935.

- The Constitution of India declares India a sovereign, socialist, secular, and democratic republic and assures its citizens justice, equality, and liberty, and endeavours to promote fraternity.
- The Constitution of India was drafted by a committee of seven members, headed by Dr. B.
 R. Ambedkar, who is regarded as the father of the Indian Constitution.
- The Constitution of India was inspired by various other constitutions, such as the US Constitution, the UK Constitution, the Irish Constitution, the French Constitution, the Canadian Constitution, the Australian Constitution, and the Japanese Constitution.

Q. Consider the following statements in respect of the Constitution Day:

Statement-I: The Constitution Day is celebrated on 26th November every year to promote constitutional values among citizens.

Statement-II: On 26th November 1949, the Constituent Assembly of India set up a Drafting Committee under the Chairmanship of Dr. B.R. Ambedkar to prepare a Draft Constitution of India.

Which one of the following is correct in respect of the above statements?

(a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I

(b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I

(c) Statement-I is correct but Statement-II is incorrect

(d) Statement-I is incorrect but Statement-II is correct

GS 2: POLITY, GOVERNANCE, SOCIAL JUSTICE, INTERNATIONAL RELATIONS/INSTITUTIONS 3. Cabinet approves new scheme for research journals on one platform

Context: The Union cabinet on Monday approved the 'One nation One Subscription' (ONOS) scheme, under which all centrally run and state-run higher education institutions (HEI) will have access to reputed journals published by international publishers on a single platform. The platform is set to become operational on January 1,2025. Access will be provided through a national subscription, coordinated by the Information and Library Network (INFLIBNET). The scheme involves an outlay of Rs. 6000 crore for three years, until 20267 and will provide subscriptions to around 13,000 journals published by 30 international publishers.

Key points

- **Overview:** The Union Cabinet has approved the "One Nation One Subscription (ONOS) scheme" aims to provide nationwide access to scholarly research articles and journals.
- One Nation One Subscription (ONOS): About Fully digital and user-friendly Central Sector Scheme approved by the Union Cabinet.
 Aims and Objectives - Provide unified access to scholarly journals and research articles for

government HEIs and R&D labs. Support research through the Anusandhan National Research Foundation (ANRF) and other government initiatives, particularly in tier 2 and tier 3 cities. Centralize subscriptions to reduce the financial burden on individual institutions. Align with Viksit Bharat@2047, National Education Policy (NEP) 2020, and National Research Foundation (NRF).

- <u>Structural Mandate</u>: Information and Library Network (INFLIBNET), an autonomous inter-university center under UGC, will coordinate ONOS and ensure seamless access to research materials. 6,300 institutions under central and state government management, including universities, colleges, and R&D labs. A dedicated digital portal for easy access, designed for wide accessibility.
- Provisions and Eligibility Criteria: All government-run HEIs and R&D institutions are eligible. 13,000 journals from 30 international publishers are available free of cost. ₹6,000 crore allocated for 2025-2027; payments to publishers made centrally by INFLIBNET.
- <u>Government Initiatives related to R&D</u>: Development of Centres of Excellence. Creation of National Research Foundation. VAIBHAV Fellowship. Global Innovation Index 2023: India secured the 40th position in the latest GII 2023. Atal New India Challenge 2.0. Announcement of New Science Awards (Vigyan Yuva-Shanti Swarup Bhatnagar). Post-Doctoral Fellowships (PDFs): The government has increased the number of Post-Doctoral Fellowships (PDFs) from 300 annually to 1000.
- <u>Way forward:</u> Consistent Investment Science requires consistent, large-scale investment to bear fruit. For India to reach 'developed nation' status, it needs to spend more to scale R&D than developed countries spend to maintain that status.

Philanthropic Funding - Encouraging wealthy individuals, corporations, and foundations to invest in R&D through philanthropy can significantly boost funding. Establishing dedicated funds or grants for scientific research can attract donations from those interested in contributing to societal progress.

Industry-Academic Collaboration - Facilitating partnerships between academia and industry can leverage resources and expertise from both sectors. Industry can provide funding, equipment, and real-world problems for research, while academic institutions offer scientific knowledge and talent. Government incentives or tax breaks can incentivise such collaborations.

Venture Capital and Angel Investors - Encouraging venture capital firms and angel investors to invest in R&D projects with high potential for commercialisation can provide a significant source of funding. Startups and small enterprises often drive innovation and can benefit from private investment to scale their research efforts.

Q. Which of the following statements is/are correct regarding National Innovation Foundation-India (NIF)?

1. NIF is an autonomous body of the Department of Science and Technology under the Central Government.

2. NIF is an initiative to strengthen the highly advanced scientific research in India's premier scientific institutions in collaboration with highly advanced foreign scientific institutions.

Select the correct answer using the code given below:

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

QUICK FACTS: CABINET APPROVES NEXT PHASE OF ATAL MISSION

The Union Cabinet, at a meeting here on Monday, approved the continuation of the Atal Innovation Mission (AIM), implemented by NITI Aayog, with an enhanced allocation of ₹2,750 crore for the period till March 31, 2028. The centre emphasized that the next phase of AIM is expected to further enhance India's global competitiveness in the innovation ecosystem they also added that the continuation of AIM will directly contribute to creating better jobs, innovative products, and high-impact services across sectors.

GS 3: ECONOMY, ECOLOGY, SCIENCE & TECHNOLOGY, DEFENCE, SECURITY AND DISASTER 4. MACE in Ladakh opens its one-of-a-kind eye to cosmic gamma rays

Context: The Major Atmospheric Cherenkov Experiment (MACE) telescope is a state-of-the-art groundbased gamma-ray telescope inaugurated in Hanle, Ladakh, on October 4. Located at around 4.3 km above sea level, it is the highest imaging Cherenkov telescope in the world. It boasts of a 21-metre-wide dish, the largest of its kind in Asia and second largest in the world. The facility was built by the Bhabha Atomic Research Centre, the Tata Institute of Fundamental Research, the Electronics Corporation of India Ltd., and the Indian Institute of Astrophysics.

Key points

• <u>The MACE project</u>: *Location* - Hanle, Ladakh, at an altitude of ~4,300 m, making it the highest imaging Cherenkov telescope in the world.

Development - Indigenously built by Bhabha Atomic Research Centre (BARC) with support from ECIL and other Indian partners.

Objective - To study high-energy gamma rays and contribute to the understanding of the universe's most energetic phenomena, such as supernovae, black holes, and gamma-ray bursts.

Technology - Uses Cherenkov imaging technology to detect cosmic rays and observe high-energy astrophysical events.

Significance - Enhances India's cosmic-ray research capabilities and strengthens its position in multi-messenger astronomy on a global scale.

- <u>Scientific advancement</u>: Puts India at the forefront of cosmic-ray research, enhancing its ability to study high-energy gamma rays and contribute to global space research.
- <u>Technological achievement</u>: Demonstrates India's capability to develop world-class astronomical instruments, promoting self-reliance in advanced technology.
- <u>Socio-economic impact</u>: Supports the development of Ladakh by encouraging local talent to pursue careers in astronomy, astrophysics, and space sciences.
- <u>Global collaboration</u>: Aims to foster international partnerships in space research, contributing to the global scientific community's efforts to understand the universe's most energetic events.

GS 3: ECONOMY, ECOLOGY, SCIENCE & TECHNOLOGY, DEFENCE, SECURITY AND DISASTER 5. Significance of the European solar mission, which ISRO will launch

Context: The Indian Space Research organisation (ISRO) will launch the European Space Agency's Proba-3 missions on its PSLV rocket to study the solar corona, the outermost and hottest part of the Sun's atmosphere. The launch date is 4th of this Dec, from Sriharikota. The mission will attempt the first-ever

precision formation flying, where two satellites will fly together and maintain a fixed configuration in space. This is the latest solar mission in ESA's Proba suite of missions. Its predecessors Proba-1 & 2 were launched in 2001 & 2009, respectively.

Proba-3 mission

- <u>About:</u> World's first precision formation flying mission. Led by the European Space Agency (ESA), Launch vehicle is PSLV-XL rocket.
- <u>Aim</u>: To form a 144-m long solar coronagraph, which will create an artificial eclipse, revealing new views of the Sun's faint corona.
- <u>Components</u>: Proba-3 consists of two small satellites a Coronagraph spacecraft and a solar-disc-shaped Occulter spacecraft.
 - A coronagraph is an instrument that will allow scientists to study the Sun's elusive corona with unprecedented proximity and detail.
- Working mechanism: By flying in tight formation about 150 metres apart, the Occulter will precisely cast its shadow onto the Coronagraph's telescope, blocking the Sun's direct light. This will allow the Coronagraph to image the faint solar corona in visible, ultraviolet and polarised light for many hours at a time. It will provide new insights into the origins of coronal mass ejections (CMEs) eruptions of solar material that can disrupt satellites and power grids on Earth. The mission will also measure total solar irradiance, tracking changes in the Sun's energy output that may influence Earth's climate.
- <u>Significance:</u> Proba-3's unique positioning will provide new insights into the origins of coronal mass ejections (CMEs) eruptions of solar material that can disrupt satellites and power grids on Earth. The mission will also measure total solar irradiance, tracking changes in the Sun's energy output that may influence Earth's climate. The Proba-3's formation flying also serves as a testbed for future multi-satellite missions.

ESTD