



Yojna IAS

योजना है तो सफलता है

FEB-MARCH 2024

WEEKLY CURRENT AFFAIRS

YOJNA IAS WEEKLY CURRENT AFFAIRS

26/02/2024 TO 03/03/2024

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CURRENT AFFAIRS

FEBRUARY-MARCH 2024

SWEDEN TO JOIN NATO (NORTH ATLANTIC TREATY ORGANISATION)

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF "SWEDEN TO JOIN NATO". THIS TOPIC IS RELEVANT IN THE "INTERNATIONAL RELATIONS AND INSTITUTIONS" SECTION OF THE UPSC CSE EXAM.

WHY IN THE NEWS?

A significant obstacle was removed from Sweden's NATO membership bid when the Turkish parliament approved it. All of the current members of the North Atlantic Treaty Organisation (NATO) must consent to a new member joining. Sweden's joining has been resisted by Turkey and Hungary for virtually the entire time.

REASON WHY SWEDEN WANTS TO JOIN NATO?

- Sweden remained neutral during the two World Wars and the Cold War, and has not engaged in combat for the past 200 years. Although it cooperated with NATO and joined the European Union in recent years, it never made it clear that it intended to join the military alliance.
- However, following Russia's invasion of Ukraine, this neutrality had to be given up. Sweden and Finland submitted applications for membership in NATO in 2022 as the general public's support for joining the alliance grew.
- Finland's proposal was approved, but Sweden faced strong opposition from Hungary and Turkey.

TURKEY'S OPPOSITION TO SWEDEN'S BID

- **Protests burning Qurans were held in Sweden.:** The government claims that laws pertaining to freedom of speech protect it. This made their relationship with Turkey even more strained.
- **Assistance to a terrorist Kurdish group:** Sweden, according to Turkey, has been softer on organisations that it considers terrorists, including the militant Kurdish militia.

- **US consents to provide Ankara with 40 F-16 fighter aircraft:** Experts have connected the **US's agreement to supply 40 F-16 fighter jets to Ankara**, the capital of Turkey, with Turkey's backing of Sweden. The transaction is now anticipated to proceed, even though the US had not stated that the agreement would be contingent on Turkey's conduct in Sweden.

BENEFITS TO NATO AFTER JOINING OF SWEDEN

- Nearly the whole Baltic Sea coastline—aside from the portion under Russian authority—will be a part of NATO if Sweden joins.
- This will simplify supply lines, give the alliance strategic locations near Russia, and facilitate the defence of maritime assets.
- Despite its small size, Sweden's military is up to date and has experience from previous NATO missions. Its superior aircraft and submarine capabilities are noteworthy.

ABOUT NORTH ATLANTIC TREATY ORGANIZATION (NATO)

- NATO is a **security alliance** of 31 nations from North America and Europe, which was established in 1949 following the signing of the **Washington Treaty**. Finland became the alliance's 31st member in April of 2023.
- NATO's **primary objective** is to use both military and political methods to protect the freedom and security of its members.
- It is an arrangement of **collective defence** in which sovereign member states consent to defend one another against external attacks.
- An attack on one ally is an attack against all, according to **Article 5 of the Washington Treaty**. The pledge of mutual defence found in this article serves as the foundation of the Alliance.
- **Functions:**
 1. In order to address concerns, foster trust, and ultimately avert conflict, NATO **encourages democratic values** and provides members with the opportunity to communicate and work together on defence and security-related matters.
 2. NATO is dedicated to **resolving conflicts amicably**. If diplomatic attempts prove fruitless, it possesses the military might to carry out crisis management actions.

PRELIMS PRACTICE QUESTION

Q1) Consider the following statements regarding NATO (North Atlantic Treaty Organization):

- 1) NATO was established in response to the Warsaw Pact during the Cold War.
- 2) The North Atlantic Treaty, which founded NATO, was signed in 1949.
- 3) Article 5 of the NATO treaty stipulates that an attack against one member is considered an attack

against all.

How many of the above statements is/are correct?

1. One
2. Two
3. Three
4. None

ANSWER: C

MAINS PRACTICE QUESTION

Q1) Explain the significance of Article 5 in the NATO treaty. How does the principle of collective defense operate within the alliance?

AISHE REPORT

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF "ALL INDIA SURVEY ON HIGHER EDUCATION (AISHE) REPORT". THIS TOPIC IS RELEVANT IN THE "GOVERNANCE" SECTION OF THE UPSC CSE EXAM.

WHY IN THE NEWS?

More women than males have enrolled in higher education over the previous eight years, according to the newly released 2021-22 All India Survey on Higher Education (AISHE).

ABOUT ALL INDIA SURVEY ON HIGHER EDUCATION (AISHE) REPORT:

- The **All India Survey on Higher Education (AISHE) Report** is a thorough and systematic project launched by the Ministry of Education, Government of India, to collect and analyse data on the country's higher education system. The **major goal of AISHE** is to give reliable and up-to-date information regarding many sectors of higher education, including enrollment trends, infrastructure, faculty, and other pertinent factors.
- The AISHE Report, which is published annually, **plays an important role in developing policies and strategies for the growth of higher education in India**. It examines both traditional and unconventional institutions, providing insights on the variegated landscape of educational institutions across the country.

- The report normally **includes information about student enrollment, faculty composition, infrastructure facilities, gender distribution, and exam outcomes.** It enables policymakers, researchers, and educational institutions to discover trends, evaluate policy impacts, and make educated decisions to improve the quality and accessibility of higher education.
- One prominent component of the AISHE Report is its **emphasis on inclusivity**, which includes data on student enrollment from many social groups and backgrounds. This helps to assess the success of affirmative action measures and ensures equal access to education.
- The AISHE Report is an important resource for a variety of stakeholders, including government authorities, academic institutions, and researchers, since it promotes evidence-based decision-making and the continuing improvement of India's higher education system. As an updated document, the AISHE Report reflects the dynamic character of higher education, providing a comprehensive overview of the sector's progress and difficulties.

THE MAJOR FINDINGS OF AISHE REPORT 2021-22 ARE:

- The AISHE report 2021-22 was done over the academic session 2021-22. AISHE 2021-22 registered 1,168 universities/university level institutions, 45,473 colleges, and 12,002 stand-alone institutions.
- The poll included responses from 1,162 universities, 42,825 colleges, and 10,576 stand-alone institutions.

NUMBER OF INSTITUTIONS AS PER AISHE REPORT:

- **Since 2014-15, 341 universities or university-level institutes have been formed.** Out of 1168 registered universities, 685 are government-managed (240 by the central government and 445 by the state government), 10 are private deemed (aided), and 473 are private (unaided).
- There are **17 universities** specifically for women. It was 11 in 2014-15. In 2021-22, there were **18 Open Universities** (1 Central University, 16 State Universities, and 1 State Private University).
- **Enrollment in higher education:** Higher education enrollment is projected to reach over 4.33 crore in 2021-22, up from 3.42 crore in 2014-15.
- **Female enrollment** in higher education has risen to 2.07 crore (32% increase since 2014-15). The total number of pass-outs has climbed to 1.07 crore in 2021-22 from 95.4 lakh in 2020-21.

CASTE-BASED ENROLLMENT:

- **Caste breakdown of all enrolled students in 2021-22:** The student body is made up of 15.3% Scheduled Caste, 6.3% Scheduled Tribe, 37.8% Other Backward Class, and 40.6% from other categories.
- **Scheduled Caste student** enrollment has risen to 66.23 lakh in 2021-22, up from 58.95 lakh the previous year. The enrollment of **Scheduled Tribe** students has increased to 27.1 lakh in 2021-22 from 24.12 lakh in 2020-21.

- The number of **Scheduled Tribe Female** students enrolled grew to 13.46 lakh in 2021-22 from 12.21 lakh in 2020-21. While **Minority enrollment** has risen to 30.1 lakh in 2021-22 from 21.8 lakh in 2014-15.

ENROLLMENT IN STATES:

- The **top six states** in terms of student enrollment are Uttar Pradesh, Maharashtra, Tamil Nadu, Madhya Pradesh, West Bengal, and Rajasthan. They account for **53.3%** of the overall student enrollment.
- In 2021-22, there were approximately 15.98 lakh faculty/teachers in higher education, with 56.6% being male and 43.4% female.
- The number of educators in 2021-22 has increased by 46,618 from 2020-21.

PRELIMS PRACTICE QUESTION

Q1) Consider the following statements:

- 1) University Grants Commission (UGC) is the primary regulatory body overseeing higher education in India
- 2) National Skill Development Corporation (NSDC) in India primarily focuses on Vocational education and skill development
- 3) University Grants Commission (UGC) is responsible for conducting the All India Survey on Higher Education (AISHE) in India

How many of the above statements are correct? · ·

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

ANSWER: B

MAINS PRACTICE QUESTION

Q1) In your opinion, how has the implementation of the Right to Education Act impacted the quality of primary education in the country?

END – TO – END ENCRYPTION AND RIGHT TO PRIVACY

SOURCE – THE HINDU AND PIB.

GENERAL STUDIES – PAPER 3 – PROTECTION OF PRIVACY, FUNDAMENTAL RIGHTS, INFORMATION TECHNOLOGY AND COMPUTERS, DATA SECURITY, DATA PROTECTION LAWS, ADVANTAGES AND DISADVANTAGES OF END-TO-END ENCRYPTION.

WHY IN THE NEWS ?

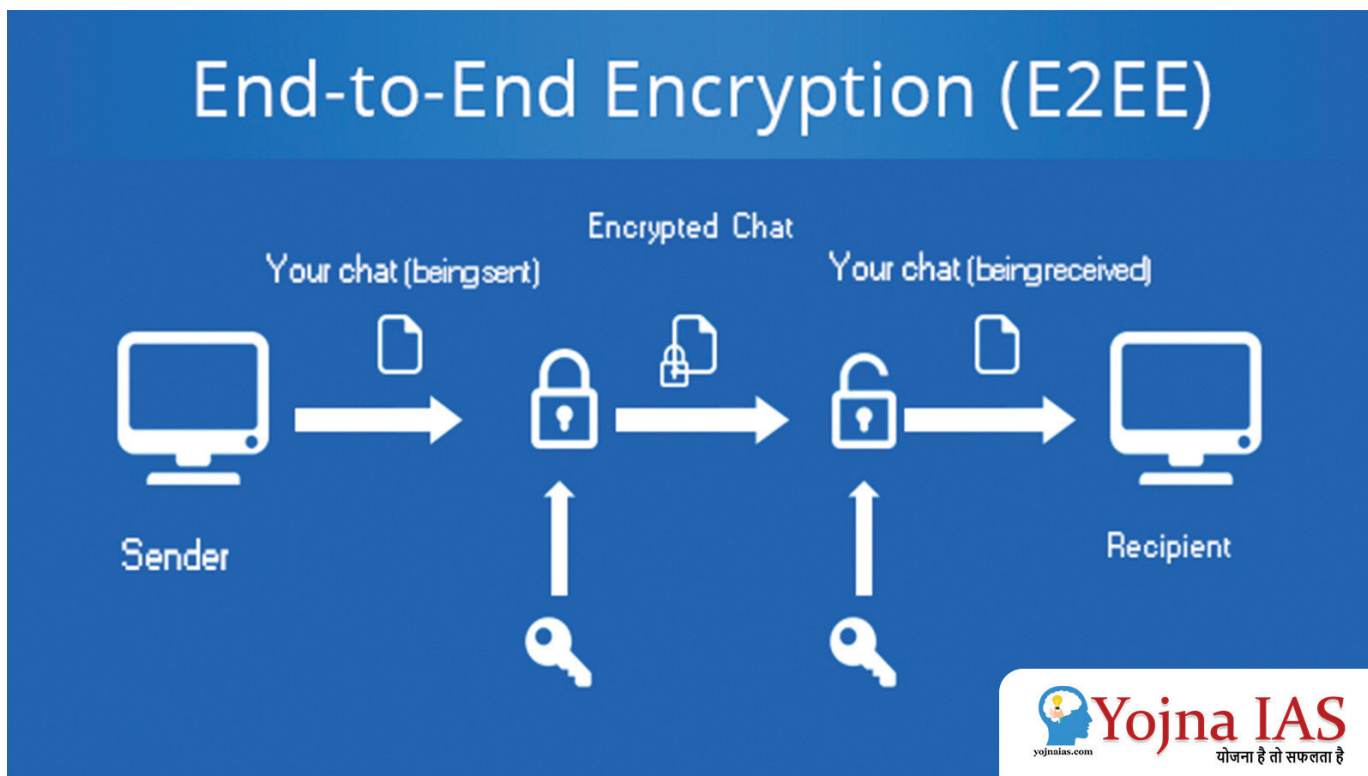


- On the one hand, in the context of compliance with India’s proposed Online Security Bill (OSB) for the entire country, the head of WhatsApp has said that – **“WhatsApp will not comply with India’s Online Security Bill (OSB), which effectively Prohibits “end-to-end (E2E) encryption.”** Apple has announced that – **“It will further increase the data points protected by end-to-end encryption (E2EE) on iCloud from 14 to 23 categories, as a result of which the protection of consumers’ privacy can be ensured.”**

MAIN OBJECTIVES OF SHARING DATA – BREACH – RESEARCH :

- According to a recent survey-research conducted by Apple, which is also called data-breach-research, the total number of data breaches in India from the year 2013 to the year 2021 is three. Has increased more than times. Only in the year 2021 . In this year alone, data of 1.1 billion personal records has been revealed.
- With this end-to-end encryption, even if someone’s personal data is breached in the cloud, the user’s data will remain completely safe. This additional layer/level of encryption will somehow prove to be extremely valuable from the right to privacy and security of personal data point of view to deal with the hacking attacks launched by some funded groups and also from data theft and other security point of view.

WHAT IS ENCRYPTION ?



- One way to protect data from unauthorized access or tampering is called encryption. This process involves converting data into a secret code that only the intended recipient can understand. It is useful for various cases. Such as securing mutual online communications, storing sensitive information among themselves and verifying their digital identities, etc.

There are mainly two types of encryption-

1. SYMMETRICAL AND

2. ASYMMETRIC.

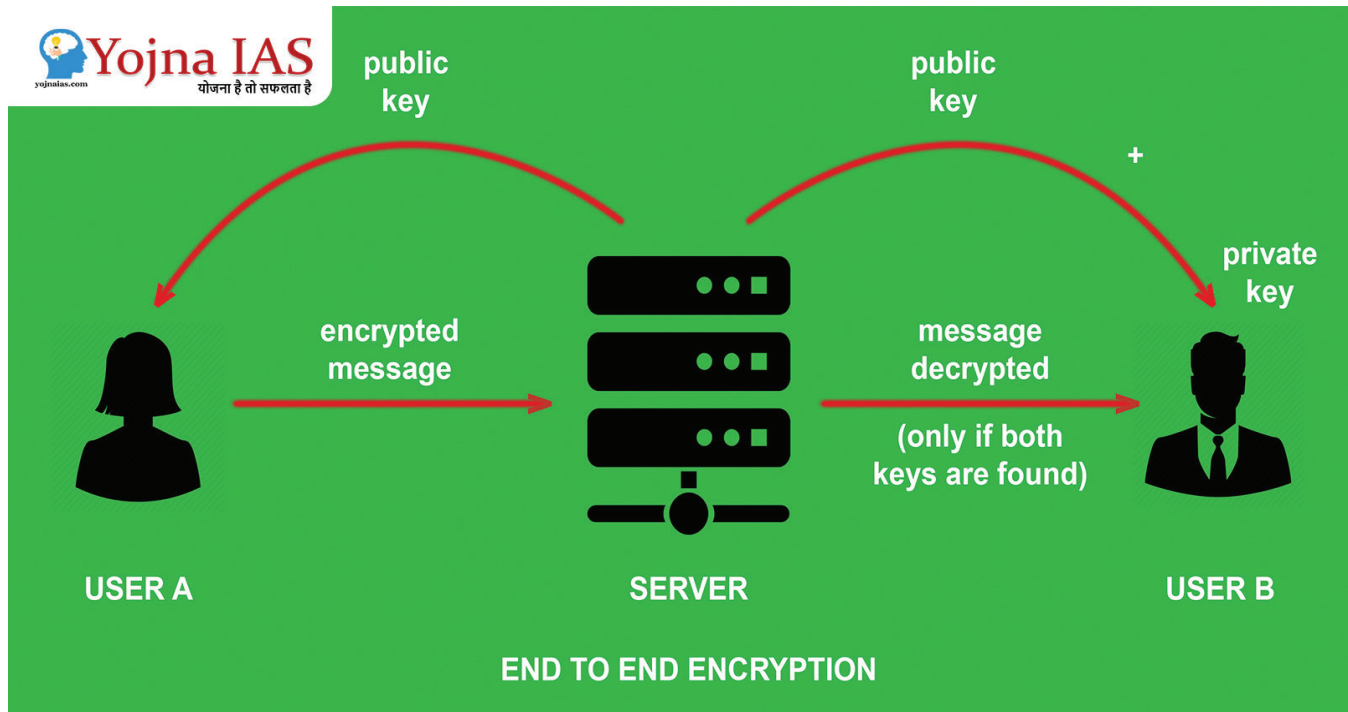
- Symmetric encryption uses a single key to encrypt and decrypt data, while asymmetric encryption uses a pair of keys – one public and one private. One thing to note is that any public key can be shared with anyone, but in asymmetric encryption the private key is always kept secret.

WORKING MECHANISM OF END-TO-END ENCRYPTION :

- Any end-to-end encryption relies on an elegant but complex cryptographic system to protect the data in transit or shared between two devices. The key element is asymmetric cryptography, which uses pairs of keys – public and private – to secure communications. The public key encrypts the data, while the private key decrypts it.
- It is a communication process that encrypts the data being shared between two devices.
- This prevents third parties such as Internet Service Providers (ISPs), cloud service providers and cyber criminals from accessing the data, especially when one's personal data is being

transferred.

MECHANISMS USED IN END- TO- END ENCRYPTION :



- Cryptographic keys used to encrypt and decrypt messages are stored on endpoints.
- The process of end-to-end encryption uses an algorithm that converts standard text into an unreadable format.
- This format can only be opened or read by people with decryption keys, which are stored only on the endpoints and are not shared with any third parties, including service providing companies.

USEFULNESS OF END-TO-END ENCRYPTION IN MUTUAL COMMUNICATION :

- End-to-end encryption has long been commonly used in India when transferring business documents, financial statements, legal proceedings and personal conversations.
- It can also be used to control the authorization of users when accessing any stored data.
- End-to-end encryption is used to secure user-to-user communications.
- It is commonly used to secure any passwords, ensure the security of stored data, and also for provisional protection of data security on cloud storage.

BRITISH ONLINE SECURITY BILL :

- The Online Safety Bill (OSB) is a British proposed legislation to impose '**duty of care**' obligations on online platforms to improve online safety. Whose work is motivated by forcing Internet service providers to work to improve online security.

- Section 110 of the Terrorism and Child Sexual Exploitation and Abuse (CSEA) Content Identification and Online Safety Bill (OSB) empowers the regulator to issue notices to most internet service providers, including private messaging apps, to prevent terrorism and Child Sexual Exploitation and Abuse (CSEA) can be investigated and immediately removed from internet platforms.
- The Online Security Bill (OSB) does not mandate the removal of end-to-end encryption but would require any messaging app to scan all messages to flag such content, which would actually mean removing security mechanisms such as encryption. To break.
- The Online Security Bill (OSB) is seen as contradictory to the fundamental rights of an individual such as privacy and freedom of expression which allow states or governments to restrict and monitor the individual's fundamental rights such as privacy and freedom of expression.

ONLINE SECURITY BILL (OSB) IN INDIA :

INFORMATION TECHNOLOGY ACT 2000 :

- This Act brought by the Government of India regulates and guides the electronic and wireless modes of communication in the country. It exempts us from making any concrete provision related to encryption or making any strict policy at the concrete level, which makes this Act a matter of concern from the point of view of the question of privacy of consumers and it is a major step forward in the field of information and technology in India. Also demands making a concrete guideline.

DIGITAL MEDIA CODE OF CONDUCT - RULES 2021 :

- Through what is commonly called traceability, the Government of India has made it mandatory for messaging platforms with more than five million users in India to 'enable the identification of the first originator' of the message. The Government of India has mandated this through the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.
- This information about the person who first sent the message, the number of times he has sent a message and the number of times he has forwarded it is also contained in this Code of Conduct rule.
- WhatsApp's penetration rate in India is over 97%, while in the United Kingdom it is around 75%. Because there are 487.5 million WhatsApp users in India where the messaging platform accounts for 22% i.e. 2.24 billion monthly active users.

BENEFITS OF END-TO-END ENCRYPTION (E2EE) :

END-TO-END ENCRYPTION HELPS IN PROVIDING SECURITY IN MUTUAL COMMUNICATION :

- End-to-end encryption helps provide security in communications because end-to-end encryption uses public key cryptography, which stores the private key on endpoint devices. Messages can only be decrypted using these keys, so only people with access to the endpoint device are able to read the message.

HELPFUL IN KEEPING SAFE FROM THIRD PARTIES :

- End-to-end encryption (E2EE) also serves to ensure that consumers or users are protected from malicious parties, including Internet data service providers, cloud storage providers, and companies that handle encrypted data.

IT IS FREE FROM ANY KIND OF INTERFERENCE :

- The decryption key does not need to be provided with E2EE as it is already available to the recipient.
- If a message encrypted with the public key is tampered with during transmission, the recipient will not be able to decrypt it and will not be able to access the tampered content.

UNREADABLE AND FORCED TO COMPLY WITH GOVERNMENT REGULATIONS :

- Many industries are bound by regulatory laws/requirements or compliance laws that require encryption-level data protection as a primary requirement. So end-to-end encryption (E2EE) can help organizations keep data secure by making it unreadable.

DISADVANTAGES OF END- TO- END ENCRYPTION (E2EE) :

IT IS EXTREMELY COMPLEX TO DEFINE ENDPOINTS :

- Some end-to-end encryption (E2EE) implementations in India allow encrypted data to be encrypted and re-encrypted at certain points during transmission.
- In this it clearly defines and differentiates the endpoints of the communication circuit. If the endpoints are compromised in any way, the encrypted data may be exposed. Therefore, it is extremely complex to define the endpoints of a communication circuit.

EXCESSIVE PROVISION OF CONFIDENTIALITY :

- Governments and government law enforcement agencies have always expressed concern that end-to-end encryption (E2EE) can protect people sharing illegal content because service providers are unable to provide access to the content to law enforcement.

LACK OF PROTECTION FOR METADATA AND FACILITATING DATA MISUSE :

- In any type of mutual communication, messages are encrypted, information related to the message such as date of message and sender's information etc. is visible even after sending the message, making it vulnerable to those who misuse the data in any way. It may prove helpful.

THE LEGAL FRAMEWORK CURRENTLY IN PLACE IN INDIA FOR END-TO-END ENCRYPTION (E2EE) :

CURRENTLY, INDIA LACKS ANY SPECIFIC LEGISLATION RELATED TO END- TO- END ENCRYPTION (E2EE) :

- At present, there is no specific law regarding end-to-end encryption (E2EE) in India. Although

many industry standards governing the banking, finance, and telecommunications industries include minimum encryption standards that are used to protect mutual transactions, these are limited to certain specific sectors and are not easily accessible to common consumers. Unable to access.

RESTRICTIONS ON END- TO- END ENCRYPTION (E2EE) TECHNOLOGIES :

- Currently, as per the terms of the licensing agreement between ISPs and DoT in India, consumers or users are not allowed to use encryption standards larger than 40 bits using symmetric key algorithms or comparable methods without prior approval. , while in India itself there are several additional rules and recommendations that allow the use of encryption levels higher than 40 bits for specific regions of India.

CONCLUSION: / SOLUTION PATH :

- Through the Information Technology in India (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, the Government of India seeks to encourage self-regulation of these social messaging platforms while protecting the right of individuals to privacy and freedom of expression. It keeps and guides these messaging platforms keeping in mind the privacy of the consumers, but still there are some criticisms which draw our attention towards government regulation in this regard as it is related to the issue of individual privacy. Lives. Only by finding a solution to this, the concept of India as a democratic and public welfare state can be confirmed.

IT RULES DO NOT FOLLOW HUMAN RIGHTS CONVENTIONS :

- India's new information technology (IT) rules violate the International Covenant on Civil and Political Rights (ICCPR) under the Human Rights Convention. Article 19(3) of the ICCPR provides for freedom of speech and expression. Which is for national security and public opinion or public health and morality. It is being said that all these things are being stopped due to the new IT rules.

THE GOVERNMENT WILL MANAGE THE DATA OF COMMON USERS :

- Despite there being a freedom of expression law in India, Special Messengers Company says that the government is monitoring the company and rapidly removing user generated content. This violates the right to freedom of expression in India. Common citizens of India have expressed concern that a system is being prepared to remove content from digital platforms. Due to which those working between consumers and the company can take advantage of it.

THE MAIN REASON FOR THE DISPUTE BETWEEN THE GOVERNMENT OF INDIA AND WHATSAPP :

- There is an ongoing dispute between the Government of India and WhatsApp regarding the end-to-end encryption (E2EE) technology of WhatsApp. Last month, WhatsApp had opposed the IT rule. It was alleged that consumers' right to privacy is in danger. The UN has been supporting end-to-end encryption (E2EE) since its inception. They believe that this is an effective technical safeguard. This protects the right to privacy.

GOVERNMENT COLLECTS DATA TO PROTECT THE UNITY AND INTEGRITY OF INDIA AND TO PREVENT COMMUNAL RIOTS/VIOLENCE :

- When any violence or messages harming the unity and integrity of India go viral. It is used when a woman is being portrayed in a compromising position or in an inappropriate manner or when sexual issues related to children have to be explored. So who has spread the message and for what purpose can be found out.
- There is tension between WhatsApp and the Government of India regarding the rule of traceability. End-to-end encryption is designed to protect the privacy of users. The government's argument is that if they get to read the messages of all the users, they will easily detect the person spreading rumors on social media and prevent any kind of communal riots or violence while implementing measures to safeguard the unity and integrity of India. Can be stopped.

PRACTICE QUESTIONS FOR PRELIMINARY EXAM :

Q.1. Consider the following statements regarding the Online Security Bill (OSB) in India.

1. The Online Safety Bill (OSB) is a British proposed legislation to impose 'duty of care' obligations on online platforms to improve online safety.
2. Section 110 of the Terrorism and Child Sexual Exploitation and Abuse (CSEA) Content Identification and Online Security Bill (OSB) empowers the regulator to issue notices to most internet service providers.
3. Through traceability, the Government of India has made it mandatory for messaging platforms with more than five million users in India to 'enable the identification of the first originator' of a message.
4. There are four types of end-to-end encryption.

Which of the above statement /statements is correct?

- (A) Only 1, 2 and 4
- (B) Only 2, 3 and 4
- (C) Only 2 and 4
- (D) Only 1, 2 and 3

Answer - (D).

PRACTICE QUESTIONS FOR MAIN EXAM :

Q.1 How do the current online security bill in India and the individual's right to privacy and expression contradict each other ? Give a logical explanation.

UGC RULES, 2024

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF "UGC RELEASES DRAFT GUIDELINES NAMED UGC RULES, 2024". THIS TOPIC IS RELEVANT IN THE "GOVERNANCE" SECTION OF THE UPSC CSE EXAM.

WHY IN THE NEWS?

The University Grants Commission (UGC) has released new draft rules named "UGC (Fitness of Colleges for Receiving Grants) Rules, 2024" seeking feedback from the public. If accepted, the new criteria will supersede the 1975 UGC norms, which encompass all institutions recognised by the commission.

KEY HIGHLIGHTS OF UGC'S DRAFT GUIDELINES (UGC RULES, 2024)

- **Applicability and Accountability:** The proposed rules will apply to every college affiliated with universities established **under the UGC Act, 1956**. Emphasizing the importance of **Section 2(f)**, the UGC mandates colleges to be listed under this section for accountability and to ensure quality standards. This inclusion opens the door for colleges to attain the **coveted 12(B) status**, making them eligible for funding.
- **Eligibility Criteria for Grants:**
 1. To be eligible for grants, the UGC suggests that universities should either have **accreditation from the National Assessment and Accreditation Council (NAAC)** or have a significant percentage of programs **accredited by the National Board of Accreditation (NBA)**.
 2. For colleges offering **less than three programs**, all eligible programs must be accredited. Failing accreditation, colleges should secure a position in the National Institutional Ranking Framework (NIRF) thrice after five participations or twice after three participations.
- **Compliance Requirements:**
 1. The draft mandates that colleges adhere to government-set fees, refrain from additional charges like capitation fees, and ensure at **least 75% of sanctioned teaching posts are filled**.
 2. The colleges need to follow **reservation policies**. Notably, teachers must be compensated according to UGC, Central, or state government policies.
- **Application for Recognition:**
 1. Colleges seeking recognition under **Section 12B of the UGC Act, 1956**, can apply online through the UGC portal.
 2. The affiliating university is responsible for reviewing applications and recommending approval to the UGC **within 60 days**. The UGC reserves the right to withdraw the status if any violation is detected.

- **Future Implications and Public Feedback:**

The proposed guidelines, if approved, have the potential to reshape the landscape of educational funding and quality standards. As the UGC opens the floor for public comments, stakeholders, including educational institutions, policymakers, and the public, have the opportunity to provide valuable insights and perspectives on these significant changes.

HISTORICAL CONTEXT: EVOLUTION OF UGC

- In 1944, the **Sargeant Report** laid the foundation for a national education system in India. Subsequently, the **University Grants Committee** was formed in **1945** to manage universities then.
- Post-independence, the University Education Commission (1948) recommended restructuring, leading to the **establishment of the University Grants Commission (UGC)** in **1953**, officially recognized **by the UGC Act 1956**. Currently, a proposal for the Higher Education Commission of India (HECI) is under consideration.
- **Dual Mandate of UGC: Funding and Standards:** The UGC is distinctive for its **dual role** as a **grant provider and coordinator for standards in higher education institutions**. The funding responsibility is coupled with ensuring the quality and coordination of standards in these institutions, making it a pivotal entity in shaping the nation's educational landscape.

NIRF: SHAPING INSTITUTIONAL RANKINGS

The National Institute Ranking Framework (NIRF), **initiated in 2015**, outlines a methodology to **rank Higher Education Institutions (HEIs)** in India. This government-led effort became **mandatory for all government-run institutions in 2018**. NIRF aims to **provide a comprehensive assessment of HEIs**, promoting healthy competition and enhancing the overall quality of education

CONCLUSION:

In the ever-evolving realm of education, the UGC's proposed guidelines represent a crucial step in aligning funding with quality standards. The emphasis on accreditation, rankings, and compliance reflects a concerted effort to ensure that financial support is directed towards institutions committed to excellence. As the education sector awaits the finalization of these guidelines, it stands at the threshold of a transformative era that could redefine the dynamics of higher education in India.

PRELIMS PRACTICE QUESTIONS

Q1) Consider the following statements:

- 1) The primary role of the National Institute Ranking Framework (NIRF) in India is Grant distribution
- 2) University Grants Commission (UGC) is responsible for accrediting higher education institutions in India
- 3) Rashtriya Uchchatar Shiksha Abhiyan (RUSA) initiative in India put emphasis on Higher Educa-

tion

How many of the above statements are *Not* correct?

- a) One
- b) Two
- c) Three
- d) None

ANSWER: B

MAINS PRACTICE QUESTIONS

Q1) Explore the role of public-private partnerships in higher education. How can collaboration between government and private entities contribute to the growth and development of educational institutions?

ARTIFICIAL INTELLIGENCE (AI) CHIPS

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF "AI CHIPS". THIS TOPIC IS RELEVANT IN THE "SCIENCE & TECHNOLOGY" SECTION OF THE UPSC CSE EXAM.

WHY IN THE NEWS?

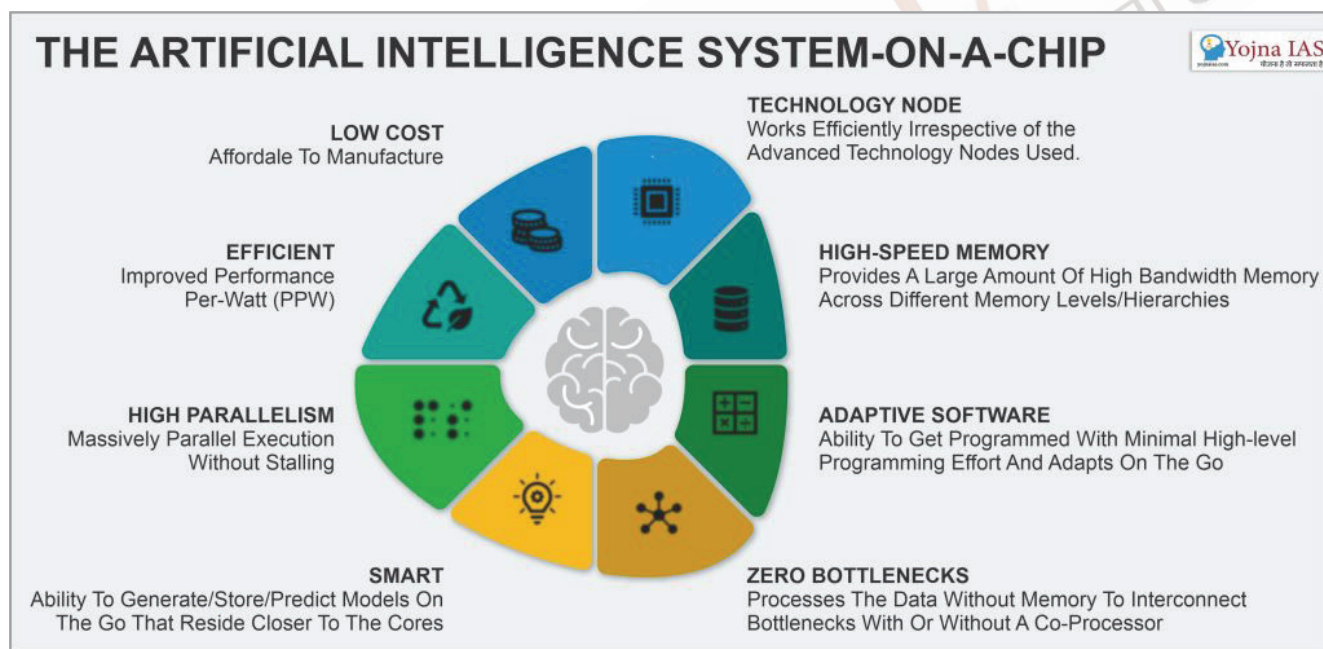
In a stunning display of tech prowess, Kerala's Digital University has unleashed the **Kairali AI Chip**, propelling India onto the global edge AI stage. This silicon marvel isn't just a chip; it's a paradigm shift, ushering in an era of intelligent machines operating closer to the data's origin.

ABOUT KAIRALI AI CHIP

- Kairali embraces the burgeoning world of edge AI, where **computations occur directly on devices where data arises**.
- It can help smartphones in translating the languages on the fly, analyzing complex images instantly, or making personalized recommendations without sending the data anywhere.
- This **decentralized intelligence**, powered by Kairali, promises **faster processing, lower latency, and enhanced data privacy** – a perfect recipe for revolutionizing countless applications.

SOME POTENTIAL USES-

- **Agriculture:** The chip revolutionizes precision farming, providing real-time monitoring of crop health, soil conditions, and environmental factors, optimizing resource usage for enhanced crop yields.
- **Aerospace:** The chip elevates Unmanned Aerial Vehicles (UAVs) and satellites by offering advanced processing power for navigation, data collection, and real-time decision-making with minimal power consumption. It also enhances the capabilities of drones for applications such as delivery services and environmental monitoring.
- **Mobile Phones:** Enhancing the efficiency of smartphones, the chip enables advanced features like real-time language translation, improved image processing, and AI-driven personal assistants.
- **Security and Surveillance:** The chip facilitates faster and efficient facial recognition algorithms, threat detection, and real-time analytics through its edge computing capabilities.
- **Automobile:** Serving as a game-changer for autonomous vehicles, the chip provides essential computing power for real-time processing of sensory information, ensuring safe and efficient autonomous driving.



ABOUT AI CHIPS

- AI chips, often called artificial intelligence chips, are **specialised processors** that improve the efficiency of Artificial Intelligence (AI) tasks. These chips play an important role in **speeding up the computation-intensive tasks that machine learning and deep learning algorithms require.**
- **Unlike traditional** Central Processing Units (CPUs), which are general-purpose, AI chips are optimised for specialised tasks, resulting in quicker and more energy efficient processing.
- **One famous type of AI chip** is the Graphics Processing Unit (GPU), which was originally meant

to render visuals in video games but has since been repurposed for parallel processing tasks required by AI.

- Furthermore, **Field-Programmable Gate Arrays (FPGAs)** and **Application Specific Integrated Circuits (ASICs)** are gaining popularity because they can give even better efficiency by tailoring hardware to specific AI workloads.

HOW AI CHIPS WORK

- It is a **collection of computer programmes or algorithms** which stimulate activity and brain structure.
- **Deep Neural Networks (DNNs)** go through a training phase in which they gain new skills based on previous data.
- DNNs can then infer by using the skills learnt during deep learning training to make predictions on previously unknown data.
- Deep learning may accelerate and simplify the collection, analysis, and interpretation of massive volumes of data.
- Chips like these, with their hardware designs, compatible packaging, memory, storage, and connectivity solutions, enable AI to be incorporated into a wide range of applications, transforming data into information and subsequently knowledge.

BENEFITS OF AI (ARTIFICIAL INTELLIGENCE) CHIP-

- **Enhanced Performance:** AI chips are intended to address the special needs of artificial intelligence applications, resulting in much quicker processing rates and higher performance than standard processors. This acceleration is especially important for the complicated computations used in machine learning and deep learning techniques.
- **Energy Efficiency:** AI processors are optimised for parallel processing, which allows AI workloads to be executed more efficiently. This not only speeds up processes, but also lowers energy usage, making AI systems more sustainable and cost-effective in the long term.
- **Specialised Features:** Unlike universal processors, AI chips are designed for specific AI applications. This specialisation allows them to excel at tasks like picture recognition, natural language processing, and data analysis, resulting in more accurate and efficient outcomes.
- **Scalability:** AI chips help to scale AI systems. Their architecture enables smooth integration with a variety of devices, ranging from edge devices such as smartphones and IoT devices to data centres, offering scalability to meet the expanding demands of AI applications.
- **Optimised Hardware Layout:** Manufacturers are always optimising the design of AI chips to increase efficiency and effectiveness. This optimisation takes into account size, weight, and power consumption to ensure that AI-powered devices can be used in a variety of applications and situations.
- **Real-time Processing:** AI chips allow for real-time data processing, which is vital in applications such as autonomous vehicles, where split-second decision-making is required for safety.

This skill is especially useful in cases that require quick responses, such as cybersecurity and surveillance.

PRELIMS PRACTICE QUESTION

Q1) Consider the following statements:

- 1) AI chips in autonomous vehicles can be used to enhance safety features
- 2) AI chips in edge devices reduce the latency by processing AI tasks locally
- 3) General-purpose computing is a key feature of AI chips

How many of the above statements are true?

- a) One
- b) Two
- c) Three
- d) None

ANSWER: B

MAINS PRACTICE QUESTION

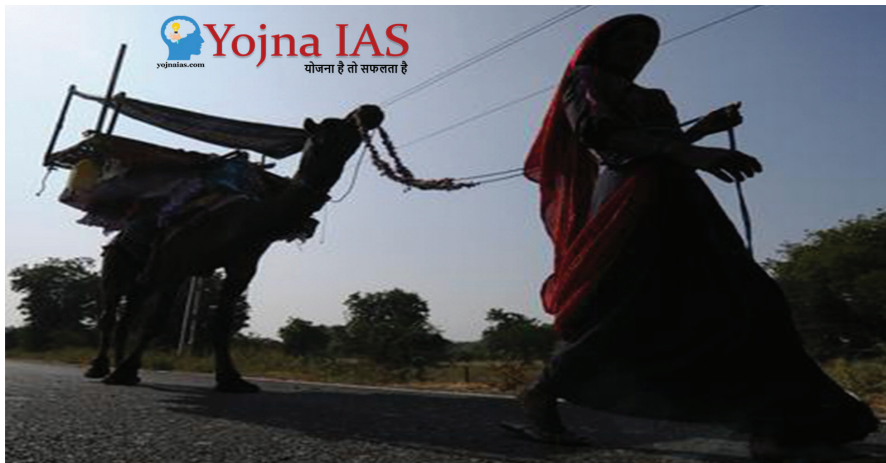
- Q1) Considering the environmental impact of technology, how can the design and manufacturing of AI chips be optimized to minimize their carbon footprint?
- Q2) As AI chips become increasingly integrated into everyday devices, how do you foresee the ethical implications and privacy concerns associated with the widespread use of AI in various aspects of our lives, and what measures should be taken to address these issues?

THE BLURRY PICTURE OF INTERNAL FEMALE MIGRATION AND THE PROBLEMS OF MIGRANT WOMEN WORKERS

SOURCE – THE HINDU AND PIB.

GENERAL STUDIES – SOCIAL JUSTICE, WOMEN'S MIGRATION, GENDER-DISOURSE, PERIODIC LABOR FORCE SURVEY, FEMALE LABOR FORCE PARTICIPATION RATE.

WHY IN THE NEWS ?



- A recent report of the United Nations states that India is going through a kind of urban revolution. According to this report, by 2031, India's urban population will be approximately 60 crores. Three big cities of India due to displacement; Delhi, Kolkata and Mumbai will be counted among the most densely populated cities in the world. The 2011 census reveals the fact that 80 percent of displacement is caused by or caused by women. **There are two reasons for this -**

(1) Migration of women after marriage

(2) Increase in demand for women workers in the export-based economy during the liberal period.

- Recent data shows that 101 percent of female workers have migrated compared to 48.7 percent of male workers.
- Both the Census and the National Sample Survey Office do not give prominence to work as the reason for women's displacement and consider only marriage as the main reason. Such survey organizations continue to consider women's economic participation as secondary.
- While poor migrants are deprived of identity cards, housing and other economic services, women migrants are subjected to various types of discrimination. In the field of work, apart from basic facilities, they are deprived of maternity benefits and care.
- Most migrant women remain victims of sexual exploitation. They are paid less than male and local female workers. Female migrants with relatively low skills are employed in jobs hazardous to health.
- According to a study by CIVIDEP, 90 percent of women working in textile industries in Bengaluru suffer from physical and mental problems like respiratory problems, tuberculosis, depression and back pain.
- Unlike China's Hukou system, India does not have a system to register different categories of migrants, so that it can easily divide them into political, administrative, labor and economic-social categories.
- PLFS data shows that the major reason for migration among women is marriage (81%), followed by migration of family members (10%), employment (2.42%), and migration for educational

opportunities (0.48%). Is. There is no provision to address secondary causes/motives such as climate shocks and food insecurity, which can be an important driver/carrier of migration for women.

INDIA MIGRATION REPORT 2020 – 21 :



- In a study released in June 2022, the Ministry of Statistics and Program Implementation compiled data on migrants and short-term tourists. 0.7% of the country's population were recorded as 'temporary immigrants' during the period July 2020–June 2021. Temporary immigrants were defined as those who arrived in their homes after March 2020 and stayed there for at least more than 15 consecutive days but less than six months. More than 84% of these 0.7% temporary immigrants returned home due to the pandemic. In India, only 86.8% of women migrate after marriage, while 49.6% of men migrate in search of employment. The migration rate at all India levels in July 2020 – June 2021 was 28.9%, with 26.5% migration rate in rural areas and 34.9% in urban areas.
- Women recorded a high share of migration rate of 47.9%, 48% in rural and 47.8% in urban areas.
- The migration rate of males was 10.7%, which is 5.9% in rural and 22.5% in urban areas.
- National surveys such as the PLFS collect information on female migrants but often present an inaccurate picture. For example – surveys only ask respondents about their primary reason for migration. Do women also migrate independently? Is there any change in the status of migrant women in their families? Does migration remove women from patriarchy in one place and push them into patriarchy in another place? To get answers to all these questions, first we need to understand migration from a gender perspective.
- Around the world, more people are migrating than ever before. Many of them migrate in search of new opportunities and a better life for themselves and their families. Many people are forced to migrate due to disaster or conflict. Traditionally, moving from one area to another in search of better life prospects has been considered a man's job. However, along with men, women are also migrating in large numbers.

ACCORDING TO THE STUDY OF MIGRATION POLICY INSTITUTE –

- According to the World Bank report, the total number of migrant workers is estimated to be 164 million, accounting for almost half of the world's migrants in 2017. Yet little concrete effort has been made to incorporate gender into theories of international migration. According to a study by the Migration Policy Institute, in the 1960s and early 1970s, the phrase 'migrants and their families' was used to understand migration, which implicitly meant, 'male migrants and their

wives and children.'

ROLE OF GENDER IN DISPLACEMENT :

- Women's movements raised questions about the invisibility of women as migrants, their perceived passivity in the migration process, and their place in the home. Women began to be included in research in the 1970s and 1980s. But this did not bring any significant change in the patriarchal thinking towards women due to the male-dominated social system. The important question was whether migration leads to modernization of women? The push-pull demographic model then viewed displacement as the result of individual decisions. It was understood that women's responsibilities as wives and mothers, and men's role as breadwinners, influenced women's decisions. Women are therefore less likely to participate in migration decisions and in the host country's labor force.

ROLE OF MARRIAGE IN MIGRATION OF WOMEN :

- Marriage continues to play an important role in women's migration. But with time economic factors like employment, business and education have gained importance. This reflects less reliance on marriage as a single factor behind women's migration. Between 2001 and 2011, the number of women migrating for work increased by 101%. This is double the growth rate for men (48.7%). Also, the number of women citing business as a reason for migration increased by 153%, which is four times the rate of men (35%). More women have also migrated for education.

PATTERN OF MIGRATION OF WOMEN :



- According to the 2011 census, there are a total of 31.4 crore internal migrants in India, out of which 30.96 crore are women, i.e. about 68 percent. According to the Migration in India 2020-21 report, marriage was a major reason behind the migration of more than 71% of the migrants. 86.8% of women and only 6.2% of men migrate for marriage. 9.2% of the migrants cited accom-

panying a earning member of the family or migration of parents as the reason, of which 17.5% were males and 7.3% were females.

- For some women, migration may mean increased social mobility, economic independence, and relative autonomy. For some, labor force participation may increase the burden as they still have to take care of household chores and children.
- Most of the people migrate within their own state, out of which 92.6% are women and 65.6% are men. 7.2% of women and 31.4% of men migrated to another state. 2.9% of men and 0.2% of women moved to another country. More than 63% of female internal migrants moved from rural areas to other rural areas, and only 18% of men. On the other hand, 33.5% of males and 15.6% of females migrated from rural to urban areas. This shows that most of the women migrate near their native places and the majority of men migrate from rural areas to urban areas, pointing to the economic disparity between village and city.

NEARLY 50 PERCENT OF THE COUNTRY'S YOUNG WOMEN ARE AWAY FROM EDUCATION AND EMPLOYMENT : REPORT

WOMEN MIGRATING FOR WORK OR EMPLOYMENT :

- A person's gender identity shapes every stage of the migration experience. Who migrates and where? How people migrate, there is an effect of class.
- Migration for work usually results in relief from poverty, even if it means a difficult life in India's metropolises. For example, a migrant from the drought-prone Marathwada region of Maharashtra temporarily tripled her income after moving to Mumbai. Factors such as agricultural distress in rural areas, changing land use patterns, increasing mechanization, and deteriorating environment have increased poverty and unemployment levels for women, forcing them to move to urban areas for work.
- In urban areas, the emergence of gender-segregated labor markets following liberalization has led to many low-skilled, uneducated women finding opportunities in the informal sector. High female literacy as well as attainment of education is also motivating many women to migrate. However, roughly 80% of the country's migrant women work on a contract basis in the informal sector – in activities such as agriculture, construction, transportation, domestic work and mining. Manufacturing labor is the largest occupation for the female workforce in urban areas (there are 45 lakh women in this sector), followed by teaching (27.5 lakh) and domestic work (20 lakh).

PROBLEMS OF MIGRANT WOMEN :

- The biggest problem of migrant women is their invisibility. When we say 'migrant', only the image of men comes to our mind and even today, like in 1950, we are unable to see women and children beyond their dependence on men. Furthermore, there is also a huge lack of awareness about the schemes available after migration. Because of this, women are not able to avail the benefits of Anganwadi services and PDS. Along with this, women are also far away from financial literacy, use of phones and technology. In the cities they have to live in extremely unhealthy conditions in temporary shelters almost instead of working.
- Women constitute more than half (56.7%) of the non-agricultural informal sector, according to

the latest data from the Periodic Labor Force Survey Annual Report, 2020 – 2021. Most of them come from marginalized communities, extremely resource-poor backgrounds and are the sole source of income for their families. Informal workers are covered by the Sexual Harassment at Workplace Act but they are often unaware of the law, making it extremely difficult for them to speak out against harassment. They also fear loss of livelihood and the stigma associated with the issue, which prevents them from reporting such violence.

MIGRATION RELATED CHALLENGES :

SOCIAL AND PSYCHOLOGICAL ASPECTS :

- Migrants are not easily accepted in the new area to which they migrate and are not considered local residents. Therefore they are often treated as second class citizens.
- Language and Cultural Adaptation Any person immigrating to a new country faces many challenges ranging from cultural adaptation and language barriers to homesickness and loneliness.

ISSUES FACED BY DISADVANTAGED COMMUNITIES OR CLASSES :

- People who belong to poor, destitute or deprived communities often find it difficult to socialize with both the local people and the migrating groups in the new place they migrate to.

FORCED TO REMAIN FOREVER DEPRIVED OF SOCIAL BENEFITS AND POLITICAL RIGHTS :

- Migrant workers are deprived of many opportunities to exercise their political rights, such as the right to vote.
- Apart from this, those migrant workers have to face many problems in getting voter ID cards, proof of their residential address, and even making an Aadhar card, which is also due to the nomadic nature of their life and also due to the instability of residence. They have a tough time and are deprived of access to welfare schemes and policies.

LOSS OF INCOME AND LOSS OF LIVELIHOOD :

- Economic uncertainty and reverse migration due to the Corona pandemic has further increased their suffering. A survey of female migrant workers from 12 Indian states by UNDP found that their incomes fell by more than half during the pandemic compared to pre-pandemic levels.
- Another study found that the pandemic not only led to loss of livelihoods, but after a few months of the lock-down, far fewer women were working than men. This also had a serious impact on the nutrition and health of migrant women.
- The men who migrate in search of employment and the women who stay behind alone to take care of farming, household and children, is a different problem. More than 4.5% of women in rural areas and 1.5% of women in urban areas have husbands living somewhere else.

PROVIDING PAY EQUALITY, OCCUPATIONAL SAFETY, AFFORDABLE HEALTHCARE, RELIABLE PUBLIC TRANSPORT AND SAFE CITIES :

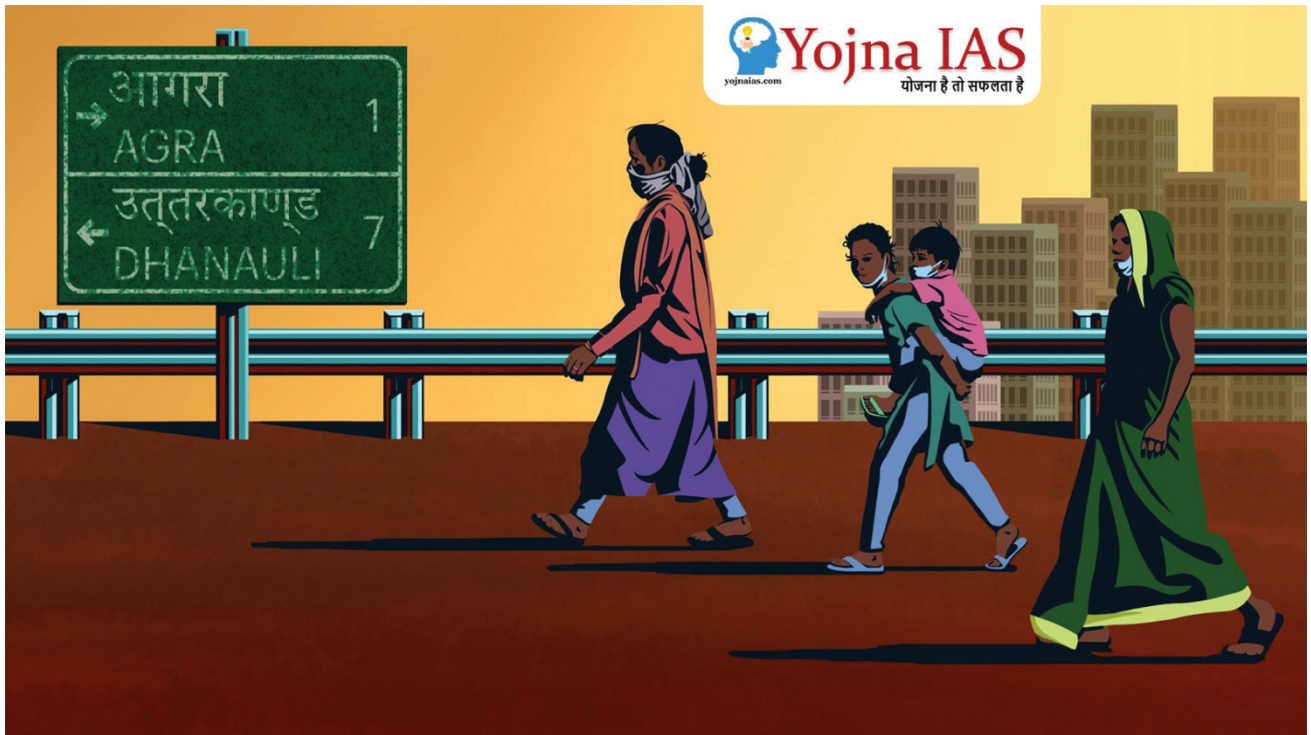
- The first thing the government needs to do is collect accurate data.
- The government must ensure that women workers have access to quality and affordable child care, pay equality, occupational safety, affordable healthcare, reliable public transport and safe cities.
- Migrant women are considered to be the most vulnerable to job loss due to technological advancements, so it is essential that they are given skills training taking into account the role of technology in shaping the future of work.

EMPLOYMENT IS NOT A SUFFICIENT SOLUTION FOR WOMEN EMPOWERMENT

- The draft Migrant Labor Policy by NITI Aayog proposes to create a suitable policy for migrant workers but it largely ignores the specific needs and concerns of migrant women.
- In the present times when women must advance socially and economically after lagging behind men for decades, it seems that advancement itself is a major obstacle to their opportunities.
- One of the main reasons for this, on the one hand, is patriarchy and ignorance, while the other reason is migration from one place to another.
- There is a need for structural change in the entire system for women in India and there is a strong need for better policy making, which is not only sensitive to the needs of women migrants, but also focuses on creating an integrated social security system for them. Perhaps then Indian society will be able to look at the mobility of women afresh.
- Several steps should be taken to solve this. National surveys should compile more information about their socio-economic conditions after migration as little is known about it. For example, the PLFS indicates that a minute percentage (about 7%) have access to social security benefits, with no data for the rest of the population. There is also a lack of time-use data for migrants as India has not yet standardized it. Time-use data will significantly help advance knowledge regarding unemployed female migrants.

SOLUTION PATH / CONCLUSION :

- There should be proper arrangement for data collection of migrant women.
- Women's economic participation and their contribution to the nation should be taken into consideration.
- Aadhaar cards of migrant women should be made on priority. They should be given the benefit of Jan Dhan Yojana provided by the government. They should be given the facilities of the National Health Security Mission.
- Austria, Belgium, Norway, UK. On the lines of other countries, there should be arrangements for vocational training for migrant women. They should be given access to support services.
- A lot can be learned from Vietnam's scheme called 'We the Women'.



- The state of Kerala provides free medical facilities and insurance to approximately 3 crore female migrant workers. This should be followed.
- A lot can be learned from Vietnam's scheme called 'We the Women'.
- A separate national policy can be made for women migrants, which will specifically focus on the problems of women migrants, and try to provide them all possible assistance. Political inclusion of migrants will make urban governance more democratic and gender equitable.

PRACTICE QUESTIONS FOR PRELIMINARY EXAM :

Q.1. Consider the following statements in the context of internal migration of women in India.

1. 101 percent of female workers have migrated compared to 48.7 percent of male workers.
2. According to the Periodic Labor Force Survey, the major reason for migration among women is marriage (81%).
3. For women, migration can mean increased social mobility, economic independence, and relative autonomy.
4. According to the latest data from the Periodic Labor Force Survey Annual Report, 2020 – 2021, women constitute more than half (56.7%) of the non-agricultural informal sector.

Which of the above statement /statements is correct?

- (A). Only 1 and 4
 (B). Only 2 and 3

(C) None of these.

(D). All of these.

Answer – (D).

PRACTICE QUESTIONS FOR MAIN EXAM :

Q.1. Highlighting the main reasons for internal migration of women in India, discuss the major problems of migrant women workers and various suggestions for their solutions.

GENERATIVE AI

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF "GENERATIVE AI". THIS TOPIC IS RELEVANT IN THE "SCIENCE & TECHNOLOGY" SECTION OF THE UPSC CSE EXAM.

WHY IN THE NEWS?

Genie AI (Artificial Intelligence) is a new model from Google DeepMind that can create interactive video games just by prompting users with text or images.

A division of Google, Google DeepMind is a British-American AI research facility. With research facilities in the US, Canada, France, and Germany, DeepMind is a London-based company.

A DEEPER LOOK AT GENIE

Genie, the brainchild of Google DeepMind, isn't your average AI model. It transcends the realm of static image or video generation, ushering in a new era of interactive experiences. Think of it as a foundation world model capable of weaving intricate tapestries of playable virtual worlds based on your wildest dreams.

- **The Power of Unsupervised Learning:** Unlike most AI models that require meticulously labelled data, Genie thrives on the unstructured chaos of the internet. Its training ground is a vast ocean of unlabeled video data, allowing it to discern the subtle connections between frames and actions. This empowers it to not only generate but also control virtual environments in real time, frame by frame.
- **Beyond Static Content:** Say goodbye to passive video consumption. Genie throws open the doors to active engagement. Gone are the days of simply watching; now, you can step into the heart of the generated world, manipulating it with your actions. This opens up a plethora of possibilities, from crafting personalised gaming experiences to exploring interactive narratives tailored to your every whim.

- **Boundless Creativity and Unparalleled Adaptability:** Genie’s potential extends far beyond its training grounds of platformer games and robotics. Its scalability and adaptability allow it to function across various domains, fueled by the diverse video data it ingests. This opens doors to countless applications, including:
 1. **Revolutionising Education:** Imagine immersive simulations that bring complex concepts to life, making learning a truly engaging experience.
 2. **Pushing the Boundaries of Entertainment:** Step into interactive stories that adapt to your choices, creating a personalised and captivating narrative experience.
 3. **Redefining the Future of Gaming:** Craft your own customised game worlds on the fly, limited only by the depths of your imagination.

UNDERSTANDING GENERATIVE ARTIFICIAL INTELLIGENCE (GAI)

OVERVIEW:

- Generative Artificial Intelligence (GAI) stands as a rapidly evolving sector within AI, dedicated to producing novel content, including images, audio, and text, based on patterns and rules acquired from data. The surge in GAI’s prominence is attributable to the advancements in generative models, exemplified by Generative Adversarial Networks (GANs) and Variational Autoencoders (VAEs), capable of creating outputs resembling the training data.
- While often associated with technologies like ChatGPT and deep fakes, GAI initially found application in automating repetitive tasks in digital image and audio correction. Notably, machine learning and deep learning, intrinsic to generative processes, can be viewed as forms of GAI.

APPLICATIONS:

- **Art and Creativity:** Empowers artists by generating unique and innovative artworks, and expanding creative boundaries.
- **Music:** Facilitates exploration of new sounds and styles, contributing to diverse and compelling music compositions.
- **Computer Graphics:** Generates 3D models, animations, and special effects, enhancing realism in movie and game development.
- **Healthcare:** Improves medical diagnoses and treatments by generating new medical images and simulations with enhanced accuracy.
- **Manufacturing and Robotics:** Optimises manufacturing processes, enhancing efficiency and quality.
- **Significance for India:** According to NASSCOM, India hosts approximately 416,000 AI professionals, with an estimated growth rate of 20-25%. AI is predicted to boost India’s GDP by an additional USD 957 billion by 2035.

CONCERNS RELATED TO GAI:

- **Accuracy:** Ensuring high-quality and accurate outputs from GAI remains a major challenge, necessitating the development of sophisticated generative models.
- **Partisan GAI Models:** GAI models, trained on biased data, may produce biased outputs, potentially reinforcing societal biases and leading to discrimination.
- **Privacy:** The need for large datasets to train GAI models poses a risk to personal and sensitive information, raising concerns about potential misuse for unethical purposes.
- **Accountability for Misinformation:** GAI's capacity to generate content introduces the ethical dilemma of accountability, especially in cases where the technology is exploited to generate fake news or malicious content without clear attribution.

INDIA'S INITIATIVE FOR GENERATIVE AI

India is rapidly positioning itself as a leader in the development and adoption of Generative AI. Here are some of the key initiatives driving this growth:

- **INDIAai:** The National Artificial Intelligence Portal hosts in-depth studies on Generative AI's potential, risks, and opportunities. It also holds roundtable discussions with key voices in the field.
- **National Mission on Interdisciplinary Cyber-Physical Systems:** Technology Innovation Hubs (TIH) have been established with a focus on AI and machine learning, promoting next-generation research.
- **Global Partnership on Artificial Intelligence (GPAI):** India's membership in GPAI emphasises its commitment to international collaboration on AI development, including generative technologies.

PRELIMS PRACTISE QUESTION

Q1. With the present state of development, Artificial Intelligence can effectively do which of the following? (UPSC Prelims-2020)

1. Bring down electricity consumption in industrial units
2. Create meaningful short stories and songs
3. Disease diagnosis
4. Text-to-Speech Conversion
5. Wireless transmission of electrical energy

Select the correct answer using the code given below:

- (a) 1, 2, 3 and 5 only
(b) 1, 3 and 4 only

(c) 2, 4 and 5 only

(d) 1, 2, 3, 4 and 5

Answer: (b)

MAINS PRACTISE QUESTION

Q1. In your opinion, what ethical considerations should be prioritised in the development and application of generative AI, particularly in fields like art, music, and content creation?

ALL INDIA HOUSEHOLD CONSUMPTION EXPENDITURE SURVEY REPORT 2022 – 23

SOURCE – THE HINDU AND PIB

GENERAL STUDIES – DEVELOPMENT OF INDIAN ECONOMY, MINISTRY OF STATISTICS AND PROGRAM IMPLEMENTATION, ALL INDIA HOUSEHOLD CONSUMPTION EXPENDITURE SURVEY REPORT 2022 – 23

WHY IN THE NEWS ?

Counting the spending | The All-India Households' Consumer Expenditure Survey will be conducted between July 2022 and June 2023

What is it?

Usually carried out every five years, the survey helps assess poverty levels and consumption patterns across the country, and rebase GDP calculations

What's the big deal? The last survey whose findings were made public was conducted in 2011-12

Why this long pause? A survey was conducted in 2017-18 too, but its results were not released owing to 'quality' concerns. It reportedly reflected the first drop in monthly per capita household spending since 1972-73, with a rise in poverty incidence



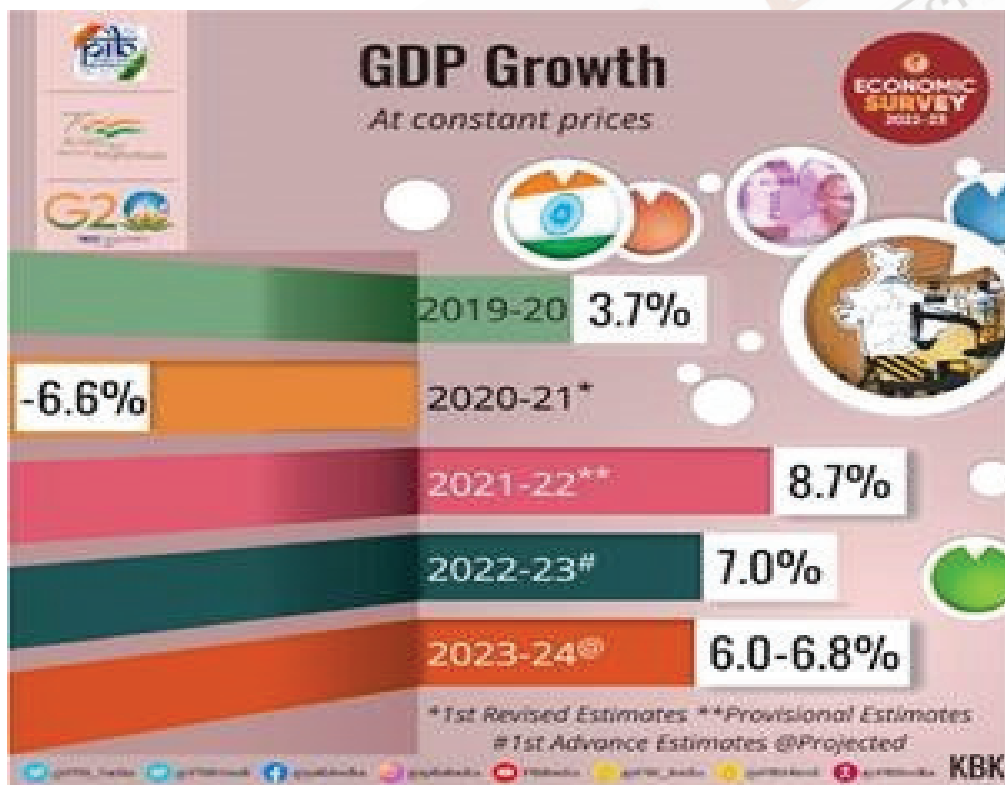
- Recently, the Ministry of Statistics and Program Implementation (MoSPI) has released the data of All India Household Consumption Expenditure Survey 2022-23 based on the results of the survey conducted between August 2022 and July 2023 on the Indian economy.

- All India Household Consumption Expenditure Survey (HCES) is a survey conducted every five years by NSSO to ascertain household spending habits. The Government of India had rejected the final survey results of 2017–18 citing 'data quality issues'. After that, this survey method was modified. Now, MoSPI is working on back-to-back surveys for 2022-23 and 2023-24 to check the robustness of the revised methodology for consumption expenditure and consistency of the results.

ALL INDIA HOUSEHOLD CONSUMPTION SURVEY REPORT :

- Household Consumption Expenditure Survey (HCES) is conducted to assess household spending habits. It provides important insights into household consumption patterns, their living standards and overall well-being.
- This survey report released by the Government of India is a five-year survey, that is, it is released at an interval of every five years.
- It is conducted by the National Sample Survey Office (NSSO), which now comes under the National Statistics Office in MoSPI.

HISTORICAL SIGNIFICANCE OF ALL INDIA HOUSEHOLD CONSUMPTION SURVEY REPORT :



- In India, this survey report has been conducted every five years since 1972-73.
- The survey results were canceled in 2017–18 due to 'data quality issues'.
- At present, the Government of India is conducting the survey according to the new method in the year 2022-23 and 2023-24.

NEW METHOD OF RELEASING ALL INDIA HOUSEHOLD CONSUMPTION SURVEY REPORT :

New method of releasing All India Household Consumption Survey report by National Sample Survey Office (NSSO) of Government of India In many new features have been added. Which is divided into the following categories –

- Dividing the consumption basket into three broad categories
- Food items, consumables and services and durable goods.
- Questions seeking information on free items and subsidies under welfare schemes such as food grains have been included.

DIFFERENCE BETWEEN PER CAPITA CONSUMPTION AT RURAL AND URBAN LEVEL :

The gap between rural and urban per capita consumption is narrowing, however, real rural per capita expenditure growth has declined. In both nominal and real terms, these growth rates are lower than in the period between the two previous surveys.

CONCLUSION OF ALL INDIA HOUSEHOLD CONSUMPTION SURVEY REPORT :

Food spending

Share of cereals and food in average monthly per capita consumption expenditure decreased in both rural and urban areas



Period	RURAL		URBAN	
	% share of cereals	% share of food	% share of cereals	% share of food
1999-00	22.23	59.4	12.39	48.06
2004-05	17.45	53.11	9.63	40.51
2009-10	13.77	56.98	8.16	44.39
2011-12	10.75	52.9	6.66	42.62
2022-23	4.91	46.38	3.64	39.17

INCREASE IN AVERAGE MONTHLY PER CAPITA CONSUMPTION EXPENDITURE (MPCE) :

- The increase in per capita expenditure in India indicates rising disposable income of households, reducing inequality between rural and urban areas and declining poverty levels.

- In the period from 2011-12 to 2022-23, rural per capita consumption expenditure has increased more rapidly than the expenditure of urban persons.
- Rural per capita consumption expenditure has increased by 164%. It has increased from Rs 1,430 in 2011-12 to Rs 3,773 in 2022-23. C. Urban per capita consumption expenditure has increased by 146%. It has increased from Rs 2,630 in the year 2011-12 to Rs 6,459 in 2022-23.

DECLINE IN THE SHARE OF EXPENDITURE ON FOOD AT RURAL AND URBAN LEVEL

:

- The decline in the share of expenditure on food in India explains households' spending on consumer durables, clothing and footwear and entertainment.
- According to this report – the share of expenditure on food per capita has gradually decreased at both urban and rural levels.
- In rural India, the share of food in average monthly per capita consumption expenditure (MPCE) has declined from 59.46% in 1999-2000 to 46.38% in 2022-23.
- In urban India, the share of food in average monthly per capita consumption expenditure (MPCE) has declined from 48.06% in 1999-2000 to 39.17% in 2022-23.

SHARE OF EXPENDITURE ON VARIOUS FOOD ITEMS IN FOOD EXPENDITURE :

- According to this survey report in India this data only helps in ascertaining the amount of money spent for cereals (rice, wheat), improved nutrition (eggs, fish, meat, fruits and vegetables).
- Over the past two decades, expenditure on high-value nutritional items (eggs, fish, meat, fruits and vegetables) has increased more among rural than urban households.
- Rural household expenditure on high value nutrition items to increase from 11.21% in 1999-2000 to 14% in 2022-23. Expenditure on cereals has declined from 22% in 1999-2000 to 4.91% in 2022-23. Urban household expenditure on high-value nutrition items is expected to increase marginally from 10.68% in 1999-2000 to 11.7% in 2022-23. Expenditure on cereals has declined from 12% in 1999-2000 to 3.64% in 2022-23.

AVERAGE MONTHLY CONSUMPTION EXPENDITURE PER CAPITA :

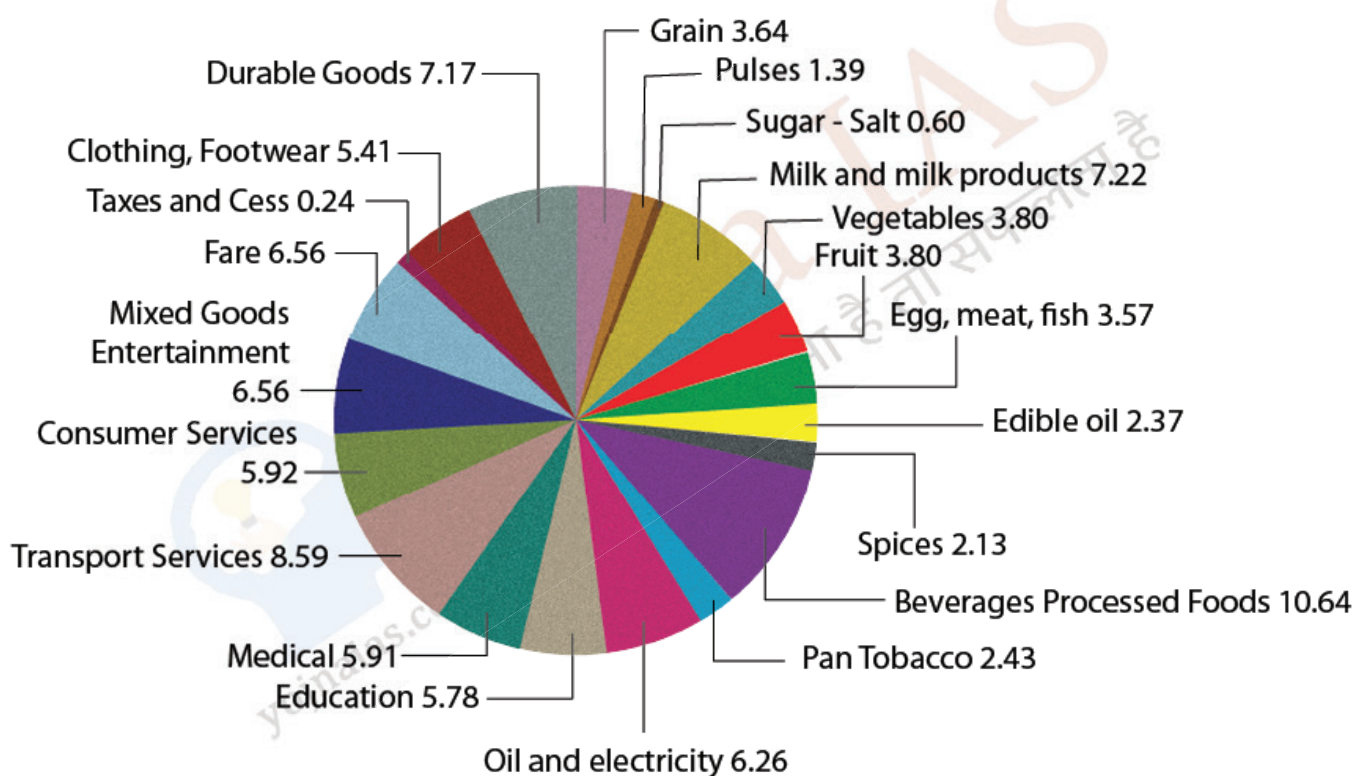
- The All India Household Consumption Survey report data by the National Sample Survey Office (NSSO) of the Government of India helps in ascertaining the impact on expenditure by summing up the price free goods received by households through various social welfare programmes. This data helps in ascertaining the impact on expenditure among different income groups. Also helps in highlighting socio-economic inequalities.
- The estimated MPCE at both rural and urban levels is higher than the average MPCE which does not include free goods.
- The estimated MPCE of the top 5% of the rural population is 7.65 times higher than that of the bottom 5%.
- The estimated MPCE of the top 5% of the urban population is 10 times higher than its bottom 5%.

STATE WISE CONSUMPTION EXPENDITURE OF DIFFERENT STATES OF INDIA :

- State wise consumption expenditure of different states of India By compiling the data state-wise consumption expenditure it presents a comparative study and presents a picture on the economic-well-being of households in a particular state.
- Sikkim has the highest MPCE for both rural (Rs 7,731) and urban households (Rs 12,105).
- Chhattisgarh has the lowest MPCE for rural (Rs 2,466) and urban households (Rs 4,483).

IMPORTANCE OF ALL INDIA HOUSEHOLD CONSUMPTION SURVEY REPORT :

How much expenditure on which items in urban areas (in percentage)



CHANGING THE WEIGHTING OF COMPONENTS TO ACCURATELY CAPTURE INFLATION :

The Consumption Expenditure Survey serves as a benchmark for assigning and changing weights for various components of the Consumer Price Index (CPI). According to earlier survey data, the weightage for food in the CPI will have to be reduced.

MACRO ANALYSIS OF THE ECONOMY :

Household consumption expenditure survey data is used by economists to analyze structural changes

in the Indian economy and to measure measures such as GDP and poverty levels.

ASSESSMENT OF ECONOMIC DEVELOPMENT TRENDS AND INEQUALITIES :

The Household Consumption Expenditure Survey indicates a narrowing gap in per capita expenditure between rural and urban India. However, it also highlights wide income gaps within households, with the top 5% of households spending significantly more than the bottom 5%.

FINE-TUNING TOOLS FOR POLICY MAKERS :

The imputed MPCE provides important insights to policy makers to fine-tune social schemes by understanding the changing consumer spending behavior.

GUIDELINES FOR STATE GOVERNMENTS :

State governments can use the survey to rework their budgetary strategies to increase disposable income in the hands of people by learning from states like Tamil Nadu and Kerala.

FORECASTING TOOLS FOR INDUSTRY :

The survey report provides industries with information about changing consumer behavior, which helps them refine their strategies and enter emerging markets.

CHALLENGES OF ALL INDIA HOUSEHOLD CONSUMPTION SURVEY REPORT :

STRENGTHS OF THE MODIFIED METHOD :

The latest survey for 2022-23 has been conducted according to the revised methodology. The next set of Consumer Expenditure Survey for 2023-24 is required to confirm the robustness of the revised methodology.

SMALL DATA SET :

The survey covered 2.62 lakh households (1.55 lakh-rural areas and 1.07 lakh-urban areas). This is a small sample size for a large and diverse country like India.

TEMPORAL AND REGIONAL VARIATIONS :

Another major challenge is to accurately incorporate seasonal variations and regional disparities in household expenditure to obtain accurate survey results.

RISKS OF PENT-UP DEMANDS :

This survey report has been conducted after two long years of Covid in the year 2020 and the year 2021. The year 2022, in which the survey was conducted, has been a year of pent-up demand, like the last two Covid years. Therefore, the accuracy of the data can be confirmed by upcoming surveys.

CONCLUSION / SOLUTION :

USING DATA TO IMPROVE SOCIAL PROGRAMS :

Using All India Consumption Expenditure Survey data run by the government To measure the impact of various social security schemes like PM Garib Kalyan Anna Yojana,

FINALIZATION OF THE SURVEY FOR THE YEAR 2023 - 24 :

To finalize the survey for the year 2022-23 and the survey results for 2023-24 should be finalized as soon as possible to confirm the robustness of the methodology.

REGULARIZATION OF SURVEY :

The new survey methodology should be institutionalized as soon as possible to establish a common five-year survey cycle (recurring every five years).

CHANGES IN THE BASES OF INFLATION INDICES SHOULD BE AWAITED :

This survey report was conducted in a year of pent-up demand, hence any change in the weightage of various parameters in the inflation indices based on the survey results would offer important ground.

An accurate, transparent and comprehensive consumption expenditure survey data will help shape a more inclusive and equitable society.

ARTICLE 371A AND RAT HOLE MINING IN NAGALAND

This article covers 'Daily Current Affairs' and the topic details of "Article 371A and rat hole mining in Nagaland". This topic is relevant in the "Polity and Governance" section of the UPSC CSE exam.

WHY IN THE NEWS?

The Nagaland Chief Minister is encountering pressure to regulate coal mining following a tragic incident in which six miners died in an explosion. In Nagaland, Article 371A of the Indian Constitution makes controlling coal mining difficult. This provision, which upholds Naga customary law, hinders the government's efforts to regulate small-scale mining, especially in light of recent fatalities in a rat-hole mine explosion.

ARTICLE 371A: A BALANCING ACT BETWEEN UNITY AND AUTONOMY IN INDIA

- **Article 371A** of the Indian Constitution, incorporated in 1962 alongside Nagaland's statehood, stands as a unique example of India's multifaceted federalism. In a nation known for its vast cultural and social diversity, **Article 371A carves out a space for distinct legal and cultural autonomy for the state of Nagaland**, demonstrating the central government's commitment to accommodating diverse identities within the framework of national unity.
- The core feature of Article 371A lies in its exemption clause. Unlike other states in India, central laws pertaining to several crucial aspects of Naga life, including:
 1. **Religious and social practices:** This ensures the continued observance of distinct Naga traditions and customs, safeguarding them from potential homogenization under central legislation.
 2. **Customary laws and procedures:** This empowers the Naga people to maintain their own legal system in specific matters, preserving their unique approaches to dispute resolution and governance within the larger Indian legal framework.
 3. **Land ownership and resource management:** This recognizes the unique land ownership structures in Nagaland, where land often holds deep cultural and community significance, and empowers the state to manage its resources in a way that aligns with its specific needs and priorities.
 4. **Administration of civil and criminal justice involving decisions according to Naga customary law:** This provision acknowledges the existence of a parallel legal system in Nagaland, allowing certain legal matters to be settled according to established Naga customary practices.

IMPORTANCE OF ARTICLE 371A

- However, the application of Article 371A goes beyond cultural preservation. The Nagaland Legislative Assembly holds the power to decide on the applicability of central laws mentioned above, **granting them significant control over areas deeply intertwined with the Naga people's identity and way of life**. This empowers the state to shape its own legislative landscape and tailor its legal framework to the specific needs and aspirations of its citizens.
- While Article 371A is lauded for recognizing Nagaland's distinct cultural heritage and fostering a sense of local self-governance, it has also generated some debate. Some critics argue that the article can **create challenges in implementing development initiatives, as the central government's ability to directly intervene in certain areas is limited**. Others point to potential complexities in navigating two separate legal systems.
- Despite these concerns, Article 371A remains a significant testament to India's evolving federal structure. **It embodies a continuous negotiation between national unity and regional autonomy, demonstrating the country's commitment to respecting the diverse needs and aspirations of its constituent states**. As India continues to navigate its complex federal balance, Article 371A serves as a crucial case study, offering valuable insights into the challenges and opportunities that arise when accommodating unique identities within a unified nation.

RAT-HOLE MINING: A PERILOUS PRACTICE IN INDIA

- Rat-hole mining, a dangerous and illegal practice prevalent in some parts of India, particularly the state of Meghalaya, involves extracting coal through narrow, horizontal tunnels resembling the burrows of rats. These tunnels, typically only 3-4 feet deep and barely wide enough for a person to crawl through, pose extreme risks to the miners' health and safety.

TWO IMPORTANT TYPES OF RAT-HOLE MINING ARE:

1. **Side-cutting:** This method involves digging tunnels along the exposed face of a coal seam, usually visible on hillsides. Workers, often forced into cramped positions, use rudimentary tools like pickaxes to extract the coal.
2. **Box-cutting:** This technique involves digging a large pit, usually circular or square in shape, with a minimum width of 5 square meters and depths reaching up to 400 feet. Miners descend into these pits using makeshift cranes or precarious rope-and-bamboo ladders before digging horizontally in various directions from the pit's edge, creating a network of tunnels akin to an octopus's tentacles.

RAT-HOLE MINING IN NAGALAND

While banned in neighbouring Meghalaya, the status of rat-hole mining in Nagaland is complex. Here's a breakdown:

LEGALITY:

1. **Permissible with restrictions:** Unlike a complete ban, Nagaland allows rat-hole mining under strict regulations.
2. **Departmental Consent:** Permission requires approvals from various departments, including Geology and Mining and Forest and Environment.
3. **Limited Scope:** Licenses are granted only to individual landowners, excluding companies. These licenses are restricted to:
 - **Duration:** Maximum of 1 year.
 - **Area:** Not exceeding 2 hectares.
 - **Production:** Limited to 1,000 tonnes per year.
 - **Equipment:** Heavy machinery is prohibited.

IMPLICATIONS:

- The complex situation in Nagaland highlights the challenges of balancing economic needs with safety and environmental concerns.

- Addressing illegal practices requires stricter enforcement of regulations, alongside exploring alternative sustainable mining methods and livelihood options for those involved.

THE DANGERS OF RAT-HOLE MINING ARE NUMEROUS AND WELL-DOCUMENTED:

1. **Tunnel collapses:** The precarious nature of these narrow tunnels makes them highly susceptible to collapsing, often trapping miners underground.
2. **Suffocation:** Poor ventilation within the tunnels leads to dangerous levels of carbon dioxide and lack of oxygen, posing a significant risk of suffocation.
3. **Water inundation:** The mines are vulnerable to flooding, especially during monsoon season, further endangering the lives of trapped miners.
4. **Health problems:** Miners are constantly exposed to harmful dust and other airborne contaminants, leading to respiratory issues and other health complications.

PRELIMS PRACTISE QUESTION

Q1. What is the significance of the Sixth Schedule in the context of tribal autonomy?

- (a) It guarantees reservation in education
- (b) It ensures political representation in the Lok Sabha
- (c) It grants self-governance and protection of tribal customs
- (d) It provides economic subsidies to tribal communities

Answer: c

MAINS PRACTISE QUESTION

Q1. "In spite of adverse environmental impact, coal mining is still inevitable for development". Discuss. (UPSC Mains-2017)