

20th TEST

Marks : 300

Time : 3 Hrs

TARGETING

TNPSC

GROUP-II

2023



**QUESTION WITH SIMPLIFIED
ANSWER**

MAINS WRITTEN EXAM

**National
Current Issues**



SURESH'
IAS ACADEMY

English
Medium

THOOTHUKUDI

0461 - 4000970
99445 11344

TIRUNELVELI

0462 - 2560123
98942 41422

RAMANATHAPURAM

04567 - 355922
75503 52916

MADURAI

0452 - 2383777
98431 10566

CHENNAI

044 - 47665919
97555 52003

TEST

20

வெற்றி ஒன்றே இலக்கு

Answer Key - English

Unit - 1

1) Explain about the Antarctica Bill?

Indian Antarctic Bill 2022 **1**

About:

- Introduced in Lok Sabha on April 1, 2022
- To give effect to
- The Antarctic Treaty
- The convention on Conservation of Antarctic Marine Living Resources
- Protocol on Environmental Protection to Antarctic treaty

The Antarctic Treaty: **5**

- Signed in Washington on 1st December, 1959
- Antarctica to be used for peaceful purposes only

Key features of the Bill

- **Applicability:** Any person, vessel or aircraft – part of Antarctica expedition
- **Areas covered:** Ice Shelves, continent shelf, All islands, Sea & Airspace south of 60oS Latitude
- **Central Committee:** Chair + 10 member treaty- To address the lack of domestic legislation
- Extend Jurisdiction of Indian courts to crimes in Antarctica expedition.

2) What is Bharat net project? What are the objectives of this project?

Background **3**

- Started on Oct 25, 2011 as National Optical Fibre Network (NOFN) Initiative
- 2015 – Renamed as Bharat Net

Objective

- To connect all 2,50,000 Gram Panchayats
- Utilize existing optical fibre network and extending it to Gram Panchayats

Implementation

- Through Bharat Broadband Network – a special purpose vehicle (spv) setup on 25 Feb 2012.

Project **3**

- To provide on demand, affordable broadband connectivity of 2 Mbps to 20 Mbps for all households
- Acts as enabler and beneficiary of key government schemes
- Digital India, Make in India, NeGP
- Revised Strategy – PPP model, involvement of private sector in operation is maintenance utilization

3) In recent news has been about the Kangaroo court. Explain about it?

Kangaroo Court: **2**

- Defined as an unofficial court managed by a group of people to try someone as guilty even without good evidence

Recent News: **3**

- CJI N.V. Ramana said media is running ‘Kangaroo Courts’ in India
- Campaigns against Judges, particularly on social media, and media trials are affecting Judicial functioning
- ‘Trial By media – Impact of television & newspaper coverage on a person’s reputation by creating perception of guilt / innocence before/ after a verdict in court of law

Implications: 1

- Affects Judicial functioning
- Unable to distinguish fake and Real information's
- Wrongful portrayal of persons undertrial
- Affects harmony in the society impacting democracy
- Instigate Hatred and Violence

Regulations

- Current – Information Technology Rules, 2021

4) Explain about Mini JallianwalaBagh?

Mini Jallian Wala Bagh: 1

- Year: 1913
- It took place 6 years before Jallian Wala Bagh massacre.

About 1

- On November 17, 1913
- British forces killed hundred of Bhil tribals in hills of mangarh (Border of Rajasthan and Gujarat)

Revolt 1

- Lead by Social Reformer Govindgiri and Punja
- Against the ruling government
- Also known as AdivasinJallian Wala
- Tribal uprising by Bhil tribals.

Monument: 3

- A report by National Monuments Authority (NMA) called for Mangarh hilltop in Rajasthan to be designated as National Monument
- To Honour 1500 Bhil tribal freedom fighters.

5) In recent news has been about the Uniform civil code explain it?

Uniform Civil Code 3

- DPSP – Article 44 – State shall Endeavour to secure a UCC for the citizen throughout the territory of India.

- To provide one Law for the entire country applicable to all religious communities in personal matters – marriage divorce, inheritance, adoption etc.

Status of Uniform Codes in India: 2

- Only state with UCC – Goa
- There are uniform code in civil matters but states amendment led to diversity in these secular civil laws.

Implications of UCC on Personal Laws 1

- Protection of vulnerable sections – women, religious minorities
- Simplification of laws in marriage, inheritance, succession
- Adhering to Secularism and Gender Justice

Challenges

- Wide variations in customary practices
- Constitutional hurdle – Art 25 religious freedom.

6) Write a short note on Project Cheetah.

Project Cheetah 2

- Introduction of African Cheetah into India
- On September 17, 2022-8 Cheetah – 3 male & 5 Female
- Origin of Cheetah – Namibia
- Introduced into – Kuno national Park, Madhya Pradesh

Reason for reintroduction 1

- Asiatic Cheetah was declared extinct on 1952

Action plan

- By Union Minister of Environment forest & climate change
- Launched at 18th NTCA meeting
- To introduce 50 Big cats by 2027

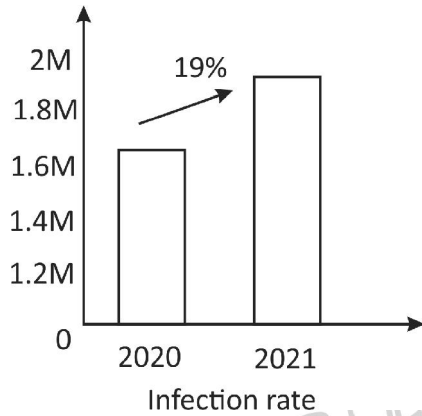
Significance 3

- First in the world to relocate from one continent to other

- A strategy to conserve threatened species
- To restore ecosystem functions
- Revive grasslands, their biomes
- Boost Ecotourism
- Corporate Social Responsibility (CSR) – 50 crore by Indian Oil

7) Write a short note on NIKSHAY MITRA?**NIKSHAY MITRA****2****About:****Aim:**

- To eliminate TB by 2025

**Nikshay Mitra****4**

- Crowd sourced programme
- Allows individuals & organization to adopt TB patients directly
- Direct support with nutritional supplier and vocational training

Support

- Nutritional
- Additional diagnostic
- Vocational support

Others

- Ni-Kshay 2.0 Portal
- Nikshay helpline

Fact

- India – World's highest TB
- Maharashtra – 1,48,000
- Committing support for 1-3 years
- NikshayMitras
- Corporates, Individuals
- Elected Representatives
- NGO's

8) Explain about poly crisis?**Polycrisis****2****Background**

- Used to describe Europe's situation in 2016- Brerit, climate change and a refugee crisis.

Polycrisis**4**

- Situation where the whole is even more dangerous than sum of the parts not just multiple crisis situation
- Dualistic → Common crisis
- Structure → Unique crisis to each country / region
- For India
- Global factors – Inflation, currency depreciation, in forest rate, fuel crisis
- Unique challenges – Growing Joblessness, stagnant economy, sectarian tensions.
- International stressors in part 30 months includes
- Climate change aggravating all other problems
- Protectionism threatening globalization
- Russia Ukrain Orisis
- USA – China cold War

9) Write the note on Vikram – S?**Vikram-S:****6**

- First private rocket approved Indian space Research organization (ISRO)

- Launched by Hyderabad based skyroot Aerospace on November 18, 2022
- Mission – ‘Prarambh’
- Support – Skyroot and IN space

Features:

- Single stage suborbital launch vehicles
- 3D printing technology based carbon composites structure
- Can carry payload upto 800kg weight
- Vikram – I, II, III is planned
- Being fitted ‘Raman’ Engine
- Uses various solid and cryogenic fuels
- Fuels
- Nitrogen Tetroxide (NTO)
- Mono Methyl Hydroxyl (MMH)

10) What is 90-70-90? Explain about it?

90-70-90: 2

- World Health organization called on all countries to reach level of ‘90-70-80’ by 2030 – Immunization systems
- 90% - children below 15 years of age should be vaccinated
- 70%- Women should have had an HPV DNA test at ages 35 and 45
- 90% - should have been treated if the infection was detected in such a test

HPV Virus: 2

- Human papillomavirus manifests as cancer (cervical)
- HPV types 16 and 18 transmitted to both men and women after sexual intercourse.

Announcements: 2

- Released on November 17, 2020-In 100 years i.e. by 2120, cervical cancer can be eradicated

11) Write a short note on Aditya L1?

Aditya L1 Mission 2

- Launched in 2008

- India’s solar mission – to study the corona, chromo – sphere and photosphere of the sun.

Launch vehicle 1

- PSLV XL-C56 rocket is used to launch
- 7 payloads total weight 1500 kg
- It will take roughly 109 earth days
- Placed at lagrangian point L1 between earth and sun
- Located approximately 1,50,000 km from earth

Payloads 3

- VELC, SUIT, ASPEX
- PAPA, SOLEX, HELLOS

Applications

- Will research changes in magnetic field strength and particle flow coming from sun
- To study particle fluk emanating from sun
- Help track the storms directed towards the earth

12) Explain about Corbevax Vaccine?

Corbevax Vaccine: 2

- Recombinant protein subunit vaccine-Made up of a specific part of SARS – Cov 2, the spike protein on virus’s surface-Similar to covaxin does not contain live components of the virus.
- Designed by: Baylor college of medicine, Texas
- Licensed to Biological E Limited – developed and manufactured, Hyderabad based.

Working 2

- In corbevax vaccine the spike protein alone is given to the body.
- Its not expected to be harmful as the rest of virus is absent.
- The body is expected to develop an immune response against injected spiks protein

Importance 2

- First time Indian government placed an order for vaccine that has not received emergency

use authorization -Grant in aid of Rs 100 crore is provided from dept of Biotechnology.

13) Write a short note on moonlighting?**Moonlighting 1**

- In addition to a regular 9 to 5 job as the main source of income, an individual may work with another company usually in the evening / night to supplement income.
- Second job after regular business hours.

Reasons 3

- Low salaries and incentives are not enough to maintain life standards.
- Rising inflation even for basic necessities
- Entrepreneurial spirit-Upgrading their skills for different job profiles
- To combat boredom

It firms are against the phenomena 2

- Conflict of interest
- Misuse of employers resources
- Absenteeism
- Poor attentiveness and fatigue
- Doubts regarding job performance.

14) Explain about the ADI missile?**Air Defence 1 Missile : 3**

- Long range interceptor missile for Low exoatmospheris and endo atmospheris interception of ballistic missile
- Designed by DRDO and test launched at Abdul Kalam Island

Features 2

- Can travel upto 5000 km
- Cn target the missile or aircraft upto altitude of 100 km
- Indigenously developed advanced control system navigation and guidance algorithm
- Two state social motor.

Functioning 1

- Once detected by radar, AD 1 defense missile will be launched
- Provides multilayer defense
- Precision of upto 99.8%
- AD2 is in development stage
- Stage 2 is to be launched by November/ 2022

15) Write a note on project 17A?**Project 17A 2**

- Involves Building of 7 stealth Frigate for Indian Navy cleared in 2015-Estimated cost: Rs.50,000 crore

Built by 2

- 3 out of 7 frigates awarded to GRSE (Garden Reach)
- 4 out of 7 frigates awarded to Government owned Mazagon Dock Limited MDL, Mumbai

Frigates 2

- 2019 – INS Nilgiri was tested and commissioned
- 2022 – INS Udayagiri
- INS Taragiri were commissioned

Features

- Advanced state of the sensor
- Top north stealth features
- Represent most advanced class of major surface warships
- Will feature Brahmos surface to surface mission
- Have torpedoes and rockets

16) Explain about One Nation, One Fertilizer.**One Nation ,One Fertilizer 2**

- All fertilizer companies, state trading entities and Fertilizer marketing entities required to use single 'Bharat' brand for fertilizers
- It comes under Pradhan Mantri Bhartiya Janaushadi Poori Yojana

Packaging 4

- Nelo 'Bharat' brand name and PMBJP logo will cover 2/3rd of the front of the packet
- 1/3rd space – manufacturing brands name, logo other informations.

Significance

- Standardization
- Affordability
- Single branding
- Reduced Freight Charges

Challenges

- Supply side constraints
- Criticism – Government brand will add another layer of regulation

17) What is Artemis program?

Aim 2

- To land humans especially first female in moon by 2024
- Contribute to scientific discovery and economic benefits, inspire new generation explores.

Launch Vehicle 2

- SLS rocket designed for space mission beyond low earth orbit
- Travel 2,80,000 miles from earth for 4 to 6 weeks during the course of the mission

Artemis – I: 2

- Uncrewed flight test of space Launch system- Orion space craft around the moon

Artemis – II:

- Crewed flight test of space Launch system- Orion space craft around the moon

Significance

- Women participation
- Way to mars
- Lunar economy

18) Explain about recent amendment on prevention of money laundering act? 6

- Prevention of Money Laundering Act, 2002
- To prevent money laundering and to provide for confiscation of property obtained through money laundering rules under July 1, 2005
- Amendment to give more authority to enforcement directorate

2019 Recent Amendment

- To close gaps in existing provisions of PMLA, 2002
- Sections – made more clear
- Person to be held guilty of found directly or indirectly attempt to indulge
- Sec 17(1) and 18(1) deleted
- ED empowered to undertake search actions even in absence of report under see 157.
- Broader goal of combating money laundering and terrorist financing
- Penalties
- Imposed fine of upto Rs.5 lakh under PMLA, 2002.
- Amendment act removed this cap
- PMLA has been made stringent enough to combat the threat of money laundering and terrorist financing.

Unit - 2

1) What is 4th industrial revolution? Explain how 5G technology will help India to achieve fourth industrial revolution

Fourth Industrial Revolution 2

- Moving from an electronic based industry to a process which is combination of human beings and electronics

Key elements

- Fusion of technologies ranging from physical, digital to biological spheres.

5G Technology 5

- In the series of communication Technologies, the latest wireless technology is 5G-Promises

significantly faster data rates, higher connection density, smooth & faster communication.-5G technology helping India to achieve 4th Industrial Revolution

Artificial Intelligence

- 5G provides faster data processing capabilities
- The increased speed would help the AI devices in recognizing complicated pattern, process data and draw conclusion in fraction of seconds.
- AI technology is used in from smallest chip to large manufacturing process

Computer Processing

- 5G has latency speed – 1 milli second and speed of 20Gbps and more
- The higher speed enables computer to handle large volume of data quicker than ever
- Quantum computing makes computers more powerful leading to advanced computation.

The Internet of Things (IOT) 5

- 5G will boost development in the field of IOT
- IoTs are used in from home appliances, farming as sensors-soil monitoring and helps making quick choice.

Health Sector:

- Biotechnology makes use of cellular and biomolecular processes to create new medications.
- CRISIR technology have dramatically increased the capacity to modify the building element of life.

Global competitiveness:

- Improvement in education health, employment due to advancement in telecommunications (5G)
- Lead to increase in production process
- Will make India a leading manufacturer

Importance of 4th Industrial Revolution

- Major role in alleviating poverty-Better and low cost health care
- By latest technologies, the farmers income is enhanced
- Strengthening infrastructure and connectivity every where.
- The demographic dividend, data availability at affordable prices along with 5G technology would help India to reap the benefits of 4th Industrial revolution very soon.

2) Explain 5 trillion Economy? What are the opportunity and challenges to Achieve the 5 trillion Economy in India?

5 Trillion Economy: 3

- Monetary definition – To achieve \$5 Trillion as measured by Gross Domestic product (GDP) in 2024 by Prime Minister
- Also means improving the growth levels – investments, consumption, exports and across all 3 sectors – agriculture, manufacturing and services.
- India – 5th Largest Economy in world (2022)

Opportunities to achieve \$5th Economy 4.5

Primary sector

- Agriculture
- Investment in agro processing, exports, agri start ups and agri tourism
- Resource conservation & sustainable use through organic, natural methods, ZBNF
- Investment in Renewable energy generation
- Livestock technology can act as additional farm income

Manufacturing Sector

- Increasing manufacturing in electronics, auto and auto components sector
- Improving funding to small & medium enterprises would further increase the development in other fields.

Service sector

- Improving Rail connectivity, facilitating visa regime for easy travel of professionals,
- Service sector to contribute 60% GDP by 2024- Export & Job creation, service sectors like IT, Tourism, medical value Tourism are great opportunities

Challenges

4.5

Primary sector

- Under employment and disguised employment
- Limited resources – Water and high usage of water for irrigation, industrial & urban needs.

Manufacturing Sector

- Transportation
- Severely unorganized High cost of fuel-Poor network of roads, rail air & sea ports
- Inadequate skills & low level of technology

Service Sector

- Lower salaries do not attract much employments.
- The target of \$5 Tn economy could be achieved with increased private sector contribution, modernization of farm sector, Good healthcare, education and other social developments.

3) What is metaverse technology? Explain the various application of metaversetechnology?

Metaverse technology

4

- In science fiction, the metaverse is a hypothetical in iteration as a single, universal and immersive virtual world facilitated by use of virtual reality and Augmented reality.

Application of Metaverse technology

8

E-Commerce

- Bridge the gap between physical & virtual world, merging online & offline commerce
- Increases the user experience-Huge benefit to companies

- Widens consumer base-Get reviews on new products
- Interact with global audience.

Skill Enhancement

- Scope of developing new experimental learning scenarios
- Key role in skill improvement

Virtual Tourism

- 360° Virtual tons
- Viewers can present digitally in derived location with realistic effects
- Virtual Reality Holiday ‘Try before you fly’
- Helps potential tourists to visit their designed destinations virtually.

Education & Learning

- Virtual Reality combined with effects of Metaverse
- Brought the learning experience to a qualitative new level.
- Students can now watch live experiments with more intensive & high quality knowledge resources.
- Eg: ‘Mesh’ created by Microsoft
- Mixed reality platform
- Faculty, staff and students interact using their 3D Avatar.

Health care

- Tele medicine & Telehealth
- Patients and doctors can interact in virtual 3D clinics

Meta Help Desk:

- In e-governance, essential information is released to targeted audience through ICT
- Can help in providing critical data required.

Conclusion

- Metaverse comes with several challenges like privacy issue, increasing digital divide, legality issue and no proper regulation.

- To overcome the challenges transparent & consent based safe and secure ecosystem is to be developed.

4) What is G20? Explain the contribution of India in G20 What are all the impacts of G20 in India.

Group of Twenty / G20 4

- Formation – 1999
- Background – Results of financial crisis in East Asia and southeast Asia in 1990's

Aim:

- Secure global financial stability involving middle income countries
- G20 countries – 60% of World's population
- 80% of GDP
- 75% of global trade
- India is also member
- Assumed charge of G20 presidency (2022)
- 18th summit in India (2023)

Contributions of India in G20 4

- India actively involved in G20 preparatory process – Sherpas Track and Financial Track
- Need to bring greater inclusivity in financial system
- Avoid protectionist tendencies
- Ensuring growth prospects of developing countries do not suffer.
- India holds the presidency of G20 from 1 December 2022 to 30 November 2023
- Theme: Vasudhaiva Kutumbakam
- The agreed to initiate reforms in WTO which is success for India.
- Major developing economy like India has a vital stake in stability of international economic and financial system
- India suggested reforms in FATF – Financial action Task Force

- Formulates standard definition for fugitive economics offenders

Impacts of G20 in India 4

- G20 meetings provided environment for growth of 2 trilateral partnership
- JAI – Japan, India and USA
- RIC – Russia, India and China
- India used the platform to strengthen its cook against economic offenders.
- Setting up of common platform for sharing experiences and best practices.
- The current presidency would helps shape the poor pandemic world.
- Could help to broader goal of reducing polarization

Conclusion:

- India's G20 presidency in 2022 will pare the way for showing the importance of the nation to the world in its leadership quality and would be of great economic importance.

5) Explain about 7 agreements made between India and Bangladesh? Also explain About Kushiya Treaty?

India – Bangladesh: 6

- Recently signed 7 Memorandum of understandings (MoUs) covering various dimensions of economy – water resources, capacity building, railway, science and technologies

Withdrawal of Water:

- From common border river Kushiya

Training of Bangladesh Railway personnel in India:

- Capacity building of the personnel working in Bangladesh Railway

IT systems:

- Collaboration in IT systems-Fols and other IT applications
- Used in Bangladesh Railways

Judicial officers:

- Between National Judicial academy and supreme court of Bangladesh
- Training and capacity building programme.
- Scientific & Technological Cooperation:
- Between CSIR and BCSIR, Bangladesh

Space Technology:

2

- Between Prasar Bharti and Bangladesh TV
- Cooperation in broadcasting

Kushiyara Treaty:

- Kushiyara river – distributory of Barak River

Importance:

- Flow of Barak river changed
- Most of water from barak river flows to Kushiyara
- Flood during monsoon, dry during winter

Agreement:

2

- Bangladesh to withdraw 153 cusec of water out of 2500 cusecs during winter season

Benefits:

- Solve water crisis for Sylhet farmers.
- Boro rice cultivation
- Ensure steady supply of water for irrigations

Reason for the treaty:

2

- Requirement for greater cooperation on flood control & irrigation related issues
- Sylhet region of Bangladesh gets water from Kushiyara river.

India's objection

- The treaty provided for channeling water through Rahimpur Canal project, sylhet
- India objected
- Claimed dyke and other infrastructure interfered in Border security

- But Economics benefits out weight leading to signing of treaty

6) What is Article 142? Explain about the clashes between Administration and Judiciary also explain about the supreme court judgment about Article 142?

Background

4

- Recently supreme court ordered release of 4G Perarivalan one of the life convicts in Rajiv Gandhi assassin action case under Article 142.
- Article 142: The Supreme Court in the exercise of its jurisdiction may pass such decree or make such orders as is necessary for doing complete justics in any cause or matter pending before it.

Clash between Administration and Judiciary

4

- Perarivalan submitted mercy petition to Tamil Nadu Governor in 2015 released under Art 161 of constitutions
- Act 161 – Governor empowered to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence.
- Governor failed to respond and moved to supreme court
- Tamilnadu cabinet headed by CM recommended the release of all 7 convicts
- Governor continued to sit on the recommendations
- Madras High Court reminded that time limit was not prescribed because of faith and trust attached to the constitutional post.
- Governor's office forwarded the recommendation to president of India.
- Yet the decision was not taken- Supreme Court took the decision and released the convicts.

Supreme Court Judgement:

4

- The supreme Court has involved its plenary power under Article 142 and several instances.

1. Union carbide corporation Vs Uol:

- Bhopal Gas tragedy case.-Court ordered to award compensation to victims

2. Siddhiq Vs Mahant Suresh Das:

- Ayodhya dispute-SC exercised power under Article 142.

3. Laxmi Devi Vs Satya Narayan:

- Compensation to Victim

Recent Judgement:

- Supreme court ruled that inordinate delay by Tamil Nadu Governor is subject to Judicial Review
- Rejected centres submission that president has exclusive power to grant remission to murder case.
- It used its power under Article 142 to release the convicts.

Conclusion:

- The Supreme Court by means of this plenary power endures complete justice to the citizen but also focus on promoting judicial restraint too.

7) What is digital currency? Explain the applications of digital currency and how the Digital currency destroys the black money – Discuss.**Digital Currency: 3**

- "Digital Rupee was launched by RBI and known as Central Bank Digital currency (CBDC)
- It is a mode of payment
- Involves digital transactions in an electronic rather than paper form
- It is just a digital form of currency notes issued by the Reserve bank of India.

History 1

- Barter system → Paper currency → Plastic money → Digital currency
- Digital rupee is a digital currency (fiat) issued by a country's governments
- Completely controlled by RBI and government

- It works as same as coins and paper currency but in digital form.

Varieties

- Retail price digital currency → used by everyone
- Gross price based digital currency → used only by authorized judicial institutions
- On November 1, 2022 the RBI launched India's first digital rupee pilot programme for wholesale sector.

Benefits 4

- Additional reinforcement to existing currencies in the country
- Low cost of printing
- Inks are imported
- Need for printing will reduce
- Sage currency
- No chance of getting lost or theft
- Banks cannot track the transaction since it is decentralized currency
- Direct transaction with RBI without intermediate banks.

Elimination of Black Money: 4

- The concept of digital currency has primary objective of eliminating black money from the system.

Reasons

- RBI data are available regarding the black money and laundered money
- Individuals banking transaction can be observed
- No possibility of hiding the digital currency like the paper currency.

Conclusion

- The world is moving towards digitization and its benefits can be reaped to ensure transparency in banking transactions.

8) What is Rupee depreciation? Explain about impacts and how it effects on Indian economy?

- Indian rupee recorded a historic low of 80 against the US dollar and it has declined nearly 7 to 8% since January this year. **3**

Depreciation

- Decrease in a currency's value due to market forces
- Takes place under Flexible exchange rate system.

Impacts of weak rupee

Positive effects: **3**

- **India's export** : weaker rupee makes the Indian products cheaper in foreign markets
- **Travel to India gets cheaper:** The purchasing power of foreign currency against Indian dollar is high leading to cheaper travel.
- **Reduce the Current account deficits:** increasing export and decrease in import due to weak rupee results in reduction in CAD.
- **Incentivize Indian companies:** to export more, substitute costlier imported goods with local products
- **Better yield on foreign investment:** stronger dollar leads to more rupees in investor hands.

Negative effects: **3**

- **Imports become costlier:** spending decision of certain things may become expensive.
- **Rise in oil price** :Huge dependence of oil and increasing price affects overall economy
- **Spending higher on abroad travels:** travelling to foreign countries becomes costlier

Impact on various sectors:

- **Information technology:** biggest gains, Rupee earnings rise
- **PHARMA:** Net gainer as exports are huge compared to raw material imports.
- **Oil & Gas:** India imports 85% of oil and 50% of gas, rise in cost of importers.

Renewable energy: **3**

- Indian solar plants dependent on imported solar cells & modules
- Project cost rises and higher tariffs in future

Consumer Electronics:

- 40% to 60% of total input cost on imports
- Auto industry
- 10 – 20% car's total raw materials by value are imported
- Make cars more expensive
- RBI has stepped in to arrest a large depreciation in the currency with interventions in spot and forward foreign exchange markets.

9) List out the achievements of ISRO in 2022?

ISRO – World's 6th largest space research organization

Achievement in 2022: **6**

Testing of cryogenic engine:

- Qualification testing of cryogenic engine is successful
- On January 12, 2022, engine testing for Gaganyaan programme was done successfully
- Test went for 720 seconds (12 minutes)
- At ISRO propulsion complex, Mahendragiri, Tamil Nadu

Chandrayan 2 detected solar polar events

- A large Area soft X ray Spectrometer (CLASS) payload - Onboard Chandrayaan 2 orbiter
- Detected solar exceptions spewing out energetic particles from sun.

Earth observation Satellite – 02 **6**

- Launched using India's First small Satellite Launch Vehicle (SSLV)
- Launched along with student made satellite – Azaadi SAT
- Azaadi SAT-8kg cubesat designed to mark 75th anniversary of India's Independence.

EOS – 06:

- Launched using polar satellite Launch vehicle (PSLV – C54)
- Along with 8 nano satellite in 2 different Sun Synchronous polar orbits (SSPOs)
- Ocean Sat Series

Vikram – S:

- First rocket designed by a private entity
- Jointly tested by ISRO and skyroot Aerospace, Hyderabad,
- Carry payload upto maximum of 500kg
- Vikram I, II, III are under design stage with varying payload capacity
- On November 18, Vikram I was launched from Satish Dawan space centre.

RH – 200

- On November 24, 2022 launched from the shores of Thumba, Kerala
- 200th Successive successful launch of RH200
- RH200 is a versatile sounding rocket of ISRO

LVM – 3:

- Launch vehicle mark 2
- Earlier called GSLV marks (Geosynchronous satellite launching vehicle)
- Successfully orbited 36 satellites of UK based one web
- It was first commercial mission of LVM 3.

10) Explain about National Crime Record Bureau and its functions. State that the recent reports submitted by the National crime record Bureau?

National Crime Record Bureau: 2

- Setup in 1986
- Recommendations by
- Tandom committee to National police commission (1977 – 81)
- MHA's Taskforce (1985)

Objectives: 4

- To function as a repository of information on crime and criminals-2009 – entrusted with responsibility for monitoring, coordinating and implementing CCTNS project.

Functions:

- Entrusted to maintain National Database of sexual offenders (NDSO) and share it with states (UT's)
- Central Nodal agency – manage technical and operational functions of 'Online Cyber Crime Reporting portal'.
- Responsibility of implementation of Inter operable Criminal Justice System (ICJS)
- ICJS – National platform for enabling integration of main IT system used for criminal Justice delivery
- Integrate 5 pillars of system-Police (crime & criminal Tracking & Network systems)
- e-Forensics for forensic labs
- e-courts for courts
- e-Prosecution for public prosecutors.
- e-prisons for prisons
- 2017 August – NCRB launched National Digital Police Portal allows for searching a criminal / suspect on CCTNS database.

Recent Reports Submitted by NCRB 2**Accidental Deaths & Suicides in India Report, 2021**

- Statistics for 'Crime rates', 'Suicides', Crime against women.

Report findings for crime against women: 4

- 31.8% Abuse by husband or his family members.
- 7.40% - rape
- States – Assam, Odisha, Haryana, Telangana & Rajasthan have highest crime against women.
- Lowest – Chennai and Coimbatore

- Dowry death & violence – 270 cases; 6589 incidences

For suicide Rate:

- From 2020 to 2021 7.17% Increase
- Daily wage earners group 11.52% increase
- Causes – family issues, Marriage problems, Health

For Crime Rates:

- Kidnapping increased 20%
- Murder – 29272 in 2021
- Crime against children – 1.49 lakh cases reported
- Sikkim, Kerala, Meghalaya, Haryana & Mizoram – Highest rates of sexual offences against minors.
- The above mentioned reports reflects the increasing nature of crimes in India and necessary steps have to be taken to overcome the issues.

11) What is Global hunger index? What is the position of India in Global hunger index and why Indian government does not accept this index?

Global hunger Index 2

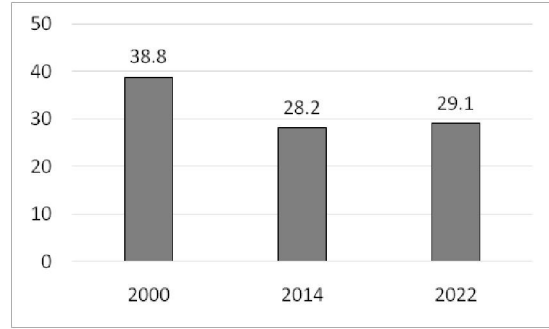
- Jointly published by Concern Worldwide & Welthungerhilfe
- Since 2006
- Recent – 2022 – 27th GHJ

Objective

- Tool to comprehensively measure and Track hunger ad global, regional and national levels
- To raise awareness and understand the struggle against hunger.
- UN SDG – 2 Zero Hunger by 2030

Position of India: 4

- India ranked 107 / 121
- 29% - Series category



Components 2

- Under nourishment – 33.33%
- Child stunting – 16.66%
- Child wasting – 16.66%- Child Mortality – 33.33%

Indian Government didn't accept the index:

- Ministry of women and child development issued statement claiming index as erroneous and serious methodological issues.
- Data used is collected from a minuscule sample through an opinion poll
- Three out of four indicators – childhood health
- It is not representative of entire population
- The report ignored efforts made by government to ensure food securing during Covid pandemic.

Initiatives taken by Govt to reduce hunger: 4

- PM Garib Kalyan Yojana-Additional 5kg rice / person each month
- Extended to December 2022
- Zero Hunger programme
- 2017, to improve agriculture, health and nutrition.
- National Nutrition Mission
- Also called POSHAN Abhiyan
- Eat Right Movement
- FSAAI

- Despite all the effort to reduce hunger and reducing the number of people under poverty and hunger, the GHI Ranking doesn't reflect the reality due to procedural errors in calculating the index.

12) What is DMH 11? Why GEAC approved the DMH 11 and also explain the recent guidelines of supreme court to DMH 11?

DMH 11: 3

- Dhara Mustard Hybrid is an indigenously developed transgenic mustard-Genetically modified variant of Herbicide Tolerant (HT) mustard

Gene modification

- 2 alien genes from soil Bacterium – “Bacillus AmyLolique facians’.
- Enable breeding of high yielding commercial mustard hybrids.
- Developed by: Centre for Genetic Manipulation of crop plants, Delhi University

Why GEAC approved DMH11? 1

- Autonomous body of exports
- To appraise safety of genetically modified seeds.
- Approval was given for cultivation of farmers fields.

Reasons: 3

- Field trials showed approximately 28% more yield in national level and 37% in zonal level.
- Studies on toxicity, allergenicity and environmental safety are done
- Data provided they are safe for cultivation and for food and fee use.
- Safe for bees and pollination.

Recent Guidelines of Supreme Court: 5

- Due to concerns over environmental contamination due to GM crops
- SC asked if there is any compelling reason or release of GM Mustard

- Ordered Statuesque on government to allow cultivation of GM Mustard
- SC asked to take into account bringing more safeguards & safety measures.
- Experimentation, Consultation to be done before releasing it
- Better understanding of GM crops to be obtained

Technical expert committee report, 2013

- It was appointed by Supreme Court
- Not advisable to conduct any field trials in BT crops till regulatory systems area addressed.
- Release of BT Brinjal should not be allowed.
- Called HT crops unsustainable and unsuitable for India.
- Non GMO options are available.
- The introduction of GM crops attacks lot of criticism only approved GM crop for commercial cultivation in India is BT cotton. Several precautionary measures have to be taken before introducing a food / edible crops.

Unit - 3

1) Compare the condition of India before Independence and the condition of India after independence and explain the areas in which India needs to improve at 2047?

India before and after Independence 1

- Since 15th August 1947, India has shown remarkable progress in several fields like Science & Technology, economy and human development while lagging in some fields.

Science and Technology 1

- In 1947, India was broken, needy under developed and economically unstable.
- First satellite Aryabhata in 1975.
- India is standing at par with USA, China, Europe in field of biotechnology and space currently.

Economic

1

- Following independence illiteracy, corruption, poverty gender discrimination, untouchability, regionalism-In 1947, GDP – 2.7 lakh crore accounting for 3% of world, 147 lakh crore GDP – 8% global GDP.-Number of startups rose from 471 in 2016 to 72,993 in 2022.

Infrastructure

1

1. 1951 – 0.399 million km road network grown to 4.70 million km in 2015.
2. National Highway system
 - 24000 km to 1,37,625 km (2021)
3. Ability to produce energy
 - 1362 MW (1947) to 3,95,600 MW
4. Rural electrification-3060 (1950) to 18,452 villages

Human Development

5

- Literacy rate from 12% to 74.04%
- Life expectancy – 32 years to 70 years

Education and Health

1. Quality of higher education is still a concern
2. Health sector is worrisome : 0.7 doctors per 1000 compared to WHO recommended 2.5 doctors per 1000 people.
3. Out of pocket expenditure for health – 65%
 - Till now several measures lead to progress in several important sectors like defence, polio eradication but still there is lot of areas that need improvement to be achieved by 2047.

Areas needed to improve act 2047

6

- In Independence day speech on August 15, 2022 the PM of India said, “We must work towards turning India into a developed nation by 2047.

1. Economy

- Bring structural reforms in the economy

- Need to create employment opportunities in secondary and tertiary sectors-Increase per capita income.

2. Government Expenditure

- Need to increase public expenditure on health and education in per with developed countries.
- Strong action to curb corruption to be taken.

3. Local Governance

- Urban and rural local governance system should be given more authority & Independence.
- Urban planning process to be done to ensure sustainable and inclusivity

4. Utilisation of resources

- Physical, human and capital resources are being under utilized
- Digital divide needs to be addressed
- Improving HDI ranking with increasing the per capita income would help to achieve the aspiration set before the target year of 2047.

2) Explain about poverty level in India? What are freebies? Explain about the effects of freebies and distinguish between Freebies and welfare scheme

Poverty level in India

2

- Poverty – “Inability to attain a minimum standard of living” – World Bank
- According to 2011 population census-21.9% of Indian population lies below poverty line
- Roughly 27 crore lie below poverty line-NITI Aayog’s National multidimensional poverty index
- Approximately 1/4th Indians are multi dimensionally poor.
- Rural poverty is approximately 30%

Freebies

2

- Certain kinds of expenditure that are done under populist pressures or with elections in mind is called freebies.

- Political parties promises like offering free electricity / water supply, monthly allowance to unemployed, laptops etc.

Effects of Freebies

Positive Effects 3

1. Social Investment

- It acts as aid to the poor
- Some expenditure do have overall benefits such as PDS, employment guarantee scheme

2. Helps the lesser developed states

- For states with lower development with large population in poverty
- Essential to offer the people for their upliftment.

3. Better workforce and productivity

- MGNREGA type of spending and subsidy inform of good ration schemes.
- Laptops became basic necessities for education.

Negative effects 3

1. Macro economically unstable

- Large government spending, heavy pressure on public expenditure

2. Impact of states fiscal situation

- Huge barrier to economic growth
- Amount is being spend from government treasury.
- Limited private benefit for the receives

3. Against free and fair election

- It is used to attract voters to cast their vote in a particular election
- Influence the decision making
- Leads to mockery of democracy

4. A step away from the environment

- Wasteful expenditure impacting the economy and environment.

5. Undermines credit culture

- Disincentives work at current wage leads to drop in labour force participation

Freebies	Welfare Scheme 5
This is for free and persons needs to pay nothing. Makes people less productive	To provide a specific goods and services at subsidized Motivates people to work hard and increases productivity
Results in a considerable loss to the government revenue	Designed keeping in mind the government revenue.
Doesn't support medium term to longterm production	Public policy intervention having longterm impact.

Conclusion

- Schemes focusing basic needs of citizens into be given priority to fulfill the basic necessities and people do not rely on freebies.

3) What is COP27? Explain the role of India and significance of COP27.

COP 3

- Annual Conference of the parties to United Nations Framework convention on climate change (UNFCC)-First COP meeting – Berlin, Germany – 1995

- 27th COP meeting – Sharm El – Sheikh – 2022
- Meetings review the progress made by countries in fight against climate change and implementation of decisions taken in earlier COPs.

Role of India 3

1. India's aim of achieving net zero emissions by 2070 was announced at glasgoro summit (COP26)
2. India submitted its long term emissions growth strategy.

3. Indicates low carbon transition pathways in key economic sectors.
4. India updated its nationally determined contribution targets (NDC)
5. New initiatives
 - Renewable energy
 - e – mobility
 - ethanol blended fuels
 - green hydrogen
6. Seek to faster strong international cooperation through action and solution oriented coalition.
 - International solar alliance
 - Coalition of Disaster resilience infrastructure
7. Mission LIFE launched
 - Lifestyle for environment
8. India seeks to lead by example.

Significance of COP27

9

1. Loss and damage

- Refers to costs the rich and developed countries are majorly responsible for emissions.
- Pay to poorer nations who are vulnerable to extreme climate events
- To address losses that have already occurred.

2. 'Polluter pays' principle

- Making polluter liable for cost of remedial action
- Compensating the victims of environmental damage caused by their actions.

3. Finance for developing countries

- For low carbon transform actions-Building resilience to inevitable climate impacts
- Loss and damage from climate induced impacts

4. Climate finance

- Focus on increased finance flows to support positive climate action in developing countries.
- Encourage finance through other channels other than public finance.

5. Challenges with L and D

- It enables only prevention and pre disaster preparation
- Combining L and D with adaptation
- Compensation for land D was took off the table.

Conclusion

- Meeting the current pledge, addressing issue of transparency and double counting is need of the hour.

4) What is EWC? State the verdict of supreme court on it. And also explain that whether EWC is necessary to India or not?

Economically Weaker Section (EWS) Quota? 3

- 103rd constitutional Amendment Act, 2019 introduced 10% EWS quota.
- Inserted Article 15(6) and Article 16(6)
- Quota is available in
 - Admission to higher education institutions.
 - Initial recruitment in central government jobs.
- Enacted to promote welfare of poor not covered by 50% reservation policy SC, ST and SEBC's.
- Both centre and state can provide reservation.

Supreme court verdict

3

- A constitutional bench of supreme court in 3 : 2 majority decision upheld the validity of 103rd CAA.

Key arguments

A. Majority Opinion

- Reservation based only on economic criteria does not violate the basic structure of the constitution.

- Treating EWS as a separate class is a reasonable classification
- After 75 years since Independence time was to re visit system of reservation.
- Reservation is not an end, it is means, it should not be allowed to become a vested interest.

Necessity of EWS

3

1. Address inequality

- It is progressive
- Address issue of educational and income inequality

2. Recognition of Economic Backwardness

- Many people / classes other than backward classes living under hunger and poverty stricken conditions.
- Gives constitutional recognition to the poor from the upper castes.

3. Reduction of caste based discrimination

- Gradually remove the stigma associated with reservation.
- Historically reservation was related to castes.
- Upper caste looks down upon people who come through reservation.

Issues with EWS quota

6

1. Amendment is being discriminatory and violative of equality code.
2. Reduction within general category
 - Reduces the size of open category
 - Breaches 50 limit on total reservation.
3. Arbitrariness over income limit
 - Income limit being fixed at Rs. 8 lakh / year.
 - Same as excluding creamy layer from OBC reservation benefits.
4. Socio Economic backwardness
 - EWS quota people do not suffer from social or educational backwardness as OBC.

5. Not based on relevant data

- The criteria of income limit and justification of reservation is done without proper relevant data.

Conclusion

- The economic backwardness hampering merit is a real issue in India.
- This the EWS quota cannot be completely ruled out. But relevant data's can be collected to ensure mass acceptance and provide justification for such reservation.

5) Explain whether the Governor act as representative of Union government or the representative of constitution and also explain the disputes between Governor and Chief Minister.

Governor as representative of Union Government Appointment (Article 155)

1

- Governor of a state shall be appointed the President by warrant under his hand & seal.
- Pleasure of President makes him a representative of Union Government.

Article 163

7

- Governor acting on aid and advice of state council of minister except during his discretion.
- Nomination by Union government combined with discretionary power provides scope for centre meddling in state's affairs

Article 356

- Governor reports to governor incase of failure constitutional machine rot law and order in the state.
- The scope of discretionary is often being misused by the centre.

Governor as representative of constitution.

1. Governor has a dual role
 - Constitutional head of the state bounded by the advice of council ministers.

- Acting as vital link between union and states government.
- 2. Ensures smooth functioning of federalism
 - By acting as bridge between Union and states.
- 3. It is constitutionally mandates that there should be governor for each state – Article 153.
- 4. Discretionary power
 - Governor enjoys both constitutional and situational discretionary power.
 - To ensure smooth functioning of the constitution.
 - Pardoning power to ensure that the fundamental rights of citizens are protected (article 161)

Disputes between Governor and Chief Minister

West Bengal

6

- Governor has been accused of summoning the Chief Secretary and DGP on a regular basis.
- He had run in with Assembly speaker.- Withheld assent to a bill delaying civil body polls.
- Made allegations of impropriety in government schemes.

Maharashtra

- Governor stalled the speaker election since 2021.
- Refused to accept recommendation of CM & COM's on nomination to legislative council.

TamilNadu

- Governor not acted upon TN admission to UG medical degree bill.
- Indefinite delay in decision making is undermining the legislature.

Other issues

1

- Not consulting Chief Minister of state of appointing the governor,
- Governor using discretionary power to determine timing to prove majority.

- Reserving bill for the president and with holding assent for indefinite period.
- Frequent use of Article 356 for removing state ruled by opposition parties.
- Constitution Assembly envisaged creating a responsible government in states and that the discretionary power in no way will negate it.
- Also several committees on centre – state relations recommended to make governor office the 'Linchpin of State's constitutional apparatus.

6) 15 November, 2022, The world's population will cross 8 billion and India will Overtake China in 2023 as UN predicts. Explain whether population growth is boon or a bane.

- UN population fund stated that the world's population has reached 8 billion and it took 12 years to reach from 7 billion. **2**

Reason for the growth

- Due to gradual increases in human lifespan due to improvement in public health, nutrition, medicine & hygiene.
- Also result of high and Persistent levels of fertility in some countries.

India's population

6

- According to UNPF, India's population growth is stabling, still growing at 0.7% per year and is set to surpass China in 2023.
- India will continue to have one of the youngest population in the world till 2030.
- India's fertility rate (TFR) – 2.02% even below replacement level (2.1%)

Population Growth is bane

- Rapid population growth brings in several challenges with it

1. Hunger and poverty

- Eradicating poverty, combating hunger and malnutrition becomes challenging.
- Increasing health coverage & Education is difficult

2. Economy and productivity

- Youth have to skilled that are essential for growth of knowledge economy.
- Job opportunities have to be increased.
- Labour force participation of both men and women had to be addressed.

3. Climate change

- Increased pressure on environment and biodiversity
- High levels of pollution, degradation.

4. Elderly population

- Challenges accompanying the old age – Medical expenses, provision of old age homes, additional care tends to increase.

5. State wise focus

- In states like Uttar Pradesh and Bihar, TFR is higher than national average leading to continuous increasing in population.

Population growth is boon**1. Increased human capital****6**

- Currently India experiencing demographic window of opportunity – “Youth bulge till 2025”
- Providing education, health & skilling led to utilizing the increased human capital.

2. Advancements

- There is more scope for innovation, invention and creating genius.
- Lead to advancement in all fields creating better life standards.

3. Economics of scale

- Increased productivity and contribution
- Increased economic growth

4. Efficient population

- Advancement in technologies and demand leads to higher specialized individuals.
- The population growth is used effectively.

5. Increased working age population

- Higher contribution by working age population
- Increased revenue for government inform of taxation.
- Availability of resources for taking care of old age.

Conclusion**1**

- The demographic dividend which India is currently facing would be dividend or a disaster based on the measures government take to reap the benefits.

7) Explain about the Election Commission and need for Selection Committee to the Election Commission also explain the delay and explain the recommendations of the Supreme Court.**Election Commission of India (Article 324)****1**

1. Autonomous constitutional authority to administer Union and States election processes in India.
2. Administers elections to
 - Loksabha & Rajya Sabha
 - State Legislative assemblies
 - Offices of President and Vice President
3. Part XV of Indian Constitution deals with ECI.

Structure**2**

- Originally only one Election Commissioner.
- Election Commissioner Amendment Act 1989 – 1 CEC and 2 EC' (multi member body)

Appointment**2**

- President appoints Chief Election Commissioner and Election Commissioner
- Tenure – 6 years / upto 65 years of age.

Need for Selection Committee**2**

- Supreme Court agreed to hear a PIL seeking appointment of member of Election Commission by 3 member selection committee

- Prime Minister
- Leader of opposition of Lok Sabha
- Chief Justice of India
- Current process lacks transparency since President.
- Appoints based on recommendation of Prime Minister and council of ministers.
- No qualification is prescribed – Arbitrariness in Appointment
- Election commission responsible for free and fair election and has quasi judicial functions too.
- The ruling party has unlimited power to choose.
- Executive cannot be a sole participant in the appointment process.

Demand for Selection Committee 2

- Committees recommended
- Justice Tarkunde Committee (1975)
- Dinesh Goswami Committee (1990)
- Law Commission (2015)
- Second ARC recommended law minister, Deputy chairman of the Rajya Sabha also be included in Collegium
- 70th constitutional amendment bill, 1990 demanded for selection committee
- Presiding officer of both houses
- Leader of opposition in Loksabha
- Lack of political will, bill was withdrawn in 1993.

Constitutional Position 4

- Art 324 (2) – President shall make the appointment till the time there is no law being made by the Parliament for this purpose.
- In absence of such law, the appointment is done by President in executive domain.

Recommendations of Supreme Court

- An appointment committee to include Chief Justice of India to ensure neutrality.
- Central government must make a law on appointment of election commissioners.
- At present PM with aid and advice of CoM's make appointment as per transaction of business rules.
- Election Commissioners selection has to be made in most transparent manner.

Conclusion 2

- Deficiencies in present system of appointment process needs to be removed and adequate safeguard to be in place to ensure ethical and capable people head the concerned positions.

8) Explain NIA Organisation, Authority, Functions? Discuss the recent amendment's on NIA whether they will affect the federation of India. Explain

NIA – National Investigation Agency

Background 2

- NIA was established by NIA act, 2008 as the aftermath of Mumbai terror attack.
- It is a Central government body engaged in action against those who act against security and unity of the country under constitution.

Organization 2

- Head – Director General
- Appointed by the Central Government
- Power – Same as DGP with respect to the police force in a state.
- Various posts – Constable, sub inspectors, inspectors, sub superintendent, SP, DIG & IG.
- NIA has setup 38 special courts.
- Functions under Ministry of Home Affairs

Authority 4

- Powers to investigate crimes outside India
- Take actions against anyone involved in criminal activities

- No need to obtain permission from the state government of court regarding the operation.
- It is the duty of the State government to provide security to the NIA
- Has powers more than CBI.
- Power to arrest and imprison anyone suspected
- Full powers to take action against criminals even if they operate from abroad and affect India or Indians.
- Responsible for protection of Indians living abroad.

Functions

2

- Investigate professionally the scheduled offences utilizing the latest scientific methods.
- Facilitate a speedy and effective trial.
- Result oriented and professional organization giving importance to human rights and dignity
- Uphold the Indian constitution and the law of the land.
- Showing scientific temper and spirit of progress while discharging their duties.
- Helping states and other agencies a database of information and investigation.

NIA (amendment) Act, 2019

5

1. First important feature

- Expand the jurisdiction

- Investigate offences that are committed outside Indian territory

2. Second feature

- The government will have power to designate session courts as special courts
- Currently 38 special NIA courts

3. Third feature

- New offences added
- Human trafficking, counterfeit currency, Expensive substance act, 1908, Cyber terrorism

Amendments affects the federalism

- List of crimes under Section 6 also includes not serious offences which comes under state jurisdiction
- Schedule 7 of constitution – Union, State and Concurrent List. But offences investigated under the act includes public order and police – state list
- State authority us superseded and permission is not needed
- Person affecting the sovereignty of India can be arrested without any reason.
- This gives overarching power to central government and can use it to suppress freedom of speech & expression of states and individuals.

EVERYTHING IS EASY

When you are BUSY

But

NOTHING IS EASY

When you are LAZY

வெற்றியின் முகவரி
SURESH'
IAS ACADEMY since 2006