New revised criminal laws

- Union Home Minister Amit Shah introduced three revised Bills in the Lok Sabha to replace British era criminal laws: the Indian Penal Code (IPC) will be replaced by the Bharatiya Nyaya (Second) Sanhita Bill, 2023;
- The Code of Criminal Procedure (CrPC) by the Bharatiya Nagarik Suraksha (Second) Sanhita, 2023; and the Indian Evidence Act by the Bharatiya Sakshya (Second) Bill, 2023.
- British-era
 Bharatiya Nyaya (Second) Sanhita
 Bill, 2023
- Section 113 of the revised Bill has modified the definition of the crime of terrorism to entirely adopt the existing definition under Section 15 of the Unlawful Activities (Prevention) Act, 1967 (UAPA).
- The UAPA, is defined as a terrorist act 'with intent to threaten or likely to threaten the unity, integrity, economic security, or sovereignty of India or with intent to strike terror or likely to strike terror in the people or any section of the people in India or any foreign country.'

Accordingly, even nonviolent speech could be categorized as a terrorist act under this definition.

- However, the new definition differs from the UAPA's definition in one respect UAPA includes the production or smuggling or circulation only of high quality counterfeit Indian paper currency, coin, or any other material within the ambit of terrorism,
- Whereas the revised Bill widens this definition to cover the same activities concerning any counterfeit Indian paper currency, coin or of any other material.
- Further, possessing property derived from or through a terrorist act is punishable only if held knowingly.
- Similarly, harbouring a terrorist is punishable if it is done both voluntarily and knowingly.
- The offence of recruiting and training persons to engage in terrorist acts has been introduced, mirroring sections 18A and 18B of the UAPA.
- Notably, the Explanation to this section allows an officer not below the rank of Superintendent of Police to decide if the prosecution of a terrorist act should continue under the UAPA or section 113 of this Bill.
- The offense is punishable by death or imprisonment for life

Cruelty defined

- Another addition to the revised Bill is that it proposes to define "cruelty" against a woman by her husband and his relatives, which is punishable with a jail term of up to three years.
- The Hindu

Court proceedings

- The newly inserted section 73 stipulates that those who print or publish 'any matter' concerning court proceedings in rape or sexual assault cases without permission would be punished with a two year jail sentence and a fine.
- The original Bill made mob lynching and hate crime a separate category of murder for the first time.
- The offence dealt with cases where murder is committed by five or more persons acting in concert with one another, on grounds of race, caste or community, sex, place of birth, language, personal belief, or any other ground.

'Petty organised crime'

• The revised Bill includes a more precise definition of 'petty organised crime': Whoever, being a member of a group or gang, either singly or jointly, commits any act of theft, snatching, cheating, unauthorised selling of tickets, unauthorised betting or gambling, selling of public examination question papers or any other similar criminal act, is said to commit petty organised crime.'

Bharatiya Nagarik Suraksha (Second) Sanhita, 2023

- The original Bill introduced the concept of 'community service' as a form of punishment for petty offences
- This punishment has now been defined under Section 23 of the revised Bill.
- Community service is 'work which the court may order a convict to perform as a form of punishment that benefits the community, for which he shall not be entitled to any remuneration.
- In another change, the power of the police to use handcuffs has been expanded beyond the time of arrest to include the stage of production before court as well.

Conduct of court

- The original Bill permitted the conduct of court proceedings the audio-visualisual means.
 - Police custody
 - Section 187(3) of the Bill, which corresponds to Section 167 (2)(a) of the CrPC, does not contain the phrase 'otherwise than in the custody of the police' implying that the prescribed 15 day period of police custody can now be an aggregate of shorter

periods of custody sought over the entire period of an investigation lasting 60 or 90 days (depending on the nature of the offence.)

The Hindu

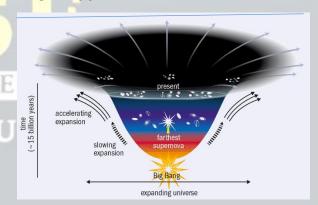
Bharatiya Sakshya (Second) Bill, 2023

- Revised to state that the admissibility of an electronic record is subject to section 63.
- requirement for a certificate under section 63 (corresponding to the requirement of a certificate under section 65B of the Indian Evidence Act).

Existing concerns

- Experts have flagged that the three revised Bills present a missed opportunity to rectify extensive over criminalization and wider police powers that aggravate State control.
- Pointing out that the provision of the Bharatiya Nagarik Suraksha (Second) Sanhita, 2023, which permits police custody beyond the initial 15 days of arrest endangers civil liberties,
- The BNSS expands the maximum limit of police custody under general criminal law from 15 days to either 60 days or 90 days (depending on the nature of the offense).
- The Hindu

- Cosmological constant
- Space as Einstein taught us is not a state of "nothingness".
- It is a bendable, stretchable medium that we occupy, much like water is for fish.
- Add energy uniformly across a patch of space and that patch will expand
- Dark energy dictates the rate at which space expands.
- From this we can estimate how much dark energy is present in any volume of space, by considering the size and age of the universe.
- The universe is wider than billions of light years and older than 10 billion years, so the dark energy is actually as dilute as one sugar crystal in a cubic kilometre
- The Hindu



What is Cosmological constant??

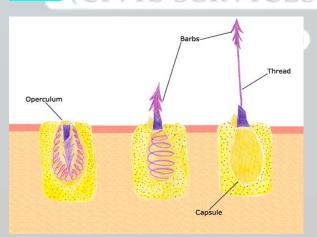
The cosmological constant is presumably an enigmatic form of matter or energy that acts in opposition to gravity and is

considered by many physicists to be equivalent to dark energy.

- Nobody really knows what the cosmological constant is exactly, but it is required in cosmological equations to reconcile theory with our observations of the universe.
- The Hindu

Nematocyst

- Evolution has come up with many strange ways to help animals defend themselves.
- One is a specialised cell called a nematocyst.
- Nematocysts are found in some animals, but especially jellyfish, corals, sea anemones, and hydras, that serve as potent weapons to hunt prey and fend off predators.
- Each nematocyst consists of a capsule containing a coiled, thread-like tubule and a bulbous structure with toxins.



- When stressed, the nematocyst rapidly ejects the tubule, often with an acceleration surpassing that of a bullet.
- Indeed, this mechanism is one of the fastest processes in the animal kingdom.
- Nematocysts play a crucial role in the feeding and defence strategies of cnidarians in particular.
- Cnidarians are animals that contain cells called cnidocytes.
- When potential prey comes into contact with a cnidocyte, specialised sensory structures on the cell's surface trigger the release of the nematocyst.
- The tubule then unfurls, piercing the prey's outer layer or injecting toxins into its body.
- The toxins in nematocysts also have different effects.
- Employment and prevalent macroeconomic changes
- At the outset, it is useful to distinguish the two types of employment that prevail in an economy such as India.
- The first is wage employment which is a result of labour demanded by employers in their pursuit of profits.
- The Indian economy has historically been characterized by the presence

of both open unemployment (out of work jobseekers) as well as high levels of informal employment consisting of the self- employed as well as casual wage workers.

- The last is also called "disguised unemployment" because, being similar to open unemployment, it also indicates a lack of adequate employment opportunities in the formal sector.
- This lack of opportunities is reflected by a more or less stagnant employment growth rate of salaried workers in the nonagricultural sector in the last four decades
- Under any given level of technological development, labour demand in the formal sector rises when demand for output rises.
- Second, labour demand depends on the state of technology that dictates the number of workers that firms need to hire to produce one unit of output.
- Introduction of labour saving technologies enables firms to produce the same amount of output by hiring a lower number of workers.
- As an economy grows, it is generally seen that it also becomes more productive.
- That is, in the process of producing a greater amount of total output, firms

become capable of producing more output per worker.

- presumption that increasing the output growth rate in the non-agricultural sector would be a sufficient condition for increasing the employment growth rate in the formal sector.
- But the evidence suggests that the employment challenge can no longer be met only through more rapid GDP growth.
- Rather, a separate policy focus is needed on employment in addition to the focus on GDP growth.
- Such employment policies will need both demand side and supply side components.
- For example, to the extent firms in India find it easier to automate due to a lack of adequate skilled labour, increasing the quality of the workforce through better public provisioning of education and health care, as well as bridging the skills gap, are important.
- On the demand side, direct public job creation will be needed.
- Financing such expenditures while maintaining debt stability requires the reorienting of the current macroeconomic framework in a significant way, including increasing

the direct tax to GDP ratio by reducing exemptions and improving compliance, and a more imaginative use of macro policy to pursue a constructive employment agenda.

Colombo security conclave

COLOMBO SECURITY CONCLAVE (CSC) Regional security grouping initially formed in 2011 as a trilateral Indian Ocean maritime security grouping of India, Sri Lanka and the Maldives MEMBERS India Sri Lanka Maldives Mauritius Bangladesh Seychelles Mauritius Itangladesh Myunnar Thalland

- India's National Security Adviser (NSA), Ajit Doval, took part in the sixth NSA meeting of the Colombo Security Conclave (CSC).
- The meeting reviewed the developments and progress made by the CSC in the last year and agreed upon a road map for the year 2024 to promote a safe, secure, and stable Indian Ocean.
- The meeting also included member states, Mauritius and Sri Lanka, and

- observer states, Bangladesh and Sevchelles.
- The Maldives, now under a new dispensation, was the only member state that was absent, underscoring the impact of domestic politics over regional collaboration. I

Changing dynamics

- The CSC underscores the evolving dynamics of the Indian Ocean.
- The organisation came into its own in 2011, with Sri Lanka joining India and the Maldives for a trilateral maritime security grouping but came to a standstill after 2014 due to rising tensions between India and the Maldives.
- In 2020, India not only pushed for the revival and institutionalisation of the organisation but also expressed interest in expanding the CSC to Mauritius, the Seychelles, and Bangladesh.
- The push for the CSC demonstrates India's evolving strategic vision for the Indian Ocean.
- The Indian Ocean is at the heart of an evolving multipolar world today, with extra regional powers competing to make inroads in the region.
- This competition will further increase as the Indo Pacific's importance grows.

- For India, a traditional power in the region, the CSC offers an opportunity to strengthen its leadership and security architecture.
- Since its independence, India has played an increasing role in promoting security in the Indian Ocean.
- The lack of capacity of island nations to secure the seas and counter transnational threats has continued to motivate India to assist them in defence and security related capacity building, infrastructure development, and equipment provision.

A revival that is linked to the China factor

- China is another crucial reason for the revival of CSC.
- Since the early 2000s, Beijing has invested substantively in the Indian Ocean with its Belt and Road Initiative (BRI) projects, helping it access the Indian Ocean.
- Beijing's outreach to the Indian Ocean is to control the crucial sea lines of communication and trade and to limit India's influence and presence.
- Today, China is not only strengthening its naval capabilities; it also maintains strong defence relationships with states in the Indian

- Ocean region and also conducts regular maritime exercises in the Ocean. It has established a base in Djibouti and controls Sri Lanka's Hambantota port.
- It continues to use scientific ships to map the Indian Ocean bed.
- Finally, it also wants to counter the prevailing security architecture in the Indian Ocean by institutionalising its presence through platforms such as the Indian Ocean Region Forum on Development Cooperation.
- Despite expressing concerns about some of these developments, India realises that many regional countries do not necessarily consider China a threat.
- They are also too dependent on China to have an overt anti-China policy.
- As a result, the CSC has focused on five pillars maritime security and safety; countering terrorism and radicalisation; trafficking and transnational crime; cyber cybersecurity and protecting critical infrastructure, and humanitarian assistance and disaster relief.
- It is with these sectors of cooperation that India hopes to better understand and respond to threats from the Indian Ocean and continue being a preferred partner for the Indian Ocean states.

- This strategic accommodation and flexibility is, in fact, contributing to the security of the Indian Ocean.
- Since 2021, the CSC has investigated terrorism and terror financing, narcotics trafficking, cybercrime and security, marine pollution, maritime law, and coastal security. In 2022, for the first time, the organization held a conference of oceanographers and hydrographers and another conference on coastal security.
- The Hindu

Climate change and health

- On December 3, the inaugural Health Day at COP28 highlighted the vital link between climate and health, underscoring that combating climate change is integral to advancing global health.
- The context to the day and the urgency to address the root cause of climate crisis fossil fuel use was set in early November with health leaders representing more than 46 million health professionals globally issuing an open letter calling on the COP28
- Presidency and world governments to "commit to an accelerated, just and equitable phase out of fossil fuels as the decisive path to health for all".
- Over 1,900 health professionals at this year's COP propelled the

- momentum to prioritise human health and wellbeing in climate decisions, taking centre stage.
- The COP28 Presidency, WHO, the UAE Ministry of Health and Prevention, and a group of champion countries also hosted the first ever climate health ministerial, which brought together nearly 50 Ministers of Health and 110 high level health ministerial staff.
- Ministers of health, environment, finance, and other related sectors set out a "roadmap and opportunities for action to address the rapidly growing burden of climate change on healthcare systems and capture the vast socio economic benefits from better health and wellbeing through climate action".
- An assessment of extreme weather events' brought out by Down To Earth magazine and the Centre for Science and Environment, India has seen a disaster nearly every day in the first nine months of this year from heat and cold waves, cyclones and lightning to heavy rain, floods, and landslides.
- These disasters have "claimed 2,923 human lives, affected 1.84 million hectares (ha) of crop area, destroyed over 80,563 houses and killed close to 92,519 livestock".

- According to the Reserve Bank of India's most recent report, as much as 4.5% of the country's GDP could be jeopardised by 2030 due to the impact of extreme heat and humidity on labour hours, emphasizing the economic risks associated with heatrelated challenges alone.
- Not to miss India's notoriety on its record on rising air pollution that caused at least 1.6 million premature deaths in 2019.
- Major public health challenges, including malaria, malnutrition, and diarrhoea, further compound the situation.

The Hindu



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(CIVIL SERVICES EXAMINATION)

FROM BASICS TO UPSC BRILLIANCE