



HEALTH AND EDUCATION

1. Doctors ring warning bells against antibiotics resistance in children.

Why in news?

- Antibiotic resistance has made it harder to treat many infections such as typhoid, pneumonia and tuberculosis.

AIIMS study

- Issued by the **World Health Organization (WHO)** recently, the warning only reinforced the findings of an **All India Institute of Medical Sciences (AIIMS)** research.
- It showed that antibiotic resistance can affect individuals of any age, even children.
- It found that nearly 26% of babies with sepsis died since **multiple drug resistance (MDR)** made the ailment untreatable.
- To assist in the “treatment” of antibiotic resistance and its impact on patients and communities, the **Indian Medical Association (IMA)** is working on a book titled “**When Not to Use Antibiotics**”.
- The retrospective study by researchers from **Case Western Reserve University School of Medicine** observed that more than 75% of antibiotic-resistant infections were already present at the time of hospitalization.
- It contradicts earlier studies showing that some infections were mostly hospital acquired.

Adverse impacts

- Antibiotic resistance prolongs hospitalization, increases cost of treatment and increases the risk of death.
- Bacterial infections resistant to multiple antibiotics are a concern especially in children.
- Limited number of stronger antibiotics currently approved for children compared to adults, putting them at higher risk of worse clinical outcomes.

Initiatives to tackle this public health threat

- The IMA has proposed— ‘**Jaroorat Bhi Hai Kya**’, ‘**3As — Avoid Antibiotic Abuse campaign**’, ‘**Use Wisely Not Widely**’ and ‘**Think Before you Ink**’.
- Doctors and patients should be aware of and advocate only judicious use of antibiotics.
- Over-prescription and self-prescription both need to be checked.

2. India runs out of life-saving HIV drug for children:

Why in news?

- **Cipla**, sole manufacturer of **Lopinavir** syrup, stopped production of the drug after Government failed to clear dues.

Issues

- Desperate over withdrawal of a life saving drug, children living with **HIV (CLHIV)** have written to Prime Minister Narendra Modi for help.
- The pharmaceutical company Cipla has in various forums cited delay in payments by the national programme for the HIV medicines by several years and even non-payment of its dues in many cases.
- Profits on child doses of HIV medicines are small and delayed payments are having a chilling effect on the ability of the **National AIDS Control Organization (NACO)** to convince the company to participate in the bids it invited annually.

Emergency tender

- Faced with a crisis, the Health Ministry says it has instructed **State AIDS Control Societies (SACS)** to purchase from local markets.
- Since the syrup has gone out of production, they are not available in retail markets.

Concerns

- Cipla will not move from its stand until either Global Fund or the Indian government settles the bills.
- The critical shortages are proving to be both tragic and embarrassing for India's HIV programme.
- The government is abdicating its constitutional responsibility to make available life saving medicines for the HIV community.
- It is also unfortunate that the present management of Cipla is walking away from its commitment to access to medicines all over the world, for which they are globally renowned.

SCIENCE & TECHNOLOGY

1. DRDO inks deal to make key alloy

Why in news?

- The **Defence Research and Development Organization (DRDO)** signed a technology transfer agreement with **Jindal Stainless (Hisar) Limited (JSHL)** for manufacturing **High Nitrogen Steel (HNS)**.
- The **"non-exclusive" licencing agreement for armour applications** was signed between the **Defence Metallurgical Research Laboratory (DMRL)**, the **Hyderabad-based laboratory of the DRDO** and the **JSHL**.

Applications of the HNS

- The alloy has significant applications in the defence sector, but currently the country is largely dependent on imports.
- HNS steel, has a much higher ballistic strength than normal steel, and will free the country of imports.
- Production of 15,000 to 20,000 tonnes of HNS per annum initially, which will be increased gradually.
- It will be priced 30-40% cheaper than the imported material.
- HNS is not only tough but also has good strength.

- In addition to being non-magnetic and corrosion-resistant, the HNS cost is about 40% less compared to **Rolled Homogenous Armour Steel (RHA)**.
- The HNS technology would further the Army's quest for lighter and high-performance armouring material compared to materials currently in use.
- HNS had passed multiple levels of ballistic tests in different calibres, with 8-10 times higher impact/blast protection.
- HNS, by virtue of its strength and characteristics, has potential application in all armoured vehicles.
- The JSHL has several upcoming programmes, including the **Infantry Combat Vehicle (ICV)**, **Light Specialty Vehicle (LSV)** and such others.

2. Green activist raises red flag over event on Yamuna bank

Why in news?

- **Manoj Misra**, the convener of **Yamuna Jiye Abhiyan**, rubbished the claims made by the **Art of Living (AOL) Foundation** about removal of debris to clean up the Yamuna floodplains and introduction of enzymes into the drains to clean up the river.

Major Issues

- Mr. Misra, has petitioned the **National Green Tribunal (NGT)** against the proposed **AOL festival**.
- He said that debris from a portion of the site has been removed, not out of any act of relief to the riverbed, but to use it to level low-lying areas and to dump it on the access roads that have been raised.
- An NGT-appointed panel has said in its report: The entire area of the floodplain between the Yamuna and DND flyover has been levelled flat.
- On the western side of the river, 50 to 60 hectares of floodplain have been completely destroyed.
- Natural vegetation comprising reeds, shrubs, trees have been removed.
- A large number of birds and other natural life on the floodplain have vanished.
- The site was a wonderful verdant marshy land with typical vegetation of a drain mouth [Barapula drain meets the river here].
- Also, the plans of AOL to introduce enzymes and plant trees at the site betray its total lack of understanding of a river system and its floodplains in general, and the restoration needs of this site in particular.
- Meanwhile, a detailed 'work-list' statement issued by AOL notes that when the site of the festival was identified in December 2015, there was already a massive dump of construction debris spread over 25 acres.
- The Art of Living further noted that the material used for the temporary construction was eco-friendly, which will not cause damage to the river or the environment.

3. Roadmap for second phase of Jal Abhiyan

Why in news?

- The **Rajasthan River Basin and Water Resources Planning Authority** has asked nodal officers of water sector wings to prepare within a week a roadmap for the second phase of the **Jal Swavalamban Abhiyan** for revival of traditional water sources.

Jal Swavalamban Abhiyan

- The country's largest water conservation campaign to make villages self-reliant in their water needs.
- The flagship programme has been promoted by Chief Minister Vasundhara Raje personally with sustained appeals to various sections such as corporate houses, voluntary groups, religious leaders and citizens, to contribute towards it.

Key features

- To ensure timely completion of work in the second phase and ensure success of scientific approach to watershed treatment.
- Harvesting of 11,170 million cubic feet of rainwater was carried out in 9,600 watershed structures constructed in 3,529 villages in the first phase.
- Rainwater Harvesting would be started in the cities as well with the active participation of elected representatives and officers of urban local bodies.
- Officials of the **Rural Development Department, National Rural Employment Guarantee Scheme** Commissionerate and Watershed and Land Conservation Department will join the programme in the villages.

4. Centre dithers on Western Ghats issue

Why in news?

- **The Environment Ministry** has dithered, for the second time in three years, from bringing into force a law that will make about **56,825 sqkm** of the **ecologically-rich Western Ghats** out of bounds for industrial development.

Other Issues

- On **February 27**, the government resuscitated a **draft notification** that was first published in March 2014 that specified how much land in various coastal States encompassing the Western Ghats would be earmarked as practically-inviolable.
- Because it wasn't made into a final law — thanks to objections from States — this lapsed in a year and a half and on September 2015, a fresh draft notification with the same numbers was reintroduced. This too would expire on March 4.
- The reiterated February notification open to public comment for 60 days allows the Centre to create an **Ecological Sensitive Area (ESA)** in the **Western Ghats (WG)**, a 1,500 km, ecologically-rich strip along the west coast spanning Gujarat, Maharashtra, Karnataka, Goa, Kerala and Tamil Nadu.
- Regions declared as the ESA will not be allowed to host mining and quarrying projects and building thermal power plants.

Gadgil committee

- **Ecologist Madhav Gadgil Committee** recommended in 2011 that all of the Western Ghats be declared as the ESA with only limited development allowed in graded zones—
- But States have forced the Centre to consistently delay imposing the ESA restrictions.
- A committee headed by **K. Kasturirangan**, former ISRO chairman, recommended that only about 60,000 sq km or about 37% of the WG and a significant reduction from that of the Gadgil committee be declared as ESA.

- Kerala managed to get this down to about 56,825 sqkm after forcing the Union Ministry of Environment and Forests (MoEF) to exclude 3,117 sqkm of settlements and agricultural land in the State from the ESA.

Fresh representation

- The 2017 notification, though technically open to public comment only for 60 days, would not automatically become law after that period. On the contrary,
- It paved the way for fresh representation from States on how much area could be demarcated as the ESA.

5. Staying cool

Why in News?

- India has launched the second phase of the programme to eliminate the use of **hydrochlorofluorocarbons (HCFC)** as part of its commitment under the **Montreal Protocol**, which requires the complete removal of chemicals that result in ozone depletion and aid global warming.

Uses of HCFC

- These are used mainly in the air-conditioning, refrigeration, polyurethane foam manufacturing and cold chain sectors, and must be replaced with better alternatives.

Increase in consumption of HCFC

- All these sectors are in high growth mode as emerging economies witness greater urbanization and higher agricultural productivity.
- In the developing world, split air-conditioning units, car ACs and commercial refrigeration record the highest use of these chemicals.
- It is imperative the Central government ensures that its efforts to upgrade industries using the \$44.1 million in funding available under the Protocol are scaled up to meet the need fully.
- Modernizing the technology used by 400 industrial units, many of them small and medium enterprises, by 2023 has to be complemented by policy changes that encourage adoption by consumers.
- Systemic change requires the active participation of State governments, which can enact and enforce new building codes and purchase regulations that are envisaged in the current phase.
- Newer refrigerants with lower global warming potential are available to industry, and there are some early adopters, while research on chemicals with greater energy reduction and very low contribution to global warming has to continue.
- Credentialed training of service technicians in the newer technologies is welcome as it will bring about change of refrigerants used in the repair and replacement market and create additional employment.
- It is important to make consumers aware of green options among products in terms of the underlying technologies, and incentivize adoption through tax structures.
- The Environment Ministry's proposal to prescribe energy-efficient temperature limits for air-conditioning units in public facilities is promising.

- The Centre should conduct audit of public buildings to determine whether they are suitably designed, as climate control relies as much on passive influences such as insulation, green roofing and the nature of materials used in construction.
- It is possible, for instance, to adopt the Paris idea and ask all major buildings to incorporate solar panel roofing or suitable green cover.
- The continued success of the Montreal Protocol in its goal to eliminate HCFCs by 2030 will depend on reducing the acquisition costs of cleaner technologies.
- The greater affordability of solar photovoltaic power and its rapid adoption at various scales is a clear pointer.
- More people will have access to air-conditioning and refrigeration in coming years, and the focus of government policy must be to make them energy-efficient and eco-friendly.

6. How to tame our forest fires

Why in news?

- Reports of fires in the dry deciduous forests of India, particularly in **Andhra Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra and Odisha.**

Major Issues

- Fighting fires with minimal equipment in challenging terrain poses grave risks.
- The bulk of forest fires in India occurs in the tropical dry forests of our country, an umbrella category encompassing scrub, savanna grassland, dry and moist-deciduous forests.
- Almost 70% of forests in India are composed of these types.
- Recent research on the ecology and bio-geographical origin of these forests indicates that fire occurrence and light availability are important factors that maintain the ecosystem.
- However, forest management still suffers from a colonial hangover intent on keeping production forestry systems free from fire in order to prevent the loss of 'stock'.
- Many trees are destroyed and on the other hand, many tree species distinct to dry forests have co-evolved with fires and have developed fire-resistance features like thick, spongy bark, and can re-sprout from rootstock in response to fire.

Blanket ban woes

- The roots of our current fire crisis lie squarely in the blanket implementation of a no-fire forest policy.
- This 'one-size-fits-all' approach of fire protection is perhaps incompatible with the ecology of India's tropical dry forests.
- For example, the fires in **Bandipur Tiger Reserve** were immensely difficult to control because of ample fuel supplied by the alien invasive species **Lantana camara.**
- Recent ethnographic and empirical research from the neighbouring **Biligiri Rangaswamy Tiger Reserve** indicates that a no-fire policy was likely responsible for the spread of Lantana in the first place.
- Additionally, frequent, low-intensity forest fires possibly prevented the proliferation of Lantana in the past, a time when fires were not yet anathema for forest managers.
- Tribal elders of the area predict that future forest fires will be difficult to control unless **Lantana biomass** is physically reduced first.
- Are frequent, small forest fires preferable to infrequent, catastrophic fires? Forest-dwellers of the area clearly seem to favour the former.

- Early dry season fires burn less hot, and are far less detrimental to vegetation than peak dry season fires which burn much hotter.
- Forest dwellers set fire to forests to clear walking paths, to collect non-timber forest products like gooseberry and mahua flowers, and to encourage the fresh growth of grass for their livestock, and sometimes as a part of ritual practice.
- Agriculturists set fire to hill forests so that the fertilising ash from fire washes down to their fields with the monsoon rains.
- For the forest dweller, therefore, fires have cultural and livelihood significance.
- The forest department, on the other hand, has historically prevented fire in order to protect timber stocks, and initiated a system of fire-lines around valuable timber 'compartments' or coupes.
- By burning the fire-lines before the onset of summer, forest fires, if they occurred, could be confined to a few compartments.
- Fire has been used as a management tool to increase the density of herbivores in tropical dry forests.
- The logic for this kind of burning is also related to the creation of fresh grass, but this time for consumption by wild herbivores rather than by cattle.
- In a centralized, top-down hierarchical system, these two broad ways of wielding fire are clearly incompatible.
- By enacting legislation that made the setting of forest fires an offence, the forest department gradually legitimized one world view of forests as timber and wildlife production systems and ignored other world views that envisioned forests as cultural and livelihood spaces.

MISC

1. River Ganga unlikely to be cleaned up by 2018.

Why in news?

- The government is unlikely to be able to clean the Ganga by 2018, a target set by Water Resources Minister Uma Bharti.

Key reasons

- Unreasonable directions by the **National Green Tribunal (NGT)** questioning the operating capacity of sewage treatment plants in **Uttar Pradesh**.
- Delay in clearances by State governments to execute projects.

STP's in U.P.

- Work at developing the **sewage treatment plants (STPs)** in **Uttar Pradesh** had stopped.
- It's because different expert groups, tasked by the court to estimate the sewage in the drains, had conflicting figures.
- These estimates are necessary to determine the processing capacity of a treatment plant.
- STPs of certain sizes are commissioned based on studies of how sewage varies daily, existing oxygen levels and several other criteria. There's a scientific process to it.
- But when this process is questioned, it cannot function.

Supreme Court's measures

- Supreme Court had transferred 30-year-old cases, which dealt with the tardiness in cleaning the Ganga, to the NGT.
- It has routinely pulled up officials in the **Central Pollution Control Board** and the **Union Ministry of Water Resources and Ganga Rejuvenation**, and the **Uttar Pradesh State Water Board**, for poorly executing projects.

NGT'S Role

- The NGT has fined officials for inaccurate information on the 30 drains in the State.
- Also fined for “wasting public money” on commissioning projects that didn't properly account for the pollution load in the city.
- Tasked the **Central Bureau of Investigation (CBI)** with probing how certain projects were cleared by the **Uttar Pradesh Jal Nigam** in **Garhmukteshwar**.

Other Concerns

- Out of a 20,000-crore clean-up programme, only 2,000 crore has been sanctioned to the **National Mission for Clean Ganga**.
- It is the executive authority tasked with commissioning treatment plants, cleaning and beautifying the ghats and setting up improved crematoria.
- To treat the 12,000 **Million Litres Per Day (MLD)** of sewage emptying into the river.
- The sewage meanders through 11 States from Uttarakhand to West Bengal, only capacity worth 4,000 MLD exists and of them, only plants with 1,000 MLD capacity were working.

2. Cyber insurance market growing rapidly: Swiss Re

Need of cyber security

- In the wake of concerns over cyber risk escalating by the day, businesses need to do much more to integrate cyber security into their risk management programmes, asserts **Swiss Re**.

Swiss Re Group

- **Zurich-based** Swiss Re Group is a wholesale provider of reinsurance, insurance and other insurance-based forms of risk transfer.

Swiss Re Group Report

- In its report titled “**Cyber: Getting to grips with a complex risk,**” it said, “the costs of a cyber breach can escalate well beyond managing the fallout of lost or corrupted data.”
- Firms must now factor in the potential damage to their reputation — physical and intellectual property — and also disruption to business operations.
- The increasing scope and magnitude of potential costs associated with cyber incidents reflect the ever-evolving cyber risk landscape.
- Three factors — speed of digital transformation, sophistication of hackers' alertness and spread of hyper-connectivity — governed the changing landscape.
- While a dedicated cyber insurance market was developing rapidly, the scope of its cover was modest relative to potential exposure.
- Product and process innovation and also advanced analytics will help foster improved cyber insurance solutions and extend both the boundaries of insurability and reach of cover.
- Some cyber risks, especially related to extreme catastrophic loss events, might be uninsurable.

- The reinsurer argued for a government-sponsored backstop similar to the state support for protection against catastrophic terrorism risks.
- Governments have an important role in promoting cyber resilience, including measures to improve cyber information capture and diffusion, and setting laws and regulations about how cyberspace is used and protected.
- By reshaping incentives and increasing awareness of cyber threats, governments can further nudge the private sector into developing improved market-led solutions.
- The sigma report is published under the "**Swiss Re Institute**" banner.

Swiss Re Institute

- The Swiss Re Institute was formally launched with an intention to provide high-quality research and outreach capabilities under one-roof.

3. Saving the Ghats

Why in news?

- The hesitation shown by the Central government in deciding upon full legal protection for one of its most prized natural assets, the **Western Ghats** in their totality, is a major disappointment.
- The idea that whatever is left of these fragile mountainous forests should be protected from unsustainable exploitation in the interests of present and future generations.
- While presenting sustainable ways of living to the communities that inhabit these landscapes, is being lost sight of.

Other Issues

- Quite unscientifically, the issue is being framed as one of **development-versus-conservation**.
- Given the weak effort at forging a consensus, there is little purpose in the Centre returning to the drawing board with another draft notification to identify ecologically sensitive areas.
- What it needs is a framework under which scientific evidence and public concerns are debated democratically and the baseline for **ESAs** arrived at.
- The Ghats play an irreplaceable role in mediating the monsoon over the country and the forests harbour a rich biodiversity that has not even been fully studied.
- New species continue to emerge each year in an area that has endemic plants and animals.
- Although, as the scientist **Norman Myers** wrote nearly two decades ago, only 6.8% of primary vegetation out of the original 182,500 sq km remains in the Western Ghats and Sri Lanka taken together.
- The ecologically sensitive nature of the forests stretching 1,600 km along the western coast as a global biodiversity hotspot was emphasised by the **Western Ghats Ecology Expert Panel** headed by **Madhav Gadgil**.
- While for conservation purposes, the **Kasturirangan Committee** identified only a third of the total area.
- Both expert groups have encountered resistance from State governments and industries, although they mutually differ in their recommendations.
- The question that needs speedy resolution is how much of the Western Ghats can be demarcated as ecologically sensitive, going beyond the system of national parks and sanctuaries that already exist.
- As a corollary, are other areas free to be exploited for industrial activity, including mining and deforestation, with no environmental consequences?

- A frequently cited example of **destruction is the loss of ecology in Goa** due to rampant, illegal mining.
- More complicated is the assessment of ecosystem services delivered by the forests, lakes, rivers and their biodiversity to communities.
- Mr. Gadgil, for instance, has underscored the unique value of some locations, such as those with fish or medicinal plant diversity peculiar to a small area, which should not get lost in the assessment process.

Recommendations

- All this points to the need for wider and more open consultation with people at all levels, imbuing the process with scientific insights.
- Several options to spare sensitive areas will emerge, such as community-led ecological tourism and agro-ecological farming.
- A national consultative process is urgently called for.

4. Law enforcement in the digital era

Digitization of the economy

- One consequence of the recent demonetization was a push towards the digitization of the economy — a move that will create transparency in the financial system.

Security concerns

- Greater security of digital transactions to deal with the tsunami of cybercrimes that is bound to follow.
- India's enforcement mechanisms, laws and policies must be re-examined immediately to ensure that the theft of data or money is dealt with severely, swiftly and transparently.

Finding of various Reports

- **ASSOCHAM-PwC** study found that cybercrime in India surged almost 300% between 2011 and 2014.
- **The Indian Computer Emergency Response Team (CERT-In)**, the national agency tasked with maintaining cyber security, reported more than 50,000 security incidents in 2015.
- With the push towards digital transactions, this number will only grow.
- As smart phones become the preferred mode of transactions, hacking, phishing and malware based attacks are serious concerns.
- The **Nokia malware report** showed a 96% surge in mobile device infections in 2016.

Challenges

- The logistical burden these incidents will place on law-enforcement the Judiciary, will be enormous.
- Police infrastructure, which doesn't yet have the capacity to handle existing cybercrimes, will be strained to breaking point in the coming surge.
- Dealing with cyber offences necessarily means upgrading the capabilities of law enforcement, either through new recruitment or by imparting technical training to existing personnel.
- But this prescription comes with its own problems, not least being the supply of qualified people.

- Given the salaries and perquisites in the public services vis-a-vis the private sector, hiring qualified people will be difficult.
- A differential pay structure or fast-track promotions will be problematic in the current system, which is strictly hierarchical.
- If existing personnel are trained rigorously, on the other hand, there is the danger that they will be poached by the private sector.

Recommendations

- The more promising option is a **Public Private Partnership (PPP)** to combat cybercrime.
- Such a partnership will draw upon the skills in the private sector to train the police, while providing practical experience in dealing with cybercrimes to corporate employees. Such models already exist and are fairly successful.
- One example is the **National Cyber Forensic Training Alliance (NCFTA)** in the **U.S.**, a non-profit platform that tackles cybercrime through partnerships with subject matter experts in the public, private, and academic sectors.
- A similar set-up in India is the **NASSCOM-affiliated Data Security Council of India (DSCI)**.
- The DSCI sets up cyber labs in different cities and imparts training.
- This model is now ripe for scale-up across the country and can be tapped into by the jurisdictional police.
- We must reshape our current cybercrime laws to address the likely surge in offences relating to digitisation.
- Given the borderless nature of cybercrimes, state police agencies need to be able to pursue offenders without worrying about jurisdiction.
- To allow for this, a pan-India cyber-enforcement force must be considered.
- Such a force can become a one-stop-shop for digital monetary fraud and will go a long way in assuaging the concerns of cyber-fraud victims.
- Such a force will also be able to identify trends and stop entities that prey on the gullibility of uninformed citizens transitioning to the digital economy.

5. U.S. nixed India's plea on reforms in medicine

Why in news?

- After the 140th **World Health Organization's (WHO)** Executive Board meeting, a **Freedom of Information Act (FOIA)** response has revealed that the **United States** government had opposed including agenda items proposed by India, which aimed at reforming medical innovation that currently pump up drug prices to unaffordable levels.
- The Indian government — along with 11 South East Asian countries — had proposed a discussion on an **'Access to Medicines' report** by the **United Nations High Level Panel**.
- The Panel had recommended reforms in the funding of biomedical research and development.
- The set of documents released by **Knowledge Ecology International (KEI)**, a not for profit organization that gives technical advice to governments, reveals that both the United States and the WHO opposed including the proposal by India.

Key Concerns

- The 11 member-states — **Bangladesh, Bhutan, South Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste** — as well as **Brazil, Iran, and South Africa** supported the inclusion of the agenda item.
- The delays by **WHO** to place the **UN HLP** recommendations on the agenda of the **WHO's EB** and subsequently at the **World Health Assembly** have drawn widespread criticism from Asian civil society organizations.
- The U.N. report says there is a need for an **RD treaty** and it recommended reforms in the area of **biomedical R&D**.
- The U.S. government has a policy of blocking all reforms that would lead to funding the R&D system in a way that it prioritizes diseases that kill million of people in the developing world.
- The U.S. government is not just a member-state of WHO but also a big donor.
- This is consistent with the U.S. policy to pressure countries like India to have more IP barriers while blocking all attempts at reforms.

Recommendations

- The **U.N. Access to Medicines report** had recommended solutions for remedying the policy incoherence between justifiable rights of inventors, trade rules and global public health targets.
- The report recommended that the governments and the private sector must refrain from explicit or implicit threats, tactics or strategies that undermine the right of WTO Members to use TRIPS flexibilities.

6. No denotified tribes in Tripura: Officials

Why in news?

- All **19 nomadic tribes** of the State of **Tripura** have been integrated into the list of Scheduled Tribes.

Background

- Tribal people constitute 33% of Tripura's population.
- Only five of the 19 clans are dominant.

NCDNT

- NCDNT has compiled the list of marginalized tribes in the State.
- The **NCDNT (National Commission for Denotified, Nomadic and Semi-Nomadic Tribes)** set up by the **Ministry of Social Justice and Empowerment**, examines various developmental aspects of nomadic and semi-nomadic tribes in the country.

7. Leaving the Continent

What is the European Union (Article 50) Bill or "Brexit Bill"?

- The Withdrawal from the **European Union (Article 50) Bill or "Brexit Bill"** is legislation that is currently being considered by the U.K. Parliament to authorise the British government to invoke Article 50 — notification of the country's exit from the **European Union (EU)**.

Where does the Bill currently stand?

- The Brexit Bill was passed without amendment by the elected House of Commons.

- In separate votes, each with a large majority, the House of Lords backed two amendments to the Bill.
- The first amendment required the U.K. to unilaterally preserve the existing rights of EU citizens already resident in the country.
- The second gives Parliament a veto on the final terms of the Brexit deal.

Arguments for and against the EU citizens' rights amendment

- Those who support preserving the EU-derived rights of some 3.2 million EU citizens resident in the U.K. argue that there is a strong moral case for it – not making bargaining chips out of people.
- There is an economic argument as well — uncertainty over their futures could mean workers leaving the U.K., adversely impacting businesses and the economy.
- The government does not want EU citizens' rights guaranteed before the rights of Britons resident in the EU are secured.

Arguments for and against the amendment regarding the Brexit deal's terms

- The Prime Minister has said she would give Parliament a vote on the final deal.
- This would entail the deal being presented as a *fait accompli*; Parliament would then have to take it or leave it. (The Prime Minister has also said she would rather have no deal than a bad deal).
- The amendment requires the Prime Minister to have the terms of the deal approved by both Houses of Parliament – failing which she will have to go back to the negotiating table.
- Critics of the amendment say this will constrict Prime Minister Theresa May's negotiating ability and provide incentives for the EU side to offer Britain a bad deal.
- They also say it subverts the will of the people which was ascertained via the referendum.
- Supporters of the amendment say that it places Parliament back at the heart of the process and protects the interests of the 48% who voted to remain in the EU in last year's referendum.

8. Commonwealth card mooted

Why in news?

- **Commonwealth nations** could consider a scheme similar to the **Business Travel Card scheme**, used across the **Asia-Pacific Economic Cooperation (APEC) forum**, as a means of promoting intra-Commonwealth trade and investment.
- This comes ahead of the **Inaugural Meeting of Commonwealth Trade Ministers in London on March 9-10, convened by the CWEIC, and the Commonwealth Secretariat.**

APEC scheme

- The scheme includes **19 fully participating countries**, including **Australia, Hong Kong, Russia and Singapore.**
- It allows the business travellers to apply for five-year-long, short-term, multiple-entry permits to other member states, freeing them from the need to apply for visas every time they travel.

Exploring opportunities

- The inaugural trade ministers meeting was planned before last June's Brexit referendum.

- But is being seen as particularly relevant in Britain, which is seeking new alliances outside the union.
- While Prime Minister Theresa May visited India last year, her government had signaled its eagerness to boost ties with other Commonwealth countries.
- Another focus area would be on the ease of doing business and the implementation of the **WTO facilitation agreement**, which came into force on February 22.

9. Firms allowed to export patented drugs

Delhi High Court Ruling

- The **Delhi High Court** allowed two Indian pharmaceutical companies — **Natco** and **Alembic** — to export generic versions of German drug major **Bayer's** patented invention **Sorafenib**, used in treatment of kidney cancer, and **Rivaroxaban**, which is a blood thinner, for research and development purposes.
- The court ruled that Indian generic drug makers have the fundamental right to make, sell and export patented medicines for purposes of regulatory approval and clinical trials.
- The same did not amount to infringement of the German company's patent.
- The court also held that a company cannot be barred from manufacturing and exporting a drug merely because there is no law to ensure that the patented product is used in the destination country for the same purpose for which it is exported.

'Fundamental right'

- The right of manufacturers/producers of medicines and of fine chemical producers, to make, construct and sell including by way of export, a patented invention, for the purposes prescribed in **Section 107A (of Patents Act)** is a fundamental right protected by **Article 19(1)(g)** of the Constitution and the sale cannot be curtailed except by express law.
- the court imposed a rider that they, during the life of the respective patent, will not export the respective patented invention for any purpose other than those specified in **Section 107 Patents Act (for development/ research purposes)**.

