www.vishnuias.com



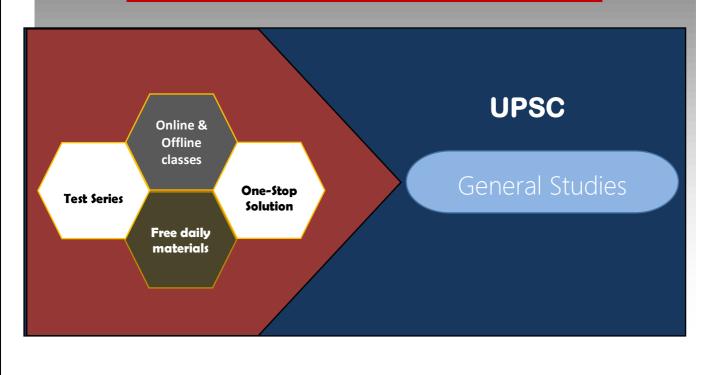
SEPTEMBER 18.09.2021



A MAGAZINEFOR CIVILSERVICESPREPARATION

JOIN OUR TELEGRAM: https://t.me/vishnuiasmentor

Articles of the day THE HINDU & INDIAN EXPRESS



VISHNU *1 A S*WWW.vishnuias.com

THE HINDU

GS 2 : Polity, Governance, International Relations

1. Agreement on Agriculture (AoA)

The Agreement on Agriculture at the WTO is riddled with deep imbalances, which favour the developed countries and have tilted the rules against many developing countries, a Union Minister has said.

Agreement on Agriculture

- The AoA is an international treaty of the World Trade Organization.
- It was negotiated during the Uruguay Round of the General Agreement on Tariffs and Trade, and entered into force with the establishment of the WTO on January 1, 1995.

Three pillars of AoA

The Agreement on Agriculture consists of three pillars – domestic support, market access, and export subsidies.

(1) Domestic support

- AoA divides domestic support into two categories: trade-distorting and non-trade-distorting (or minimally trade-distorting).
- It the classification of subsidies by "boxes" depending on consequences of production and trade:
- 1. Amber (most directly linked to production levels)
- 2. Blue (production-limiting programs that still distort trade)
- 3. Green (minimal distortion)

(2) Market access

- Market access refers to the reduction of tariff (or non-tariff) barriers to trade by WTO members.
- The 1995 AoA consists of tariff reductions of:
- 1. 36% average reduction developed countries with a minimum of 15% pertariff line reduction in next six years.
- 2. 24% average reduction developing countries with a minimum of 10% pertariff line reduction in next ten years.

VISHNU N A S*<u>www.vishnuias.com</u>

• Least developed countries (LDCs) were exempt from tariff reductions, but they either had to convert non-tariff barriers to tariffs – a process called tariffication – or "bind" their tariffs, creating a ceiling that could not be increased in future.

(3) Export subsidies

- The AoA required developed countries to reduce export subsidies by at least 36% (by value) or by 21% (by volume) over six years.
- For developing countries, the agreement required cuts were 24% (by value) and 14% (by volume) over ten years.

Criticism of AoA

- AoA has been criticized for reducing tariff protections for small farmers, a key source of income in developing countries, while simultaneously allowing rich countries to continue subsidizing agriculture at home.
- In 2017 India and China jointly submitted a proposal to the WTO calling for the elimination by developed countries of the most trade-distorting form of farm subsidies,
- They are known in WTO parlance as Aggregate Measurement of Support (AMS) or 'Amber Box' support as a prerequisite for consideration of other reforms in domestic support negotiations.

2. Model Tenancy Act:

In News :

Assam has become the first state to adopt the **Model Tenancy Act**. With this **Assam Urban Areas Rent Control Act**, **1972** gets repealed.

Impact:

• New Act will spur growth & development of transparent & accountable rental market & balance the interests of tenants & landlords. It will provide ecosystem for rapid dispute resolution.

Highlights of the Model Law:

VISHNU

- 1. **Applicable prospectively** and will not affect the existing tenancies.
- 2. Written agreement is a must for all new tenancies. The agreement will have to be submitted to the concerned **district 'Rent Authority'**.
- 3. The law also speaks about roles and responsibilities of landlord and tenants.
- 4. **No landlord or property manager can withhold any essential supply** to the premises occupied by the tenant.
- 5. **If tenancy has not been renewed**, the tenancy shall be deemed to be renewed on a month-to-month basis on the same terms and conditions as were in the expired tenancy agreement, for a maximum period of six months.
- 6. **Compensation in case of non-vacancy:** On the expiry of extended period of six months of agreed tenancy period or the termination of tenancy by order or notice, the tenant shall be a tenant in default and liable to pay **compensation of double of the monthly rent for two months and four times of the monthly rent thereafter.**
- 7. A landowner or property manager may enter a premise in accordance with written notice or notice through electronic medium served to the tenant at least twenty-four hours before the time of entry.

Significance:

It is an important piece of legislation that promises **to ease the burden on civil courts**, **unlock rental properties stuck in legal disputes**, and **prevent future tangles** by balancing the interests of tenants and landlords.

Need for a law in this regard:

- 1. Young, educated job seekers migrating to large metropolises often complain of **onerous tenancy conditions and obscene sums of money as security deposits** that they are asked to fork out to lease accommodation. In some cities, tenants are asked to pay security deposits amounting to 11 months of rent.
- 2. Also, some house owners routinely **breach tenants' right to privacy** by visiting the premises unannounced for sundry repair works.
- 3. Whimsical **rent raises** are another problem for tenants, many of whom complain of being squeezed as "captive customers".
- 4. Besides, Tenants are often accused of **"squatting" on the rented premises, or trying to grab the property.**

VISHNU <u>VISHNU</u> <u>WWW.vishnuias.com</u>

3. Maintenance and Welfare of Parents and Senior Citizens Act, 2007

In News:

Coming to the aid of senior citizen parents, the Bombay high court has directed a man and his family to vacate a flat within 10 days, failing which police would be used to forcibly evict them.

What's the issue?

As a last resort, the parents invoked the provisions of **the Maintenance and Welfare of Parents and Senior Citizens Act, 2007** and the special tribunal under the Act granted relief to the parents, against which the son and his family moved the high court.

Background:

The High Court of Karnataka has said that **there is a complete failure on the part of the State government to comply with its statutory obligation** of **establishing oldage homes** as per the provisions

Overview of the Act, 2007:

- This Act makes it legally obliging for adult children and heirs to provide for parents by way of a monthly allowance.
- This Act provides an inexpensive and speedy procedure to claim monthly maintenance for parents and senior citizens.
- According to this Act, parents could mean biological, adoptive or stepparents.
- Under this Act, there are also provisions to protect the life and property of such persons (elderly).

Is it mandatory for the state to set up old-age homes as per the law?

Section 19 of the law says, the State Government **may establish** and maintain such number of oldage homes at accessible places, as it may deem necessary, in a phased manner, **beginning with at least one in each district**.

VISHNU Masewww.vishnuias.com

• The State Government may also, **prescribe a scheme for management of oldage homes.**

4. Shanghai Cooperation Organisation (SCO):

In News:

The 21st meeting of the SCO Council of Heads of State was held on 17 September 2021 in **Dushanbe**, Tajikistan in hybrid format.

• The meeting was chaired by H.E. Emomali Rahmon, the President of Tajikistan.

About the SCO:

The Shanghai Cooperation Organisation (SCO) is a permanent intergovernmental international organization.

- The creation of SCO was announced on 15 June 2001 in Shanghai (China).
- The Shanghai Cooperation Organisation Charter was signed during the St.Petersburg SCO Heads of State meeting in June 2002, and entered into force on 19 September 2003.
- It was preceded by the **Shanghai Five mechanism**.
- The SCO's official languages are Russian and Chinese.

Founding members of SCO were-

- 1. The Republic of Kazakhstan,
- 2. The People's Republic of China,
- 3. The Kyrgyz Republic,
- 4. The Russian Federation,
- 5. The Republic of Tajikistan,
- 6. The Republic of Uzbekistan.

Background:

6

VISHNU N A S*<u>www.vishnuias.com</u>

- Kazakhstan, China, Kyrgyzstan, Russia and Tajikistan were members of the Shanghai Five, Prior to the creation of SCO in 2001.
- **Shanghai Five (1996)** emerged from a series of border demarcation and demilitarization talks which the four former Soviet republics held with China to ensure stability along the borders.
- Uzbekistan joined the organisation in 2001, following this the Shanghai Five was renamed the Shanghai Cooperation Organisation (SCO).
- India and Pakistan became members in 2017.

Member Countries:

Now, SCO is comprised of Eight Member countries. Namely-

- 1. Kazakhstan
- 2. China
- 3. Kyrgyzstan
- 4. Russia
- 5. Tajikistan
- 6. Uzbekistan
- 7. India
- 8. Pakistan

Objectives of SCO:

- Strengthening mutual trust and neighbourliness among the member states.
- Promoting their effective cooperation in politics, trade, the economy, research, technology and culture, as well as in education, energy, transport, tourism, environmental protection, and other areas.
- Making joint efforts to maintain and ensure peace, security and stability in the region.
- Moving towards the establishment of a democratic, fair and rational new international political and economic order.

Significance for India:

The SCO's significance for India lies in economics and geopolitics with the Eurasian states.

• SCO is a potential platform to advance India's Connect **Central Asia policy.** The SCO member states occupy the huge landmass adjacent to India's extended neighbourhood where India has both economic and security imperatives.

VISHNU N A S*<u>www.vishnuias.com</u>

- Importance of SCO-Afghanistan Contact Group **to stabilise Afghanistan**. SCO membership provides India a vital counter to some of the other groupings it is a part of.
- The SCO provides the only multilateral platform for India to deal in close proximity with Pakistan and Afghanistan.

GS 3 : Economy, Science and Technology, Environment

5. GST Council not for inclusion of Petroleum Products

The Goods and Services Tax (GST) Council has decided to keep petroleum products out of the GST regime.

Present taxation of Fuels

- Currently, taxes on petroleum products are levied by both the Centre and the states.
- While the Centre levies excise duty, states levy value added tax (VAT).
- For instance, VAT on petroleum products is as high as 40% in Maharashtra, contributing over ₹25,000 crore annually.
- By being able to levy VAT on these products, the state governments have control over their revenues.

Impact of inclusion of fuel under GST

- If petroleum products are included under the GST, there will be a uniform price of fuel across the country.
- However, petroleum products coming under GST not necessarily means that taxes or prices will come down.
- If the GST council decides to opt for a lower slab, taxes may come down.
- At present, India has four primary GST rates 5 percent, 12 percent, 18 percent and 28 percent.
- Levying a standard rate of GST on petrol would mean that the prices increase dramatically in Andaman and Nicobar, but on the flip side, they would fall in Maharashtra if the cumulative rate is lower than the current rate.

Key takeaways from States VAT

- Among the states, Rajasthan levies the highest tax across the country keeping VAT on petrol at 36 percent, followed by Telangana at 35.2 percent.
- Other states with more than 30 per cent VAT on petrol include Karnataka, Kerala, Assam, Andhra Pradesh, Delhi and Madhya Pradesh.

8

VISHNU MARKAWWW.vishnuias.com

- On diesel, the highest VAT rates are charged by states like Odisha, Telangana, Rajasthan and Chhattisgarh.
- So far, five states, West Bengal, Rajasthan, Meghalaya, Assam and Nagaland have cut taxes on fuel this year.

<mark>6. Green Bonds</mark>

In News:

Power Finance Corporation Ltd (PFC), the leading NBFC in power sector, has successfully issued its first ever Euro **Green Bonds**.

- It is the first ever Euro denominated Green bond issuance from India.
- Moreover, it is the **first ever Euro issuance by an Indian NBFC and the first Euro bond issuance from India** since 2017.

Green Bond

A green bond is a **type of fixed-income instrument** that is specifically earmarked to raise money for climate and environmental projects.

These bonds are **typically asset-linked and backed by the issuing entity's balance sheet**, so they usually carry the same credit rating as their issuers' other debt obligations.

- Green bonds may come with tax incentives to enhance their attractiveness to investors.
- The World Bank is a major issuer of green bonds. It has issued 164 such bonds since 2008, worth a combined \$14.4 billion. In 2020, the total issuance of green bonds was worth almost \$270 billion, according to the Climate Bond Initiative.

How Does it Work?

Green bonds work just like any other corporate or government bond.

- Borrowers issue these securities in order to secure financing for projects that will have a **positive environmental impact**, such as ecosystem restoration or reducing pollution.
- Investors who purchase these bonds can expect to make as the bond matures.
- In addition, there are often tax benefits for investing in green bonds.

VISHNU

Green Bonds Vs Blue Bonds:

Blue bonds are sustainability bonds to finance projects that **protect the ocean and related ecosystems**.

- This can include projects to support sustainable fisheries, protection of coral reefs and other fragile ecosystems, or reducing pollution and acidification.
- All blue bonds are green bonds, but not all green bonds are blue bonds.

Green Bonds Vs Climate Bonds:

"Green bonds" and "climate bonds" are sometimes used interchangeably, but some authorities use the latter term specifically for **projects focusing on reducing carbon emissions** or alleviating the effects of climate change.

<mark>7. 27th Global Ozone Day</mark>

Global Ozone Day:

World Ozone Day is celebrated on **16th September each year** to commemorate the signing of the **Montreal Protocol**.

- This international environmental treaty for phasing out of production and consumption of Ozone Depleting Substances came into force on this day in 1987.
- The Day is celebrated every year **to spread awareness among people about the depletion of Ozone Layer** and the measures taken/ to be taken to preserve it.

The theme World Ozone Day 2021: "Montreal Protocol – Keeping us, our food and vaccines cool".

Montreal Protocol:

The Montreal Protocol on Substances that Deplete the Ozone Layer (the Montreal Protocol) is an international agreement made in 1987.

VISHNU N A St<u>www.vishnuias.com</u>

- It was **designed to stop the production and import of ozone depleting substances** and reduce their concentration in the atmosphere to help protect the earth's ozone layer.
- The Montreal Protocol sits under the **Vienna Convention for the Protection of the Ozone Layer** (the Vienna Convention).

'Kigali Amendment'

Kigali Amendment was adopted by the **Parties to the Montreal Protocol on October, 2016** at 28th Meeting of the Parties to the Montreal Protocol held at Kigali, Rwanda.

- Under the Kigali Amendment; Parties to the Montreal Protocol will phase down production and consumption of Hydrofluorocarbons, commonly known as HFCs.
- All amendments and adjustments of the Montreal Protocol, prior to the Kigali Amendment have Universal support.

India's achievements in implementation of Montreal Protocol:

- India, as Party to the Montreal Protocol since June 1992, has been successfully implementing the Montreal Protocol.
- India has phased out Chlorofluorocarbons, Carbon tetrachloride, Halons, Methyl Bromide and Methyl Chloroform for controlled uses in line with the Montreal Protocol.
- **Currently Hydrochlorofluorocarbons are being phased out** as per the accelerated schedule of the Montreal Protocol.
- Hydrochlorofluorocarbons Phase out Management Plan (HPMP) Stage-I has been successfully implemented from 2012 to 2016 and HPMP Stage-II is currently under implementation from 2017 and will be completed by 2023.
- Government of India has recently decided to Ratify the Kigali Amendment to the Montreal Protocol.

Benefits of ratification of the Kigali Amendment:

• HFC phasedown is expected **to prevent the greenhouse gas emissions**, helping prevent climate change and would benefit the people.

VISHNU Massawww.vishnuias.com

• The industry producing and consuming Hydrofluorocarbons will be phasing out Hydrofluorocarbons as per the agreed schedule under and transition to non-HFC and low global warming potential technologies.

THE INDIAN EXPRESS

GS 2 : Polity, Governance, International Relations

1. Collective Security Treaty Organization (CSTO)

The Prime Minister has participated virtually in the Joint SCO (Shanghai Cooperation Organization)-CSTO Outreach Session on Afghanistan.

What is CSTO?

- The CSTO is a Russia-led military alliance of seven former Soviet states that was created in 2002.
- Current CSTO members are Armenia, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation and Tajikistan. Afghanistan and Serbia hold observer status in the CSTO.
- Its purpose is to ensure the collective defence of any member that faces external aggression.
- It has been described by political scientists as the Eurasian counterpart of NATO, which has 29 member states, while the CSTO has just six.

Outlined functions of CSTO

- CSTO supports arms sales and manufacturing as well as military training and exercises, making the CSTO the most important multilateral defence organization in the former Soviet Union.
- Beyond mutual defence, the CSTO also coordinates efforts in fighting the illegal circulation of weapons among member states and has developed law enforcement training for its members in pursuit of these aims.

What does CSTO membership provide?

• While CSTO membership means that member states are barred from joining other military alliances, limiting, for example, their relationship with NATO.

VISHNU NA SXWWW.vishnuias.com

- Its members receive discounts, subsidies, and other incentives to buy Russian arms, facilitating military cooperation.
- Most importantly, membership presumes certain key security assurances the most significant of which is deterring military aggression by third countries.
- In the CSTO, aggression against one signatory is perceived as aggression against all.
- It however remains unclear whether this feature works in practice.

<mark>2. Global Methane Pledge</mark>

Context U.S. President Joe Biden recently announced the Global Methane Pledge, a U.S.-EU led effort to cut methane emissions by a third by the end of this decade.

• The announcement was made at the Major Economies Forum on Energy and Climate (MEF), hosted virtually by the White House recently, in which leaders from several countries and the EU, as well as UN Secretary General António Guterres and (India's) Environment Minister participated.

Key takeaways

- The pledge will help in rapidly reducing the rate of global warming.
- It will also produce a very valuable side benefit, like improving public health and agricultural output.

About Methane

- Methane is a greenhouse gas.
- It is 80 times more potent than carbon dioxide in terms of its global warming capacity.
- Approximately 40% of methane emitted is from natural sources and about 60% comes from human-influenced sources, including livestock farming, rice agriculture, biomass burning and so forth.

Do you know?

- 26th Conference of the Parties (COP26), the UN climate conference in Glasgow, Will be held in November 2021.
- The objective is to review progress since the Paris Agreement (2015) on climate, with some countries making commitments to achieve net zero emissions by 2050.

VISHNU N A St WWW.vishnuias.com

• The Paris deal seeks to maintain temperature rises to under 2 degrees Celsius (and pursue the goal of limiting rises to below 1.5 degrees Celsius) above preindustrial levels by getting countries to commit to emission cuts.

GS 3 : Economy, Science and Technology, Environment

3. Rising unemployment is yet to receive the attention it deserves from government

Context

India's unemployment rate in August was 8.3 per cent. This was higher than the 7 per cent recorded in July. The month-to-month variations notwithstanding, these are all very high unemployment rates.

Why inflation gets more attention in India than unemployment?

- **Periodic Labour Force Survey (PLFS)** results showed the historically high unemployment rate of 6.1 per cent for 2017-18 (July to June). It was at a 45-year high.
- New norm at 7-8 per cent: Till then, India was used to recording an unemployment rate of around 3 per cent.
- Today, an unemployment rate of 7-8 per cent seems to be the norm and such levels do not seem to matter.
- The **unemployment rate** is not the most important labour market indicator for a country like India.
- Why inflation gets preference: Between inflation and unemployment, the two economic indicators conjoined theoretically by the Phillips curve, it is inflation that wields political power.
- Inflation hurts almost the **entire population**.
- Equally importantly, high **inflation rates can upset financial markets** that in turn exert pressure on regulators to keep inflation in control.
- Unemployment directly impacts only the unemployed, who don't count much.
- Worse still, society perceives being unemployed as **an individual shortcoming**, and not an outcome of a macroeconomic malaise.

VISHNU Www.vishnuias.com

What does low labour force participation rate (LFPR) indicate about the labour market in India?

- The unemployment rate is a measure of the economy's inability to provide jobs only **for those who seek work.**
- But, in India, very often people do not look for jobs in the belief that none are available which is reflected in a **low labour force participation rate (LFPR)**.
- India's LFPR is at around 40 per cent when the global rate is close to 60 per cent.
- It is important that this belief in the futility of a job hunt is overcome by an explosive creation of new good quality formal jobs.

Why employment rate is a useful indicator for India

- A useful labour market metric for a country like India is the employment rate.
- This measures the proportion of the **population over 14 years of age that is employed.**
- The definition of employment needs to be changed, at present, engaging in some economic activity for just one hour in any of the past seven days is counted as employment.
- India's record in providing employment to its people has been abysmally poor.
- **CMIE's definition of employment** indicates that in 2016-17, only 42.8 per cent of the working-age population was employed.
- In the year of the pandemic, it fell to 36.5 per cent.

Reverse migration in employment from manufacturing to low productivity employment

- People are moving away from factories as manufacturing jobs shrink, to farms that provide shelter largely in the form of disguised unemployment.
- It cannot be the desire of a nation to move people away from high productivity, better quality jobs in manufacturing to low productivity employment in agriculture or as gardeners or security guards in the household sector.
- Employment opportunities need to expand in areas where labour is deployed to deliver higher productivity for enterprise and higher returns to labour.

Way forward

• **Increase investment:** A large part of the solution to this lack of adequate jobs is in increasing investments.

VISHNU N A SX<u>WWW.vishnuias.com</u>

• Focus on demand size: For this, the investment climate needs to be businessfriendly and government interventions must shift away from supply-side support to spurring demand.

Conclusion

The government needs to come up with policies for generating employment opportunities and stemming the reverse migration from manufacturing jobs to low productivity employment.

4. National Monetization Pipeline shows promise — and limits

The government of India recently announced an asset monetization plan, wherein existing public assets worth Rs 6 trillion would be monetized by leasing them out to private operators for fixed terms.

The plan has generated a lot of print so it is worth discussing its pros and cons.

About NMP

- The identified assets are primarily concentrated in roads, railways, power, oil and gas, and telecoms.
- The lease proceeds are expected to be used for new infrastructure investment which, in turn, will contribute to the government's ambitious Rs 111 trillion infrastructure investment plan.

Important issues raised by the plan

[I] How much should the government expect to raise from the plan?

Revenue Potential

- In deciding the amount to bid for leasing rights, bidders compute the present discounted value of the annual cash flow from the asset for the duration of the lease.
- The biggest uncertainty in this calculation surrounds the cash flow on these public assets.
- Rates of return estimates on public capital in the US have been estimated to be upwards of 15 per cent.
- However, this is India with its myriad uncertainties regarding pricing, bill collection, asset quality, regulatory framework as well as policy reversals.

VISHNU MARKAWWW.vishnuias.com

• Hence there is significant uncertainty regarding the revenue potential of the plan.

[II] Is the plan likely to increase the efficiency of the economy?

a. Efficiency of the economy

- The NITI Aayog believes that the private sector is better at managing and operating the identified public assets than the public sector.
- There is certainly scope for efficiency gains. However, there are significant efficiency impediments too.
- One set of efficiency issues surrounds usage fees. A second factor related to efficiency is the effect of the plan on competition.

b. Stressed sectors

- The identified assets belong to core sectors of the economy spanning transport, energy and communication.
- Sectors like telecoms and ports have already seen rising concentration of ownership in recent years.
- An acceleration and extension of this trend to other segments of the infrastructure landscape would be seriously worrying.
- While some of this could well be rationalized through the stipulation of rules for the allocation of leasing rights, the plan is silent on this.

c. Financing of the lease bids

- If bidders finance their bids using domestic savings, there is a clear opportunity cost of the plan since these savings would otherwise have been invested in alternative projects.
- Moreover, the bidding for scarce domestic savings by prospective investors will also raise domestic interest rates which will put downward pressure on domestic private investment.
- It would also be worth reminding ourselves that the last round of PPP-based infrastructure funding routed through banks ended up with a heap of NPAs in public sector bank balance sheets.

Biggest flaw of the NMP

- **No clear objective:** The biggest drawback of the plan is that it fails to articulate the reasons for public sector inefficiency in asset management.
- **No focus on management:** If it is personnel-related, then privatizing management may be the right answer. If the inefficiency is related to constraints on pricing and bill collection, then the roots of the problem are

VISHNU Markeywww.vishnuias.com

unlikely to be addressed by leasing out their management to private operators.

• No clear assessment of underperforming sectors: The plan document also fails to outline whether the identified brownfield assets are the public sector's highest cash flow assets or the relatively under-performing ones.

Better alternatives for the govt

- The way around this is to welcome foreign investors to bid for the assets.
- But this will require serious political will since entrenching foreign influence on Indian public assets will generate controversy.
- On this aspect too, the announced plan is low on details.

Way forward

- If the private sector is indeed more efficient in running infrastructure assets, the most efficient strategy would be to lease out the worst-performing assets rather than the best performing ones.
- The NITI Aayog would do the policy landscape a big service by following up the proposal with a white paper that addresses some of these efficiency-related issues.
- Without that, the monetization plan, while intriguing, is incomplete.

Conclusion

- A monetization plan envisages the private sector paying an upfront fee to the government which the government uses for new infrastructure investment.
- As much as private bidders finance themselves by borrowing, this amounts to the private sector borrowing and handing over the funds to the government to invest in infrastructure.
- This could enhance efficiency in infrastructure investment only if the government faces higher interest rates in capital markets than the private sector.

5. Pseudo-melanism in Tigers of Simlipal

A team of scientists has resolved the genetic mystery of Simlipal's so-called black tigers.

What are Black Tigers?

• Tigers have a distinctive dark stripe pattern on a light background of white or golden.

VISHNU MARKAWWW.vishnuias.com

- A rare pattern variant, distinguished by stripes that are broadened and fused together, is also observed in both wild and captive populations.
- This is known as pseudo-melanism, which is different from true melanism, a condition characterized by unusually high deposition of melanin, a dark pigment.
- This pseudo-melanism is linked to a single mutation in Transmembrane Aminopeptidase Q (Taqpep), a gene responsible for similar traits in other cat species.

Where are they mostly found?

- While truly melanistic tigers are yet to be recorded, pseudo-melanistic ones have been camera-trapped repeatedly, and only, in Simlipal, a 2,750-km tiger reserve in Odisha, since 2007.
- Launched in 2017, the study was the first attempt to investigate the genetic basis for this unusual phenotype (appearance).

Why they are rare?

- Mutants are genetic variations which may occur spontaneously, but not frequently, in nature.
- A cub gets two copies of each gene from both parents, and a recessive gene can show up only in the absence of the dominant one.
- So, two normal-pattern tigers carrying the recessive pseudo-melanism gene will have to breed together for a one-in-four probability of giving birth to a black cub.
- But recessive genes are rare and it is unlikely that two unrelated tigers will carry the same one and pass it on together to a cub.

Connection with Simlipal TR

- In an ideal tiger world, where far-ranging individuals are never short of choices for partners, that makes succession of black tigers a rarity.
- Under exceptional circumstances, a black tiger may succeed as part of a very small population that is forced to inbreed in isolation for generations.
- As it turned out, that is what happened at Simlipal.
- Pseudo-melanistic tigers are also present in three zoos in India Nandankanan (Bhubaneswar), Arignar Anna Zoological Park (Chennai) and Bhagwan Birsa Biological Park (Ranchi) – where they were born in captivity.
- All of them have ancestral links to one individual from Simlipal.

VISHNU N A St<u>www.vishnuias.com</u>

What about natural selection?

- Natural selection eliminates the weakest from a gene pool, and the traits of the more successful get passed on.
- Niche modelling, the study said, shows higher frequency of melanistic leopards in darker tropical and subtropical forests than in drier open habitats.
- Likewise, darker coats may confer a selective advantage in both hunting and avoiding hunters in Simlipal's tropical moist deciduous and semi-evergreen closed-canopy forest, with a relatively darker understory.

6. General Sherman: World's largest tree

Two wildfires in California are burning through the Sequoia National Park in the Sierra Nevada that is home to some of the largest trees in the world.

Among these trees is the world's largest tree popularly known as General Sherman, which firefighters are now trying to protect from the blaze.

About General Sherman

- The General Sherman tree is the world's largest in terms of volume and exists in the Giant Forest sequoia grove of the national park.
- As per recent estimates, General Sherman is about 2,200 years old.
- It stands at a height of 275 feet (taller than the leaning tower of Pisa) and has a diameter of 36 feet at the base.
- Even 60 feet above the base, the tree has a diameter of 17.5 feet.
- Giant sequoia trees have existed in the national park for thousands of years and there are an estimated 2,000 such trees in the park.

WTO's Agreement on Agriculture pact

Context G-33 Virtual Informal Ministerial Meeting was recently held.

• In the meeting, the Indian commerce and industry ministry has recently pointed out that the agreement on Agriculture at the World trade organisation (WTO) is riddled with deep imbalances, which favour the developed countries and have tilted the rules against many developing countries.

What is G-33?

- The G33 (or the Friends of Special Products in agriculture) is a coalition of developing countries.
- It was established prior to the 2003 Cancun ministerial conference.

VISHNU Mass<u>www.vishnuias.com</u>

- The group has coordinated during the Doha Round of WTO negotiations, specifically in regard to agriculture.
- Dominated by India, the group seeks to limit the degree of market opening required of developing countries, especially with regard to agriculture.
- There are currently 47 member nations.

What is Agreement on Agriculture?

- The Agreement on Agriculture (AoA) is an international treaty of the World Trade Organization.
- It was negotiated during the Uruguay Round of the General Agreement on Tariffs and Trade, and entered into force with the establishment of the WTO on January 1, 1995.
- The Agreement has been criticised by civil society groups for reducing tariff protections for small farmers, a key source of income in developing countries, while simultaneously allowing rich countries to continue subsidizing agriculture at home.

Prelims Practice Questions

1. Consider the following statements:

- 1. The 'Crime in India' is an annual report published by the National Crime Records Bureau (NCRB).
- 2. The NCRB was set up on the recommendations of the National Police Commission in 1985.

Which of the statements given above is/are correct

A 1 only B 2 only C Both 1 and 2 D Neither 1 nor 2

VISHNU Masswww.vishnuias.com

Answer : A

Explanation

- The National Crime Records Bureau (NCRB) is headquartered in New Delhi, was set-up in 1986 under the Ministry of Home Affairs to function as a repository of information on crime and criminals so as to assist the investigators in linking crime to the perpetrators.
 - NCRB was set up based on the recommendations of the National Police Commission (1977-1981) and the MHA's Task Force (1985). Hence, statement 2 is not correct.
- NCRB brings out the **annual comprehensive statistics of crime** across the country ('Crime in India' report). **Hence, statement 1 is correct.**
 - Having been published since 1953, the report serves as a crucial tool in understanding the law and order situation across the country.

2 The RS Virus primarily affects which function in humans?

- a. Reproduction
- b. RNA synthesis
- c. Ribosomal activity
- d. Respiration

Answer: d

Explanation:

- RS (Respiratory Syncytial) Virus primarily affects respiration function in humans.
- Respiratory syncytial virus, also called human respiratory syncytial virus and human orthopneumovirus, is a very common, contagious virus that causes infections of the respiratory tract.

3. In which of the following countries the Sufficiency Economy Philosophy (SEP) was introduced after the Asian financial crisis, 1997?

A Myanmar

VISHNU MASSWWW.vishnuias.com

B Vietnam C Indonesia D Thailand

Answer : D

Explanation

- The **Sufficiency Economy Philosophy (SEP)** is based on the fundamental principle of **Thai culture**.
- Thailand believes that its homegrown development approach of SEP can serve as an alternative approach to achieving the Sustainable Development Goals (SDGs).
- Sufficiency Economy is an innovative approach to development designed for practical application over a wide range of problems and situations.
 - It is also part of the fundamental administration policy of the state (Thailand).
 - It was introduced in Thailand after the Asian financial crisis in 1997.
- It is a philosophy that guides one's inner thinking to immunize oneself from external shocks and can be applied in any setting and at any levels.
- Hence, option D is correct.

4. What best describes the term 'bad bank', seen recently in news?

- a. A bank used by those involved in money laundering and fraudulent activities
- b. A bank which is unable to honour its depositors
- c. A bank that takes over and resolves non-performing assets (NPAs) in the banking system
- d. A bank which deliberately violates the regulations of the central bank

Answer: c

Explanation:

- A bad bank is a bank set up to buy the bad loans and other illiquid holdings of another financial institution. The entity holding significant nonperforming assets will sell these holdings to the bad bank at market price.
- It will then manage and dispose of the assets to potential investors for eventual value realization. In other words, it will hold problem loans for public sector banks which can then be sold on to investors at a reduced price. This will ultimately help clean up the balance sheets of banks.

VISHNU N A SX WWW.vishnuias.com

- 5. Mura-Drava-Danube (MDD) was recently in the news, it is related to -
- A Landform established by the Danube river.
- B World's first five-country biosphere reserve.
- C Primitive tribe found in the Danube river valley.
- D New variety of fishes in Danube river.

Answer : B

Explanation

- Recently, Mura-Drava-Danube (MDD) was declared as the world's first 'five-country biosphere reserve' by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Hence, option B is correct.
- The biosphere reserve covers 700 kilometres of the Mura, Drava and Danube rivers and stretches across Austria, Slovenia, Croatia, Hungary and Serbia.
- The total area of the reserve is a million hectares in the so-called **'Amazon of Europe'**, which is now the largest riverine protected area in Europe.
- The biosphere "represented an important contribution to the European Green Deal (climate action plan) and contributed to the implementation of the EU Biodiversity Strategy in the Mura-Drava-Danube region."
- The strategy's aim is to revitalise 25,000 km of rivers and protect 30% of the European Union's land area by 2030.

6. Which of the following statements are correct?

- 1. The 'Doing Business' report is brought out by the World Economic Forum.
- 2. Its publication has been recently discontinued due to data irregularities and ethical concerns.

Select the correct answer from the code given below:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer: b

VISHNU Masswww.vishnuias.com

Explanation:

- The 'Doing Business' report is brought out by the World Bank.
- The World Bank Group has decided to discontinue publication of its 'Doing Business' rankings of country business climates after a review of data irregularities and ethical concerns in the 2018 and 2020 reports. The World Bank will work on a new approach to assessing countries' business and investment climates.

Mains Practice Questions

<u>1Q.</u> The government regulation on NGOs, at a time when the country especially requires robust civil society organisations and networks, is not desirable. Critically analyse. (250 words)

Approach

- Introduce the answer by starting with the context i.e. amendments in the FCRA act.
- Briefly explain the role of NGOs in India.
- Discuss the key provisions of the act and the concerns emanating from these amendments.
- Conclude suitably.

2Q. Though growth of Nationalism is attributed to the Western influence but Swami Vivekananda's nationalism is deeply rooted in Indian spirituality and morality. Discuss (250 words)

Approach

- Define nationalism from western perspective and how was it different from Vivekananda's perspective
- In body, identify different dimensions/ values on which Vivekananda's nationalism was based and point where it diverged from western nationalism
- In conclusion, suggest how this idea of nationalism embodied India's culture more comprehensively and how it impacted India's freedom struggle and ideas of other freedom fighters and leaders.

