1. Jal Jeevan Mission (JJM)

Why in News?

- The Ministry of Jal Shakti has recently approved Drinking Water Supply schemes of Rs. 15,381.72 Crore for Madhya Pradesh under Jal Jeevan Mission (JJM).

Highlights:

- It aims to ensure assured tap water supply or 'Har Ghar Jal' to all rural households by 2024.
- It is Launched in 2019, it envisages supply of 55 litres of water per person per day to every rural household through Functional Household Tap Connections (FHTC) by 2024.
- It looks to create a jan andolan for water, thereby making it everyone's priority. It comes under Jal Shakti Ministry.
- The mission ensures functionality of existing water supply systems and water connections, water quality monitoring and testing as well as sustainable agriculture.
- It also ensures conjunctive use of conserved water; drinking water source augmentation, drinking water supply system, grey water treatment and its reuse.
- It focuses on integrated demand and supply-side management of water at the local level.
- Creation of local infrastructure for source sustainability measures as mandatory elements, like rainwater harvesting, groundwater recharge and management of household wastewater for reuse, is undertaken in convergence with other government programmes/schemes.
- The Mission is based on a community approach to water and includes extensive Information, Education and Communication as a key component of the mission.
- Paani Samitis plan, implement, manage, operate and maintain village water supply systems.
- These consist of 10-15 members, with at least 50% women members and other members from Self-Help Groups, Accredited Social and Health Workers, Anganwadi teachers, etc.
- The committees prepare a one-time village action plan, merging all available village resources.
- The plan is approved in a Gram Sabha before implementation.

2. Financial Resolution and Deposit Insurance (FRDI) Bill

Why in News?

- The Finance Ministry has recently sought views of the Reserve Bank of India (RBI) on drafting a modified version of the Financial Resolution and Deposit Insurance (FRDI) Bill in order to deal with Insolvency of Firms in the financial sector.

Highlights:

- In 2018, the Government had withdrawn the FRDI Bill 2017 amid concerns over the security of bank deposits.
- The bill will provide for establishing a resolution authority, which would have powers to undertake prompt resolution for banks, insurance companies and systemically important financial firms.
- The legislation will also provide for an insurance of up to Rs 5 lakh for bank depositors, which already has a legal backing.
- Even as the RBI has come out with a Prompt Corrective Action framework for NBFCs (Non Banking Financial Companies), a need is being felt for a legislative backing for the entire financial sector. The current resolution regime is especially inappropriate for private sector financial firms in the light of significant expansion and many of these acquiring systemically important status in India.
- The provision of a single agency for resolution of financial firms is in line with the recommendations made by the Financial Sector Legislative Reforms Commission (FSLRC), 2011 headed by Justice B N Srikrishna.
- The Insolvency and Bankruptcy Code, 2021 along with the FRDI bill would have streamlined the procedure for the winding up or revival of an ailing financial sector firm.

3. Semiconductor

Why in News?

- There has recently been an abrupt and cascading shortage of semiconductors worldwide.

Highlights:

- Semiconductors are materials which have a conductivity between conductors (generally metals) and non-conductors or insulators (such as most ceramics). Semiconductors can be pure elements, such as silicon or germanium, or compounds such as gallium arsenide or cadmium selenide.

- Conductivity is the measure of the ease at which an electric charge or heat can pass through a material.
- They are also known as integrated circuits or more commonly just chips; they may be the tiniest yet most exacting product ever manufactured on a global scale
- It's an electric circuit with many components such as transistors and wiring formed on a semiconductor wafer. An electronic device comprising numerous of these components is called Integrated Circuit (IC), and can be found in electronic devices such as computers, smartphones, appliances, gaming hardware and medical equipment.
- These devices find widespread use in almost all industries, especially in the automobile industry.
- Electronic parts and components today account for 40% of the cost of a new internal combustion engine car, up from less than 20% two decades ago.
- Semiconductor Chips account for a bulk of this increase.

4. RBI approves Offline E-Payments

Why in News?

- The Reserve Bank of India (RBI) has come out with the framework for facilitating small-value digital payments in offline mode, a move that would promote digital payments in semi-urban and rural areas.

Offline E-payments:

- Offline digital payment does not require Internet or telecom connectivity.
- Such payments can be carried out face-to-face (proximity mode) using any channel or instrument like cards, wallets and mobile devices.
- Such transactions would not require an Additional Factor of Authentication.
- Since the transactions are offline, alerts (by way of SMS and/or e-mail) will be received by the customer after a time lag.
- There is a limit of ₹200 per transaction and an overall limit of ₹2,000 until the balance in the account is replenished.

Conditions Applied:

- Payment instruments shall be enabled for offline transactions only after the explicit consent of the customer.

- That apart, these transactions using cards will be allowed without a requirement to turn on the contactless transaction channel.
- The customers shall have recourse to the Reserve Bank – Integrated Ombudsman Scheme, as applicable, for grievance redressal.
- RBI retains the right to stop or modify the operations of any such payment solution that enables small value digital payments in offline mode.

5. Preparing for a green energy shift in 2022

Why in News?

- Political leaders find themselves currently amid a messy reality. The seemingly "irresistible force" for clean energy has met, it would appear, the "immovable object" of an embedded fossil fuel energy system.

Changes in the Energy Sector in 2021:

- Commitment to Net-zero: One hundred and thirty-three countries pledged to a "net-zero carbon emissions date" and most governments, corporates and civic entities have shown determination to "phase down" and eventually phase out fossil fuels from their energy basket.
- Price volatility: The petroleum market seesawed and was expectedly volatile.
- High price: Natural gas prices reached stratospheric levels as demand exceeded supplies and geopolitics compounded the Imbalance.

Five Trends that will shape the Emergent Energy Landscape:

- **Transition to clean energy will be long and expensive**
  - ✓ Redesign and rebuilding: The fossil fuel-based economic system will have to be redesigned and, in parts, rebuilt for clean energy to achieve scale.
  - ✓ The process will take decades and require massive capital infusion.
  - ✓ No country or multilateral institution can finance this transition individually.
  - ✓ The world needs to collaborate: The world will have to collaborate and if it fails to do so, the financing deficit will push back the transition even further.
  - ✓ Fossil fuels will dominate the energy basket during the transition
  - ✓ Fossil fuels will dominate the energy basket during this transition phase.
  - ✓ Contributing factors: As has been the case so far, its market will be defined by the "fundamentals" of demand, supply and geopolitics and the "non-fundamentals" of exchange rates and speculative trade.

- ✓ The price movements will be sharp, volatile and unexpected.
- ✓ The resurgence of market influence of OPEC plus after private companies move beyond fossil fuel
- ✓ The " OPEC plus" will resurge in market influence.
- ✓ The low-cost, high resource petrostates (Saudi Arabia, the Gulf nations, Iraq, Iran, Russia) will, in particular, gain greater control over the petroleum market as private companies move beyond fossils under pressure from shareholders and regulators.

Transition will Create New Centres of Energy Power:

- The Democratic Republic of Congo controls, more than 50 per cent of the global supply of cobalt; Australia holds a comparably large share of the lithium market; and China controls the mining, processing and refining of rare earth minerals.
- It is difficult to tell how and when these countries will exercise their market power but it is clear that the "green transition" will create new centres of energy power.
- Nationalism and political opportunism will influence energy policy
- The US and China are currently embroiled in a "Cold War" over technology, trade, cyber issues and the South China Sea.
- The US and China appear to be in a similar face-off. But that has not come in the way of their Energy Relations. A few weeks ago, the two countries decided to coordinate the release of oil stocks from their strategic reserves to cool off the oil market.
- The underlying reality is that national self-interest and short-term political ambition will be the defining determinant of future energy supply relations cutting across values and rhetoric.

Suggestions for India:

- Nurture relations with traditional suppliers: India must assiduously Nurture Relations with Our Traditional Suppliers of oil and gas.
- It must not assume their role in the energy market will diminish.
- Increase storage capacity of strategic reserves: It should accelerate the build-up of the storage capacity for oil and gas; the latter to hold strategic oil reserves, the former to store Gas for inter alia conversion to blue hydrogen.
- Ecosystem for search and development of minerals required for clean energy: It must create a Facilitative Ecosystem for the search and development of the minerals and metals required for clean energy.
- Clean energy supply chain: It should create a "clean energy aatmanirbhar supply chain".