

UPPSC/UPPCS MAINS 2018

GS PAPER - 3

Section - A

1. Evaluate the effects of globalization on industrial development in India.

Approach

1. Briefly introduce the globalization and changes made by India in this regard
2. Impact of Globalization on Industrial development in India
3. Conclusion

Hints:

Globalization means the dismantling of trade barriers between nations and the integration of the nations economies through financial flow, trade in goods and services, and corporate investments between nations. Globalization has increased across the world in recent years due to the fast progress that has been made in the field of technology especially in communications and transport. The government of India made changes in its economic policy in 1991 by which it allowed direct foreign investments in the country.

Impact of Globalization on Industrial Sector:

Positive impact

- Effects of Globalization on Indian Industry started when the government opened the country's markets to foreign investments in the early 1990s.
- India gained highly from the LPG model as its GDP increased to 9.7% in 2007-2008. In respect of market capitalization, India ranks fourth in the world.
- Globalization of the Indian Industry took place in its various sectors such as steel, pharmaceutical, petroleum, chemical, textile, cement, retail, and BPO.
- The benefits of the effects of globalization in the Indian Industry are that many foreign companies set up industries in India, especially in the pharmaceutical, BPO, petroleum, manufacturing, and chemical sectors and this helped to provide employment to many people in the country.
- This helped reduce the level of unemployment and poverty in the country. Also the benefit of the Effects of Globalization on Indian Industry are that the foreign companies brought in highly advanced technology with them and this helped to make the Indian Industry more technologically advanced.

Negative impact

- The negative Effects of Globalization on Indian Industry are that with the coming of technology the number of labor required decreased and this resulted in many people being removed from their jobs. This happened mainly in the pharmaceutical, chemical, manufacturing, and cement industries.

- Even after globalization, condition of agriculture has not improved. The share of agriculture in the GDP is only 17%.
- The number of landless families has increased and farmers are still committing suicide.

Conclusion:

The lesson of recent experience is that a country must carefully choose a combination of policies that best enables it to take the opportunity - while avoiding the pitfalls. To conclude we can say that the modernization that we see around us in our daily life is a contribution of Globalization. Globalization has both positive and as well as negative impacts on various sectors of Indian Economy. So Globalization has taken us a long way from 1991 which has resultant in the advancement our country.

2. Describe the targets of energy generation through renewable energy sources in accordance with National Energy Policy 2017 drafted by NITI Aayog.

Approach

1. Introduce by giving brief overview about National Energy Policy 2017
2. Highlight the targets of energy generation in accordance with NEP 2017
3. Conclusion

Hints:

The 2017 National Energy Policy (NEP), drafted by the NITI Aayog, takes the baton forward from the 2006 Integrated Energy Policy in setting the trajectory of growth for the energy sector. The NEP, however, contains a list of general courses of action for the government – identified objectives that could be considered for implementation.

The targets of energy generation through renewable energy sources in accordance with NEP 2017

- Renewable energy capacity target of 175 GW has been declared for the year 2022, by 2040 a likely capacity of 597-710 GW is expected to be achieved.
- No targets are proposed beyond 2022 as the growth is expected to take place autonomously.
- The period 2017-2040 will, therefore, witness a transformation in the electricity sector of India, calling for policy action across the entire value chain of generation, transmission and distribution.
- In the NEP, Large hydropower also considers as renewable energy.
- Electricity markets are now expected to take over the role that Government subsidies have played so far. The sharp reduction in tariffs received in bids for solar and wind power points towards two aspects.
- Exposing these technologies to market discipline
- Need to now address other lagging renewable sources such as hydro and biomass.
- NEP proposes gradual withdrawal of the provisions of ‘must-run’ status and other supports such as non-levy of inter-State transmission charges.
- The NEP advocates framing of a Bioenergy Policy that encompasses all forms of biomass-based energy (solid fuel, first/second generation biofuels and gasifying biomass).
- The present strategy of promoting ethanol and biodiesel admixtures in liquid transport fuels will be continued, even while the Government’s recent focus on augmenting the supply of ethanol through 2nd generation technologies will be pursued vigorously.
- NITI Aayog will offer a platform to bring the Central Ministries and State Governments together to solve the inter-agency issues related to integration and growth of Renewable Energy in the country as per the Renewable Energy Integration Roadmap 2030.

- Reduce the risk of the DISCOMS from having to arrange back-up/balancing supply. A scheme to give feed-in-tariff to the existing stranded gas based capacity will be launched to address the balancing issues of renewable power.
- Electric Vehicles that can also double up as a storage device. Suitable application of time-of-the-day tariff mechanisms will be applied to encourage EVs to store-up renewable energy when it is available in excess of demand.

Conclusion:

The NEP aims at supporting the Indian ambition to emerge as a well-developed and resilient economy with high level of human development. Additionally, it helps prepare the nation to anticipate the technological and market related changes in the renewable energy sector. However, as articulated by some academics, the policy needs to be more specific with steps for implementation rather than as a framework vision document.

3. Throw light on the 'Pursuit of Sustainable Development Goals (SDGs) in India'.

Approach

1. Give brief introduction about SDGs in India
2. Discuss in detail about the pursuit of SDGs in India
3. Highlight the National Action on the SDGs in India
4. Conclusion

Hints:

The 17 SDGs and 169 targets are part of the 2030 Agenda for Sustainable Development adopted by 193 Member States at the UN General Assembly Summit in September 2015, and which came into effect on 1 January 2016. These goals are the result of an unprecedented consultative process that brought national governments and millions of citizens from across the globe together to negotiate and adopt the global path to sustainable development for the next 15 years.

India along with other countries signed the declaration on the 2030 Agenda for Sustainable Development, comprising of seventeen Sustainable Development Goals (SDGs) at the Sustainable Development Summit of the United Nations in September 2015.

Pursuit of Sustainable Development Goals (SDGs) in India:

- The Government of India is strongly committed to the 2030 Agenda, including the SDGs, as evidenced by the statements of the Prime Minister and other senior Ministers at national and international meetings.
- India’s national development goals and its policy initiatives for inclusive development converge well with the SDGs, and India will play a leading role in determining the success of the SDGs, globally. As Prime Minister Narendra Modi noted, “These goals reflect our evolving understanding of the social, economic and environmental linkages that define our lives.”

National Action on the SDGs in India

- NITI Aayog, the Government of India’s premier think tank, has been entrusted with the task of coordinating the SDGs.
- NITI Aayog has undertaken a mapping of schemes as they relate to the SDGs and their targets, and has identified lead and supporting ministries for each target.
- They have adopted a government-wide approach to sustainable development, emphasising the interconnected nature of the SDGs across economic, social and environmental pillars.
- States have been advised to undertake a similar mapping of their schemes, including centrally sponsored schemes.

- In addition, the Ministry of Statistics and Programme Implementation (MoSPI) has been leading discussions for developing national indicators for the SDGs.
- **State governments** are key to India's progress on the SDG Agenda as they are best placed to 'put people first' and to ensuring that 'no one is left behind'.
- Many of the Government's flagship programmes such as Swachh Bharat, Make in India, Skill India, and Digital India are at the core of the SDGs. State and local governments play a pivotal role in many of these programmes.
- **The role of local governments** is equally important; 15 of the 17 SDGs directly relate to activities undertaken by local governments in the country. State governments are paying keen attention to visioning, planning, budgeting, and developing implementation and monitoring systems for the SDGs.

Thus, achieving the SDGs requires the partnership of governments, private sector, civil society and citizens alike to make sure we leave a better planet for future generations.

4. What is Pradhanmantri Kisan Sampada (SAMPADA) Yojana? Mention its objectives and provisions.

Approach

1. Write introduction about SAMPADA Yojana
2. Discuss its objectives and provisions

Hints:

Central Sector Scheme - SAMPADA (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) was approved by the Cabinet Committee on Economic Affairs (CCEA) in 2017. This umbrella scheme has now been renamed as the "Pradhan Mantri Kisan Sampada Yojana (PMKSY)" to be implemented by Ministry of Food Processing Industries (MoFPI).

- PM Kisan SAMPADA Yojana is a comprehensive package which aims to create modern infrastructure with efficient supply chain management from farm gate to retail outlet.
- It will not only provide a big boost to the growth of food processing sector in the country but also help in providing better returns to farmers and is a big step towards doubling of farmers income, creating huge employment opportunities especially in the rural areas, reducing wastage of agricultural produce, increasing the processing level and enhancing the export of the processed foods.

Objectives of pm Kisan Sampada Yojana

- Creation of modern infrastructure for food processing mega food parks/ clusters and individual units/ Preservation Capacities (Unit Scheme)
- To create effective backward and forward linkages - linking farmers, processors and markets
- To create robust supply chain infrastructure for perishables
- Integrated Cold Chain and Value Addition Infrastructure
- Infrastructure for Agro-processing Clusters
- Creation of Backward and Forward Linkages
- Food Safety and Quality Assurance Infrastructure
- Human Resources and Institutions

5. What is meant by 'Technology Mission in India' agriculture? Discuss its objectives.

Approach

1. Introduce by giving the concept of Technology Mission in India
2. Discuss its objectives in detail

Hints:

Agricultural Technology, including the adoption/ promotion of critical inputs, and improved agronomic practices were being disseminated under 17 different schemes of the Department of Agriculture & Cooperation, Ministry of Agriculture during the 11th Plan period. The Modified Extension Reforms Scheme was introduced in 2010 with the objective of strengthening extension machinery and utilizing it for synergizing interventions under these schemes under the umbrella of the Agriculture Technology Management Agency (ATMA).

The National Mission on Agricultural Extension and Technology (NMAET) has been envisaged as the next step towards this objective through the amalgamation of these schemes.

The objective of the Technology Mission in India' agriculture

- The objective of the Scheme is to make the extension system farmer-driven and farmer-accountable by way of new institutional arrangements for technology dissemination.
- It aims to restructure and strengthen agricultural extension to enable delivery of appropriate technology and improved agronomic practices to farmers.
- This is envisaged to be achieved by a judicious mix of extensive physical outreach and interactive methods of information dissemination, use of ICT, popularisation of modern and appropriate technologies, capacity building and institution strengthening to promote mechanisation, availability of quality seeds, plant protection etc. and encourage aggregation of Farmers into Interest Groups (FIGs) to form Farmer Producer Organisations (FPOs).

6. What is Cyber Security Science? Mention its importance.

Approach

1. Start with giving introduction about cyber-security science
2. Discuss briefly its importance and essential elements

Hints:

Cyber security science is an important aspect of the understanding, development, and practice of cyber security. Cyber security is a broad category, covering the technology and practices used to protect computer networks, computers, and data from harm. People throughout industry, academia, and government all use formal and informal science to create and expand cyber security knowledge. As a discipline, the field of cyber security requires authentic knowledge to explore and reason about the "how and why" we build or deploy security controls.

Cyber security is an applied science. That is, people in the field often apply known facts and scientific discoveries to create useful applications, often in the form of technology.

The Importance of Cyber security Science

- The scientific method is a structured way of investigating the world. This group of techniques can be used to gain knowledge, study the state of the world, correct errors in current knowledge, and integrate facts. Importantly for us, the scientific method contributes to a theoretical and practical understanding of cyber security.
- Central motivations for the scientific method are to uncover new truths and to root out error, common goals shared with cyber security.

- Businesses need new products and innovations to stay alive, and science can produce amazing and sometimes unexpected results to create and improve technology and cyber security.

Cyber security Science contains only five essential elements:

- Formulating a question from previous observations, measurements, or experiments
- Induction and formulation of hypotheses
- Making predictions from the hypotheses
- Experimental testing of the predictions
- Analysis and modification of the hypotheses

7. Discuss the Fields in which the application of biotechnology are being done.

Approach

1. Write a brief introduction about biotechnology
2. Discuss its application and fields in which they are widely used in today's world

Hints:

Biotechnology has application in four major industrial areas, including health care (medical), crop production and agriculture, non food (industrial) uses of crops and other products (e.g. biodegradable plastics, vegetable oil, biofuels), and environmental uses.

Applications of Biotechnology in Medicine

- Biotechnology techniques are used in medicine for diagnosis and treating different diseases. It gives opportunities for the people to protect themselves from dangerous diseases.
- The field of Biotechnology, genetic engineering has introduced techniques like gene therapy, recombinant DNA technology and polymerase chain reaction which use genes and DNA molecules to diagnose diseases and insert new and healthy genes in the body which replace the damaged cells.
- There are some applications of biotechnology which are playing their part in the field of medicine and giving good results:
 - **Biopharmaceuticals:** The drugs are being developed with the use of microorganisms without using any synthetic materials and chemicals. Large molecules of proteins are usually the source of biopharmaceutical drugs. They when targeted in the body attack the hidden mechanisms of the diseases and destroy them without any side effect(s). Now scientists are trying to develop such biopharmaceutical drugs which can be treated against the diseases like hepatitis, cancer and heart diseases.
 - **Gene therapy:** It is used in delicacy and diagnoses of diseases like cancer and Parkinson's. The apparatus of this technique is that the fit genes are under attack in the body which either obliterate the injured cells or replace them. In some cases, the fit genes make corrections in the genetic information and that is how the genes start performance in the favor of the body.
 - **Pharmaco-genomics:** Pharmaco-genomics is an additional genetically modified method which is used to learn the genetic information of a personality. It analyzes the body's reply to sure drugs. It is the mixture of pharmaceuticals and genomics. The aspires of this field is to expand such drugs which are inserted in the person according to the genetic information there in the individual.
 - **Genetic Testing:** It is a technique of heredity is used to conclude the genetic diseases in parents, sex and carrier screening. The technique of genetic testing is to use DNA probes which have the sequence alike to the mutated sequences. This technique is also used to recognize the criminals and to test the parenthood of the child.

- It is completed that no field of science can be winning until it uses the techniques of biotechnology. Scientists are operational in the research area to expand new drugs and vaccines and are also judgment cures for the diseases which were not easy to treat in the past decade. Biotechnology is a field of miracle.

Applications of Biotechnology in Agriculture

- Biotechnology has played major role in agriculture by altering genes, studying and cloning various crops in order to provide better quality products of foods ultimately improving our lives.

Application of Biotechnology in Food Processing:

- Food processing is a process by which non-palatable and easily perishable raw materials are converted to edible and potable foods and beverages, which have a longer shelf life. The method, by which the microbial organisms and their derivatives are used to increase the edibility and the shelf life of foods, is known as fermentation.

Application of Biotechnology in Environment:

- There are five major different types of Applications of Environmental Biotechnology. They are as follows: Bio-marker:, Bio-energy:, Bioremediation, Biotransformation

8. *Discuss the corrective strategies needed to win the Left Wing Extremism (LWE) doctrine affected citizens back into the mainstream of social and economic growth.*

Approach

1. *Briefly introduce by explaining the menace of naxalism*
2. *Discuss the Steps taken by the government to win the Left Wing Extremism (LWE) doctrine*
3. *Strategies needed to win the Left Wing Extremism (LWE) doctrine*
4. *Conclusion*

Hints:

The naxalites operate in vacuum created by absence of administrative and political institutions, espouse the local demands and take advantage of the disenchantment prevalent among the exploited segments of the population and seek to offer an alternative system of governance which promises emancipation of these segments from the clutches of 'exploiter' classes through the barrel of a gun. This movement came into being as a result of prevailing social and economic issues. Hence, the government took multifaceted approach to negate the menace of Naxalism.

Steps taken by the government to win to win the Left Wing Extremism (LWE) doctrine

Infrastructure development initiatives

- **Road Requirement Plan-I (RRP-I)** is being implemented by Ministry of Road Transport & Highways, since 2009 for improving road connectivity in 34 LWE affected districts of 8 States.
- **Road Connectivity Project** for LWE affected areas (RRP-II): It was approved in 2016 for further improving road connectivity in 44 districts of 9 LWE affected States. Ministry of Rural Development (MoRD) is the nodal Ministry for this project.
- **LWE Mobile Tower Project** to improve mobile connectivity in the LWE areas.
- **Approval of Projects** under Universal Service Obligation Fund (USOF) supported scheme to provide mobile services in 96 districts of LWE-affected states.
- **The National Technical Research Organization (NTRO)** is assisting the Security Forces in anti-Naxal operations by providing Unmanned Aerial Vehicles (UAVs).

Skill Development related Schemes

- **ROSHNI** is a special initiative which envisages training and placement of rural poor youth from 27 LWE affected districts.
- **Skill Development in 34 Districts affected by Left Wing Extremism** under implementation from 2011-12 aims to establish ITIs and Skill Development Centres in LWE affected districts.
- **Surrender and rehabilitation policies:** Additional incentives are given for surrendering with weapons/ammunition.

Institutional measures

- **Black Panther combat force** - A specialised anti-Naxal combat force for Chhattisgarh on the lines of Greyhounds unit in Telangana and Andhra Pradesh.
- **Bastariya Batallion** - A newly formed batallion of CRPF with more than 534 tribal youth from four highly naxal infested districts of Chhattisgarh along with adequate female representation in sync with the Government's policy of 33% reservation for women making it the first composite battalion in any of paramilitary forces.
- **Multi-disciplinary groups to check funding of Naxalites.**
- **Constructively engaging youth through education**
- **SAMADHAN:** It is a strategy of MHA to frame short term and long-term policies to tackle LWE.

In spite of taking multipronged initiatives, Issues in handling LWE

- Negligence of established standard operating procedures at times leads to loss of valuable lives of security personnel.
- Certain vulnerabilities remain such as poor planning, inadequate numbers, insufficient intelligence backup etc.
- Structural deficits and deficiencies such as putting IPS deputationists into almost every senior position in CRPF ignoring the decades of experience within the Force.
- Sluggish Capacity building of police forces, for example - in Chattisgarh, there are about 10,000 vacancies in different ranks in state police and 23 sanctioned police stations have yet to be set up.
- LWEs are well trained in guerilla warfare.
- **Inefficient technology of mine detection:** Present technology is unable to detect deep planted mines under the road.
- **Laundering of funds:** Naxal leaders operating in Bihar and Jharkhand are laundering extorted money through acquiring movable and immovable assets.

Strategies needed to win the Left Wing Extremism (LWE) doctrine

- **Learning from Chattisgarh police:** As the Chhattisgarh police have experience in tackling Maoists in Bastar, they are now coordinating with the bordering States to strengthen intelligence and ground presence. Such measures can be taken in new areas as well where Maoists are trying to establish themselves.
- Eliminating the root cause of the problem that is leading to the alienation of tribals in this area. The focus should now be on building roads, increasing administrative and political access of the tribals, improving reach of government schemes etc.
- **Centre-state cooperation:** Centre and states should continue with their coordinated efforts where Centre should play a supportive role with state police forces taking the lead.
- **Undertaking technological solutions:** such as use of micro or mini-UAVs or small drones to minimize loss of lives of security personnel.

- **Build trust:** Winning a psychological war against the Maoists remains an unfinished task. To bridge this trust deficit, civil society must join hands with the government in realising the villagers' right to development.
- **Awareness generation:** Government should undertake awareness and outreach programmes and inclusive developmental programmes.
- **Forest Rights:** Effective implementation of the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Rights) Act, 2006
- **Financial empowerment:** Introduce measures to encourage formation of 'Self Help Groups' (SHGs) to improve access to credit and marketing and empower the disadvantaged.
- **Choke funding:** The nexus between illegal mining/forest contractors and transporters and extremists which provides the financial support for the extremist movement needs to be broken through establishment of special anti-extortion and anti-money laundering cell by State Police.
- **Infrastructure development:** For implementing large infrastructure projects, particularly road networks that are strongly opposed by the extremists need to be undertaken with the help of specialised Government agencies like the Border Roads Organisation instead of local contractors.
- Special efforts are needed to monitor the implementation of constitutional and statutory safeguards, development schemes and land reforms initiatives for containing discontent among sections vulnerable to the propaganda of violent left extremism

The former Prime Minister Manmohan Singh said "Naxalism is the biggest internal security challenge and it is imperative to control Left-wing extremism for the country's growth". The Naxalite threat is indeed the biggest security problem for India's future as its effects are multi-layered. From their ideology, it appears that naxals are fighting for the rights of poor people and want to establish a people's government, while the facts are quite contrary. Hence, the two-pronged policy of direct action by the security forces combined with development is showing results. The paradigm of proactive policing and holistic development should ensure more such significant results in the future.

9. Elaborate on the 'National Defence Council' of India.

Approach

1. Briefly give history of National Defence Council
2. Explain the organizational structure.
3. Give the way forward.

Hints:

The National Defence Council is an executive government agency tasked with advising the Prime Minister's Office on matters of national security and strategic interest. It was established by the former prime minister of India Atal Bihari Vajpayee in 1998. Prior to the formation of the NDC, these activities were overseen by the Principal Secretary to the preceding Prime Minister.

Organizational Structure:

- The members of the council are:
- National Security Advisor (NSA),
- Deputy National Security Advisors (Dy.NSA),
- Minister of Defence,
- Minister of External Affairs,
- Minister of Home Affairs,

- Minister of Finance and
- Vice Chairman of the NITI Aayog.
- Other members, as required, are invited to attend the council's monthly meetings.
- The NDC is the apex body of the three-tiered structure of the national security management system in India. The other two tiers are the Strategic Policy Group, and the National Security Advisory Board.

The Way forward:

The creation of an organization like National Defence Council was very crucial for the country. It has brought the important persons from all the relevant fields like ministries of defence, finance, external and home affairs together in one platform and discuss the decisions to be taken for the security of the country.

10. What is the Public Private Partnership Model in defence?

Approach

1. **Briefly introduce the PPP model in defence**
2. **Discuss the rationale behind PPP model in defence sector**
3. **Conclusion**

Hints:

Public-private partnerships are arrangements under which the private sector supplies goods or services which were traditionally provided by the governments. The Government of India has already put in place broad guidelines regarding PPP, and these have been implemented extensively in the infrastructure sector in India. Public-private partnership between the Indian public sector undertakings (PSUs), ordnance factories (OFs), agencies of defence forces and private sector companies will enhance the capabilities for the provision of Military maintenance, repair and overhaul (MRO) services for the existing equipment held with the armed forces of the country.

- For most of the 70 years since India's independence, it has been solely the government that has taken up the mantle of provisioning defence goods and services, including the entire gamut of equipment sustenance services. Though many remarkable achievements are due to the state defence establishment, certain gaps have remained unfulfilled.
- To address these gaps, the government has sought the participation of the private sector and progressively removed many of the policy bottlenecks which impaired the participation of private sector in the defence domain.
- However, the role of the Indian private sector continues to be limited in defence and minimal in the MRO space.
- Moreover, PPP contracts enable the government to acquire management and technological capabilities often locked into the private sector.
- PPP arrangements benefit not only the government but also offer distinct advantages to the private sector, leading to win-win situations with mutual benefit for all participants.
- The private sector stands to benefit from the significant pool of built-up assets of the government that is already in existence.
- 'Efficient MRO of defence equipment through PPP is expected to increase the uptime of the existing equipment in order to enable its optimum exploitation. Another advantage would be the harnessing of efficiencies of the private sector while using existing public sector resources.

- The rationale and motivation behind focusing on PPP in the defence sector is the potential of PPP-based arrangements to address systemic problems, such as foreign dependency for defence equipment and insufficient integration of private sector for provisioning of defence goods and services, and other structural constraints in India's ability to provide sustenance and MRO for defence equipment.

India needs to strengthen its R&D and develop a strong defence industrial base in order to become self-reliant in the field of Defence. Government recently eased FDI norms for Defence, by enhancing the limit from 26% to 49%. In order to be self-sustainable, 100% PPP is allowed in defence. The Defence Procurement Manual has been amended from time to time in order to take into stride the wave of globalisation and liberalisation. However, despite all this, India still stands at a point where it must take flight over the globe on its wings of modernisation and a strong industrial base. India has to make its dream of being self-reliant in Defence a reality.

Section - B

11. Examine the major provisions of U.P. Skill Development Mission. Mention the status of its implementation.

Approach

1. **Briefly introduce the U.P. Skill Development Mission**
2. **Discuss the major provisions of U.P. Skill Development Mission**
3. **Discuss the status of its implementation of U.P. Skill Development Mission**
4. **Conclusion**

Hints:

UP being the first state in India to come up with a skill development policy with Uttar Pradesh Skill Development Mission (UPSDM)'s mandate to provide livelihood skills to the employable youth and ensure placement to enable them earn their sustenance. The Mission aspires to change this by creating a platform which brings all stakeholders - trainers, employers, sponsoring departments and trainees together. However, the efforts in this direction so far have been inadequate and have also not been very effective due to lack of a cohesive strategy that links skills to employment.

Major provisions of U.P. Skill Development Mission

- The UPSDM has empanelled training partners drawn from both government as well as private sector to impart training in 654 trades spanning in 53 sectors.
- Certification by National Skill Development Council (NSDC) and National Council for Vocational Training (NCVT) authenticates the possession of requisite standard of skills by the trainees.
- Vision India is associated with UPSDM to train about 5000 youth across 5 different centres in UP and provide facilities for acquisition and up-gradation of skills of the unskilled and semi-skilled workforce by enabling provision for the vulnerable section e.g. women, PWD and minorities.

The main objectives of the project are as follow:

- To Skill the un-skilled youth and upgrade the skills of skilled workers.
- To promote skill development activities to help and monitor skilling programs implemented by different Government agencies.
- To formulate appropriate and innovative strategies to facilitate large scale employment for vulnerable people of the state.
- To improving livelihoods by enhancing earning capacities through skills development.

The status of its implementation of U.P. Skill Development Mission

- **Lack of Integration of skill development efforts of various departments:** Several departments such as Rural Development, Urban Development, Social Welfare and Food Processing offer skill development trainings under central and state schemes. However, there is no coordination amongst the departments or sharing of information and most of these programmes are not placement linked.
- **Employer-Educator-Trainee Linkages either absent or weak:** There are no institutional mechanisms for incorporating the needs and views of the employers to update /upgrade course offerings or change in syllabus. The trainers hardly ever interact with the employers for upgrading their own skills and employers do not offer their resources for improving the content and quality of vocational training.
- The State has a reasonably large set up of ITIs/polytechnics and degree colleges imparting education and training in vocational areas but the quantity as well as quality of trainings provided by these institutions is a cause of concern.
- A large number of students with vocational education need to look for placement in private organizations or for self employment. The condition of private industrial employments and self employment are inferior in UP in comparison to other part of the country.
- Funding of vocational education in UP is restricted largely to government, where little attention was paid to quality.
- Education being a state subject, the implementation of any vocational; education would be in the domain of respective state governments. While the student fees in ITI's/polytechnics go to the State treasuries, the institution itself does nothing to cater to the market requirements.
- For now, far too much of young of UP learns on the job. It learns well but lacks the stamp of authority, and languishes in low-paid jobs or in the informal sector.
- **Data Insufficiency:** The vocational education and training sector suffers from a severe crisis of good evidence / data base for proper planning and policy making.

Skills and knowledge are the driving forces of economic growth and social development for any country. Countries with higher and better levels of skills adjust more effectively to the challenges and opportunities of world of work. As Uttar Pradesh moves progressively towards becoming a 'knowledge economy' it becomes increasingly important that the state should focus on advancement of skills and these skills have to be relevant to the emerging economic environment.

12. Write a note on "Problem of Equilibrium between Economic Development and Carbon Emission".

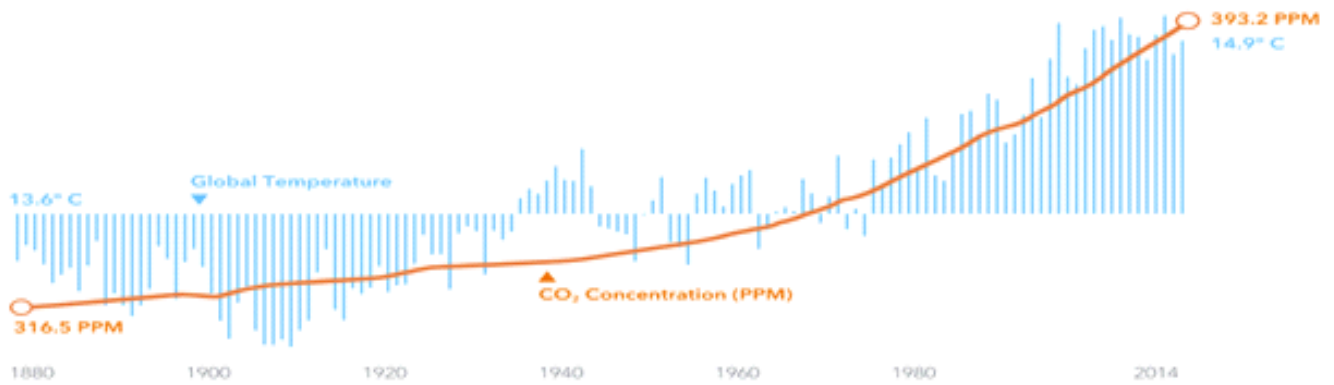
Approach

1. Briefly introduce with the environmental challenges facing humanity
2. Discuss the problem of Equilibrium between Economic Development and Carbon Emission
3. Way forward

Hints:

There are two major challenges facing humanity: economic development and preserving the environment. However environment has come to the forefront of contemporary issues for both developed and developing countries since the deterioration of environmental quality raises concerns about global warming and climate change arising mainly from carbon emissions. Hence, understanding the equilibrium CO₂ emissions and economic growth helps economies in formulating energy policies and developing energy resources in sustainable ways.

GLOBAL AVERAGE TEMPERATURE & CARBON DIOXIDE CONCENTRATION



Problem of Equilibrium between Economic Development and Carbon Emission

- Greenhouse gas emissions (GHGs), particularly carbon dioxide (CO₂) emissions, are considered to be the main causes of global warming. Also, Climate change is not only an environmental issue but also a development problem. Maintaining rapid economic development while simultaneously mitigating climate change is a pivotal and challenging task.
- Although during recent years, numerous of the studies have been very thoroughly investigated the equilibrium between economic growth and CO₂ emissions, there is a lack of research regarding the qualitative systematic review analysis in these areas.
- There is in a relationship between per capita GDP and per capita carbon dioxide emissions. The correlation is positive, which suggests growing per capita GDP leads to increasing carbon dioxide emissions. However, no turning point is found at which emissions start to decrease when reaching a high enough GDP.
- This race of nations has resulted increase in greenhouse gases emissions, particularly CO₂ emissions, which plays a major role in global warming and ozone depletion
- Instability, such as conflict between nations
- No serious effort is taken by developed countries like USA. As recently USA moved away from Paris climate deal.
- Implementation, such as ensuring programmes fit the local context.
- Governance, such as political will to transform development programmes into sustainable long-term practices.

Way forward:

- Just as a country's development cannot be sustainable without a properly functioning democracy, economic development without environmental protection is also bound to fail. Hence, multifaceted efforts are needed to negate the menace of increased carbon emission.
- It is vital to maintain balance between economic developmental and carbon emission. A concrete action plan in order to compensate for the damage caused to the environment by the execution of developmental works and carbon emission is needed.
- Based on the carbon emission implications for fresh water resources, agriculture and food supply, natural ecosystems, biodiversity and human health, it is important to quantify the impact of economic growth of developing nations on CO₂ emission.
- Recognizing the importance of taking corrective measures to condense global warming several countries have signed the Kyoto Protocol and agreed to meet the target set under the Kyoto Protocol, particularly to reduce greenhouse gas emissions by an average of five percent. More such actions are needed.

13. Discuss the provisions of National Food Security Act, 2013. What reforms are required to strengthen the food security? Explain.

Approach

1. Briefly introduce the food security ACT
2. Discuss the provisions of National Food Security Act, 2013
3. Discuss the reforms needed to strengthen the food security
4. Conclusion

Hints:

The enactment of the National Food Security Act, (NFSA) 2013 on July 5, 2013 marks a paradigm shift in the approach to food security from welfare to rights based approach.

Provisions of National Food Security Act, 2013

- The Act legally entitles upto 75% of the rural population and 50% of the urban population to receive subsidized foodgrains under Targeted Public Distribution System.
- About two thirds of the population therefore is covered under the Act to receive highly subsidised foodgrains.
- The National Food Security Act, (NFSA) 2013 is being implemented in all the States/UTs, on an all India basis.
- Out of maximum coverage of 81.35 crore, around 80 crore persons have been covered under NFSA at present for receiving highly subsidized foodgrains.
- The identification of beneficiaries by States/UTs is a continuous process, which involves exclusion of ineligible/fake/duplicate ration cards and also exclusion on account of death, migration etc. and inclusion on account of birth as also that of genuine left-out households.



Reforms needed to strengthen the food security

- India needs to take big initiatives to improve its food security as it faces supply constraints, water scarcity, small landholdings, low per capita GDP and inadequate irrigation
- In addition to growth in agricultural output, allied sectors such as dairy, poultry, fishing and livestock also needed a boost, which would help increase rural prosperity in line with the government's aim to double farmers' income.
- Recently, India ranked 76th in 113 countries assessed by The Global Food Security Index (GFSI) , based on four parameters—affordability, availability, quality, safety and natural resources.

- India's food security challenges lie in the areas of low GDP per capita, sufficiency of supply, public expenditure on R&D and protein quality which need to be improved.
- India needed to address these issues not just for food security, but welfare of rural India, where the majority of people live.
- Agriculture remains the pre-dominant occupation in India for vast sections of the population. Over the years, several new challenges have emerged before the sector. With fragmentation of agricultural holdings NSE 0.65 % and depletion of water resources, the adoption of a resource-efficient, information and communication technology (ICT) based climate-smart agriculture can enhance agricultural productivity and sustainability.
- Farmers also need real-time data about weather conditions and prices of inputs and output to help them increase productivity and prosperity.
- In the context of poor infrastructure, adoption of ICT in agriculture will promote market access, facilitate financial inclusion and contribute significantly to early warning signals that are critical for the development of smallholder community.

India has many policies and programmes. However, food insecurity and malnutrition continue to be challenge for India. The problem is with both design and implementation of the programmes. The focus of reforms can now be shifted to more efficient delivery systems of public services. It has been recognized that better governance is very important for effective functioning of food-based programmes. Social mobilization, community participation and decentralized approach are necessary in this context.

14. "Micro, Small and Medium Enterprises (MSMEs) are the drivers of economic growth and employment proliferation in India". Examine this statement

Approach

1. Briefly introduce the MSMEs in India
2. Discuss the MSMEs as the drivers of economic growth and employment proliferation in India
3. Conclusion

Hints:

Micro, Small and Medium Enterprises (MSME) sector is the most vibrant and dynamic sector promising high growth potential for the Indian economy. There are close to 51 million MSME units in the country that employ about 117 million people across various sectors, constituting 40% of the workforce. The MSME share to the total Gross Domestic Product (GDP) is about 37% and they also contribute to 43% of exports based on the data maintained by Ministry of Commerce.

MSMEs as the drivers of economic growth and employment proliferation in India

- The MSMEs have played a great role in ensuring the socialistic goals like equality of income and balance regional development as envisaged by the planners soon after the independence.
- With the meager investment in comparison to the various large scale private and public enterprises, the MSMEs are found to be more efficient providing more employment opportunities at relatively lower cost.
- The employment intensity of MSMEs is estimated to be four times greater than that of large enterprises.
- The most important contribution of SMEs in India is promoting the balanced economic development. The trickle down effects of large enterprises is very limited in contrast to small industries where fruits of percolation of economic growth are more visible.
- While the large enterprises largely created the islands of prosperity in the ocean of poverty, small enterprises have succeeded in fulfilling the socialistic goals of providing equitable growth

- MSMEs not only provide the employment opportunities but helps in the process of industrialization in rural areas simultaneously reducing the unequal income distribution among the residents.
- The MSMEs contribute significantly in the development of Indian economy through export production, domestic production, low investment requirements, operational flexibility, technology oriented enterprises etc.
- The SMEs are complimentary to large industries operating in the economy and contribute significantly in the development of the country.
- On an average this sector has almost 36 million units that provide employment to about 80 million individuals.
- Given that a majority of India's population lives in villages and Tier-1/Tier 2 cities, the MSME sector has also emerged as a key factor to urbanize rural India.

MSMEs have tremendous potential to take India way ahead in terms of development .However they face various challenges which are acting as bottleneck for its growth which are as follow:

- Lack of capital due to inadequate access to finance and credit
- Inability to attract talented and tech-savvy manpower
- Poor infrastructure and utilities resulting in low production capacity
- Lack of innovation
- Technology and digital knowledge gap
- Lack of marketing know-how
- Absence of adequate and timely banking finance
- Ineffective marketing strategy
- Constraints on modernisation & expansions
- Non availability of skilled labour at affordable cost

Some of the measures taken by government to improve the performance of MSMEs are as under

- Government has set up an India Opportunities Venture Fund with SIDBI worth INR 50 bn to provide equity to the MSME sector.
- Under the Public Procurement Policy for Micro and Small Enterprises (MSEs), government organizations and Central Public Sector Enterprises(CPSEs) are required to make a minimum of 20% of their annual purchase from MSMEs. Of this purchase, 4% to be earmarked for procurement from MSEs owned by SC/ST entrepreneurs.
- To improve the productivity, competitiveness and capacity building of MSMEs, the Government of India has adopted a cluster based approach.
- Credit disbursed to micro and small enterprises is considered part of priority sector lending by banks.
- Around 20 items have been reserved for exclusive manufacturing by MSMEs. Large scale enterprises cannot produce these items.
- In order to build the capacity of MSMEs, central government has initiated National Manufacturing Competitiveness Programme (NMCP). It would help them in facing stiff competition from global MNCs.

There are immense opportunities for the Indian MSME sector to grow and thrive. All it needs to do is to adapt to the changing trends and embrace digital skills. Apart from the aforesaid measures, the most important prerequisite for the unbridled growth of SMEs is ensuring the availability of enabling

environment and requisite infrastructure. If government can ensure the double digit growth for the SMEs, it would definitely help in achieving the long cherished goals of equality of income and promoting the growth in rural hinterlands and stop the avoidable migration to the urban areas.

15. Explain the inter-regional disparities in economic development of Uttar Pradesh and discuss the factors acting as obstacles in the development of backward regions.

Approach

1. Briefly introduce the inter-regional disparities in economic development of Uttar Pradesh
2. Discuss the reasons for inter-regional disparities in economic development of Uttar Pradesh
3. Discuss the factors acting as obstacles in the development of backward regions
4. Conclusion

Hints:

India has experienced impressive economic growth since the 1990s. Its growth patterns, however, are uneven. While some states like Maharashtra, Punjab, Haryana and Gujarat are growing by 7-10%, others, particularly Bihar and Uttar Pradesh (UP), have lagged behind, Bihar and UP are the least developed states in India. UP has suffered from regional disparities and inequality despite many prime ministers representing the state in Parliament. The challenges rose by intra-regional disparities and their compounding implications on living conditions and governance are enormous.

Reasons for inter-regional disparities in economic development of Uttar Pradesh

- Unlike eastern region, the Western Region has been principal region in agricultural as well as industrial progress of the state, and in fact, the region acted as catalyst for the Green Revolution in the 1960s and 1970s.
- **Agrarian Structure:** Inter regional inequality in the state of Uttar Pradesh may be examined with the help of three important indicators viz. land use pattern, agrarian structure particularly irrigation; patterns of income and consumption, estimates of poverty.
- **Inter-Regional Disparity in Food Grains Productivity:** Land is the most important factor of production. In spite of having larger average size of holdings, low level of food grains productivity may result into income inequality.
- It can be seen that the Western Region has the highest level of total and per capita income at both current and constant prices in the state. In respect of total income, Bundelkhand Region has the lowest position but in respect of per capita income, Eastern Region occupied the lowest level
- **Education:** Eastern Region followed by Western Region has the highest dropout rate
- **Credit-deposit ratio:** The CD Ratio has increased in Western, Central and Bundelkhand Region but has decreased in Eastern Region. Credit institutions, (and institutional credit too), are unequally distributed across regions.
- But these agrarian reforms failed to take off, accentuating disparities and inequalities, though the state adopted a decentralized planning process, which was governed by community development approach.
- The per capita availability of geographical area has declined in Central, Eastern and Bundelkhand Regions.
- **Urbanisation:** The degree of urbanization is highest in Western Region followed by Central, Bundelkhand Region and Eastern Region.

Factors acting as obstacles in the development of backward regions:

- According to world bank report, the administration of UP has become increasingly politicized over the years, which has eroded the stability of tenure and undercut managerial authority ,

administrative fragmentation has led to a proliferation of senior positions and undermined coordination and accountability in administration as well as policy-making, a related expansion in the size of the civil service, combined with weak revenue generation, placed a squeeze on the capital budget as well as spending on operations and maintenance; and poor expenditure management practices have undermined the efficacy of public spending for combating poverty in the state.

- Uttar Pradesh could not seize the prime objective of planning which aimed at reduction of inter-regional disparities and balanced economic growth.
- Despite the fact that UP has taken many important steps like abolition of Zamindari System, imposition of ceiling and acquisition of surplus land and their redistribution, but the absence of effective political will has been responsible for the partial success of land reforms in the state.
- Deprivation of basic needs including housing, access to safe drinking water, good sanitation, and domestic electricity.
- **Poor physical and economic infrastructure:** investment, public investment in agriculture in UP has remained inadequate.
- **Governance and institutional factors:** Well-functioning institutions, good governance and strong leadership play critical roles in economic development. UP is rated as the most poorly governed states of India
- Transfer of resources from the centre to the state: **UP has been receiving less per capita allocation from the centre for development expenditure than any other of the states.**
- While the share of primary sector gradually declined to 33 per cent, the share of agriculture declined to 31 per cent. On the contrary, more than 66 percent of the workforce in the state depends on agriculture as a means of livelihood.
- Western Region has always occupied better position as compared to the other regions due to the fact that in the region, the contribution of the primary sector in the Net District Domestic Product in the Western Region is better than that of other regions. The main cause of Western Region being ahead is the contribution of primary sector in the Regional Domestic Income.

Inadequate access to these essential services directly limits the welfare of large sections of UP's population, and also denies them the opportunity to share fully in the growth process. Indeed, inadequate attention to human resource development limits the growth process itself. Thus, the Government will have to harness its efforts and will to overcome the issues interlocking challenges enumerated above. The Government has to provide opportunity to accelerate growth and empower the poorest amongst its citizens through higher incomes, better education and health, and a stronger voice in the decisions that affect their lives.

16. What is TIFAC (Technology Information Forecasting and Assessment Council), give its mandate. Enlist the upcoming technologies in India by 2020 in I.T. sector.

Approach

1. Write brief introduction about TIFAC
2. Discuss in detail different mandate of TIFAC
3. Highlight the upcoming technology in India by 2020 in IT sector
4. Conclusion

Hints:

TIFAC (Technology Information Forecasting and Assessment Council) is an autonomous organization set up in 1988 under the Department of Science & Technology to look ahead in technology domain, assess the technology trajectories, and support innovation by networked actions in select areas of

national importance and tries to delineate possible technology trajectory that the country needs to take.

Mandate of TIFAC

- TIFAC continues to strive for technology development in the country by leveraging technology innovation through sustained and concerted programmes in close association with industry and academia.
- TIFAC embarked upon the major task of formulating a Technology Vision for the country in various emerging technology areas.
- Under the leadership of Dr. APJ Abdul Kalam, the then Chairman of TIFAC, Technology Vision 2020 exercise led to set of 17 documents, including sixteen technology areas and one on services. In more than 25 years of its service to the nation, it has delivered number of technology assessment and foresight reports.
- While inaugurating the 103rd Indian Science Congress in Mysuru, Hon'ble Prime Minister of India released the Technology Vision 2035 prepared by TIFAC. This is being followed by release of Technology Roadmaps in 12 thematic areas of national priorities and importance namely, Education, Medical Science & Health Care, Food and Agriculture, Water, Energy, Environment, Habitat, Transportation, Infrastructure, Manufacturing, Materials and Information & Communication Technologies (ICT).

Upcoming technologies in India by 2020 in I.T. sector

- There are many such technologies that have already made their prominent mark in 2018 and are only a few more applications away from becoming mainstream. Those are the the upcoming and latest technology trends that would become trending by the year 2020.
- **Artificial Intelligence** has been continuing to make its place in the list of top technology trends since quite some years. And now has found a place in 2020 technology predictions as well.
- **Chatbots:** In few year Chatbots would have reached their market potential, with the majority of the businesses employing them to redefine their customer engagement policies.
- **Blockchain technology:** The rate at which Blockchain is growing has placed it at a pivotal point in the list of top technology trends 2020. While prevalent in only a handful of industries right now, by 2020 the world will see its mass adoption.
- **IoT** has been finding itself in the list of up and coming technologies .
- **5G:** By the time 2020 comes, the world would be under the spell of fast internet connection and all the various perks that come attached with it.
- **Facial Recognition:** What started with iPhone X with its face ID will be taken ahead by a number of industries who would now be using one's face for a series of different applications.
- **Automation** has moved ahead from its involvement in the production lines. There are a number of ways automation will create its presence around us by becoming one the most awaited new technologies of 2020.
- **Big Data:** With the evergrowing amount of interaction between machines and humans, the devices that we carry with us every waking hour have become a massive repository of data. Data that is waiting to be converted into meaningful information and insight for businesses to use for offering better service.

Technology is an absolute need we cannot escape from, it has a very big role in most aspects of our lives. It helps our lives to remain and become easier. Technology can help not just with the present but also approximating the future. Hence, if India has to outpace the world in development it has to be proactive in developing the cutting edge technology.

17. Mention the earmarked fields, aim and special powers provided to Indian citizens in Technology Vision Document 2035.

Approach

1. Write brief introduction about the vision document 2035
2. Explain in detail different fields and special power provided to Indian citizens in tech. vision document 2035
3. Conclusion

Hints:

Technology is one of the key drivers for empowering individuals, societies and countries. Technologies that facilitate development in all its dimensions and enhance human capabilities are of particular importance. The vision Document 2035 is both an account of a future and a route to that future where technology delivers, provides and secures.

The 12 identified sectors of Vision Document are:

- Education
- Medical Sciences & Healthcare
- Food and Agriculture
- Water
- Energy
- Environment
- Habitat
- Transportation
- Infrastructure
- Manufacturing
- Materials
- Information and Communication Technology

The earmarked fields, aim and special powers provided to Indian citizens in Technology Vision Document 2035:

- The Aim of this 'Technology Vision Document 2035' is to ensure the Security, Enhancing of Prosperity, and Enhancing Identity of every Indian, which is stated in the document as "Our Aspiration" or "Vision Statement" in all languages of the 8th Schedule of the Constitution.
- Assurance of these prerogatives, according to the Vision document, is the core of technology vision for India. For assuring these prerogatives, technologies are mapped as: 1) those readily deployable, 2) those that needs to be moved from Lab to Field, 3) those that require targeted Research and 4) those that are still in Imagination.
- The vision document also makes a mention of three critical essential prerequisites or Transversal Technologies i.e., materials, manufacturing, and Information and Communication technology (ICT) to provide the foundation upon which all other technologies would be constructed.

In order to overcome these challenges, the Vision Document 2035 envisages a rational assessment of the capabilities and constraints of the Indian Technological Landscape. It categorizes technologies into a six-fold classification from an Indian perspective which is as follows:

- Technology Leadership – niche technologies in which we have core competencies, skilled manpower, infrastructure and a traditional knowledge base eg., Nuclear Energy, Space Science.
- Technology Independence – strategic technologies that we would have to develop on our own as they may not be obtainable from elsewhere eg., Defence sector.
- Technology Innovation – linking disparate technologies together or making a breakthrough in one technology and applying it to another eg., solar cells patterned on chlorophyll based synthetic pathway are a potent future source of renewable energy.
- Technology Adoption – obtain technologies from elsewhere, modify them according to local needs and reduce dependence on other sources eg., foreign collaboration in the sectors of rainwater harvesting, agri-biotech, desalination, energy efficient buildings.
- Technology Constraints – areas where technology is threatening and problematic i.e. having a negative social or environmental impact because of serious legal and ethical issues eg., Genetically Modified(GM) Crops.

18. Discuss the challenges of National Security in the age of Globalization.

Approach

1. Give introduction by providing detailed overview about globalization
2. Discuss threats posed by globalisation to security of India
3. Highlight the solutions to the challenges of National Security
4. Conclusion

Hints:

On the one hand, globalization contributes to accelerated development of productive forces, scientific and technological progress and ever more intensive communication among states and peoples. On other hand, the processes of globalization, which mainly develop spontaneously, without a collective directing influence of the world community, aggravate a number of old problems of international security and engender new risks and challenges.

The national security issues most impacted upon by globalisation are generally found to fall into three categories:

- The nature of security threats in a globalised world
- The effects of the phenomenon of globalisation on the pursuit of national security
- The erosion of the exclusivity of the state as a provider of national security.

Threats posed by globalisation to security of India:

- The emergence of non-state terrorist actors and the rise of their international influence is accelerating. Much of their activity is clandestine and outside the accepted international norms.
- International and state-sponsored terrorism, often motivated by fundamentalist ideologies, backed by secretive but efficient financial networks, use of IT, clandestine access to chemical-biological and nuclear materials, and illicit drug trafficking, has emerged as a major threat to international stability.
- They pose threats to multi-religious, multiethnic and pluralistic societies. India is at the receiving end of these violent elements and is likely to remain a target of international terrorism in the future.
- They bring fake currency to India and try to hit Indian economy
- They smuggle weapons, drugs (in Punjab/Northeast) in India, directly targeting the youth

- Extremist non state actors also include religious fanatics which propagate religious hatred which can led to communal tensions in the country
- They can also incite people for regionalism thus demanding their separate state which further increases secessionist tendencies
- Terrorists of every hue constantly change their methods and tactics and choose ever new targets for their attacks.

Solution to challenges of National Security in the age of Globalization

Protection of the rights and freedoms of its citizens is the duty of every state. Chief of them is the right to life. But it is the life of the common man that is threatened by terrorists. The world community is obliged to ensure for its citizens the right to safe protection against terrorism.

The solution of this task is possible if an effective code of protecting human rights against terrorism is developed under the UN aegis, a code aimed at:

- preventing and stopping acts of terrorism
- opposing the funding of terrorism
- prosecution of the people who have perpetrated acts of terrorism or are complicit in them in other ways
- ensuring that such persons should not escape from responsibility and punishment;
- assistance to persons who have suffered from terrorism, including financial assistance, social and psychological rehabilitation and reintegration into society; and
- Effective international cooperation towards achieving the above goals.

Many new threats to human security are emerging, or old threats are being intensified as the pace of globalization accelerates, outpacing the capacity of governments to develop policy responses. Appropriate policy responses are urgently needed to address some of the most acute threats for which the world is currently unprepared.

19. Discuss the disaster management in India at the Centre, State and District levels.

Approach

1. **Briefly discuss the disaster management in India**
2. **Discuss disaster management at the Centre, State and District levels**
3. **Conclusion**

Hints:

Disaster management in India has evolved from an activity-based reactive setup to a proactive institutionalized structure; from single faculty domain to a multi-stakeholder setup; and from a relief-based approach to a 'multi-dimensional pro-active holistic approach for reducing risk'.

Disaster management at the centre:

- Supportive role is there in matters of research and development, finances, etc. There is Cabined Committee on Management Act, 2005 provides for the National Disaster Management Authority under Prime Minister's already functional. A committee of Union government looks after issue of financial support from National Calamity contingency Fund.
- There is Central Relief Fund. Biological and Chemical Emergencies are coordinated by Cabinet committee on security. National Crisis Management by Cabinet Committee on Security.
- National Crisis Management committee (NCCM) is headed by the Cabinet Secretary. Union Ministries looking after disasters are : Ministry of Home Affairs – natural and man-made Disasters;

Ministry of Agriculture – Drought, Ministry of Civil Aviation – Air Accidents; Ministry of Railways – Railway Accidents; Ministry of Environment – Chemical Disaster; Ministry of Health – Biological Disasters; Department of Atomic Energy – Nuclear Accidents; etc. Crisis Management Group (CMG) is chaired by Central Relief Commissioner in the Ministry of Home Affairs.

Disaster management at the State Government:

- Primary responsibility of relief operations is of the States. National Disaster Management Act, 2005 provides for the state Disaster Management Authority under the Chief Minister. At top political level, there is, normally Cabinet Committee on Natural Calamities under the Chief Minister.
- There are Crisis Management Committees chaired by the Chief Secretaries. Relief commissioners – functionaries of State Revenue Department are used. They look after issues of Natural Disasters.
- They work under Crisis Management committee headed by the Chief Secretary. State Revenue Secretaries also have some responsibilities. Overall responsibility at the District Level, rests with the District Collector/ District magistrate.

Disaster management at the district level:

- National Disaster Management Act, 2005 provides for the district Disaster Management Authority under his/her chairpersonships (co-chairpersons is elected member of local authority). Overall co-ordination between various departments at district level is achieved.
- Under General Financial Rules/Revenue Codes, there are powers to draw money. If there are armed forces units available locally, their assistance can be requested. Coordination with civil society is achieved.

India has suffered a loss of precious human lives, economic losses of \$79.5 billion due to natural disasters during the last two decades, according to the United Nations (UN). The National Disaster Management Authority has been established at the centre, and the SDMA at state and district authorities at district level are gradually being formalized. In addition to this, the National Crisis Management Committee, part of the earlier setup, also functions at the Centre.

20. Write a note on the challenges and their solutions for Law and Order in Uttar Pradesh at the present time.

Approach

1. Briefly introduce the law and order situation in Uttar Pradesh
2. Challenges for Law and Order in Uttar Pradesh
3. Solutions for Law and Order problem in Uttar Pradesh
4. Conclusion

Hints:

There are two major issues that concern Uttar Pradesh – law and order situation, and corruption. Corruption is still a concern. Recent report by UP police shows that Communal riots and hate crimes have become fewer. But corruption and crimes against women continue.

Crime rates (Source: UP Police)					
#	Crime	2019	2018	2017	Reduction (%)
1	Dacoity	73	96	158	23.96
2	Loot	1,473	2,116	2,656	30.49
3	Murder	2,355	2,669	2,740	11.76
4	Riot	3,637	5,396	5,878	32.60
5	Domestic dispute	5308	5108	7332	3.92

6	Road holdup	0	0	0	0
7	Ransom/Kidnapping	23	21	28	9.52
8	Dowry death	1,536	1,621	1,563	4.71
9	Rape	1,833	2,641	2,823	30.59
	Total Crimes	2,18,096	2,11,525	1,92,048	3.11

Challenges for Law and Order in Uttar Pradesh

A study conducted early in 2019 ranked Uttar Pradesh as the worst state in terms of police staffing, and use of budget. The findings were based on 'Police Adequacy Index', and the state's overall index value was at 0.31, below the national overall index value which was at 0.42.

- The study found that the state police force was functioning at 48 percent of its capacity, which is less than half of its total sanctioned strength. Poor police strength would mean there aren't enough personnel to effectively ensure law and order is in place.
- The study noted that a 2017 report by the Comptroller and Auditor General (CAG) had also highlighted Uttar Pradesh's failings with respect to improving the access to communications facilities for the police.
- "According to the CAG's performance audit, a major reason for the state's lack of basic communication infrastructure is their inability to utilise the budget adequately by expediting procurement of essential equipment and replacement of obsolete equipment and technologies.
- Vehicular access was another major issue as the report found Uttar Pradesh had an overall deficit of 57.8 percent for all vehicles. This may also serve as a hindrance to the efficient execution of a policeman's duties.

Solutions for Law and Order problem in Uttar Pradesh

- As far as politically motivated killings are concerned, they aren't a new phenomenon in Uttar Pradesh. And, the police need to do more to earn people's trust. They need to prove that they are unbiased and not influenced by any political party.
- Slackness in registering cases should be checked.
- There is huge vacancy of judges in UP which result in delay in delivering the justice. The government must streamline the judiciary process.
- The police reform must be undertaken and steps should be taken to make the police citizen friendly
- Steps should be taken to break the nexus between mafia, politicians, businessmen and the police.
- The hatred based on communal and caste line must be reduced.
- A separate law on lynching is needed in line with the similar law passed in Rajasthan.
- SMART (strict but sensitive, modern and mobile, alert and accountable, reliable and responsive and techno-savvy and trained) policing is needed.

The law and order problem in any part of nation is one of the biggest hindrance to the peace, prosperity and happiness. The recent crime rate of Uttar Pradesh has shown reduction in crime .However, due to globalization and development of technology, today we face complex challenges like cyber crime, money laundering, terrorism, etc. Hence, the state should find short term, medium term and long term solution to negate the menace of law and order.

