TNPSC GROUP I MAIN – 2021
HOME TEST – QUESTION BANK BASED TEST (QBBT)
PAPER - III

Time: 3 hours **Total marks: 250**

SECTION A
UNIT- I: Geography of India with special reference to Tamil Nadu

3 x 10 = 30

Answer all the questions. Answer not exceeding 150 words each

1. The central location of India at the head of the Indian Ocean is considered of great significance. Why?

LOCATION

India is a vast country. Lying entirely in the Northern hemisphere (Figure 1.1) the main land extends between latitudes 8°4'N and 37°6'N and longitudes 68°7'E and 97°25'E The Tropic of Cancer (23° 30'N) divides the country into almost two equal parts. To the southeast and southwest of the mainland, lie the Andaman and Nicobar Islands and the Lakshadweep islands in Bay of Bengal and Arabian Sea respectively.

SIZE

The land mass of India has an area of 3.28 million square km. India's total area accounts for about 2.4 per cent of the total geographical area of the world. From Figure 1.2 it is clear that India is the seventh largest country of the world. India has a land boundary of about 15,200 km and the total length of the coastline of the mainland, including Andaman and Nicobar and Lakshadweep, is 7,516.6 km. India is bounded by the young fold mountains in the northwest, north and northeast. South of about 22° north latitude, it begins to taper, and extends towards the Indian Ocean, dividing it into two seas, the Arabian Sea on the west and the Bay of Bengal on its east.

The Indian landmass has a central location between the East and the West Asia. India is a southward extension of the Asian continent. The trans Indian Ocean routes, which connect the countries of Europe in the West and the countries of East Asia, provide a strategic central location to India. Note that the Deccan Peninsula protrudes into the Indian Ocean, thus helping India to establish close contact with West Asia, Africa and Europe from the western coast and with Southeast and East Asia from the eastern coast. No other country has a long coastline on the Indian Ocean as India has and indeed, it is India's eminent position in the Indian Ocean, which justifies the naming of an Ocean after it India's contacts with the World have continued through ages but her relationships through the land routes are much older than her maritime contacts. The various passes across the mountains in the north have provided passages to the ancient travellers, while the oceans restricted such interaction for a long time. These routes have contributed in the exchange of ideas and

commodities since ancient times. The spices, muslin and other merchandise were taken from India to different countries. On the other hand, the influence of Greek sculpture, and the architectural styles of dome and minarets from West Asia can be seen in different parts of our country.

2. Write about sustainable agriculture

Sustainable agriculture

- ✓ Sustainable agriculture offers a much-needed alternative to conventional input-intensive agriculture, the long-term impacts of which include degrading topsoil, declining groundwater levels and reduced biodiversity. It is vital to ensure India's nutrition security in a climate-constrained world.
- ✓ While various definitions of sustainable agriculture exist, this study uses agroecology as a lens of investigation. This term broadly refers to less resource-intensive farming solutions, greater diversity in crops and livestock, and farmers' ability to adapt to local circumstances.
- ✓ Sustainable agriculture is far from mainstream in India, with only 5 (crop rotation; agroforestry; rainwater harvesting; mulching and precision) SAPSs scaling beyond 5 per cent of the net sown area.
- ✓ Most SAPSs are being adopted by less than five million (or four per cent) of all Indian farmers. Many are practised by less than one per cent.
- ✓ Crop rotation is the most popular SAPS in India, covering around 30 million hectares (Mha) of land and approximately 15 million farmers. Agroforestry, mainly popular among large cultivators, and rainwater harvesting have relatively high coverage - 25 Mha and 20-27 Mha, respectively.
- ✓ Organic farming currently covers only 2.8 Mha — or two per cent of India's net sown area of 140 Mha. Natural farming is the fastest growing sustainable agricultural practice in India and has been adopted by around 800,000 farmers. Integrated Pest Management (IPM) has achieved a coverage area of 5 Mha after decades of sustained promotion.

- ✓ Agroforestry and system of rice intensification (SRI) are the most popular among researchers studying the impact of SAPSs on economic, environmental, and social outcomes. Evidence for the impact of practices such as biodynamic agriculture, permaculture and floating farming are either very limited or non-existent.
- ✓ The existing literature critically lacks long-term assessments of SAPSs across all three sustainability dimensions (economic, environmental and social). Other research limitations include a research gap concerning landscape, regional or agroecological-zone level assessments and a relative lack of focus on evaluation criteria such as biodiversity, health and gender.
- ✓ The budget outlay for the National Mission for Sustainable Agriculture (NMSA) is only 0.8 per cent of the Ministry of Agriculture and Farmers' Welfare's total budget - INR 142,000 crore (excluding INR 71,309 crore spent annually on fertiliser subsidies by the Centre).
- ✓ Eight of the 16 practices identified by the study receive some budgetary support under various central government schemes. Of these, organic farming has received the most policy attention as Indian states, too, have formulated exclusive organic farming policies.

- ✓ Most Civil Society Organisations (CSOs) involved in SAPSs were active in Maharashtra, Rajasthan and Madhya Pradesh. Organic farming, natural farming and vermicomposting get the most interest from CSOs.

3. Explain the role of GIS in environmental management

GIS in environmental management

Human activities and global warming are rapidly contributing to environmental degradation, decreasing glacier area, growth in glacial lake size, unprecedented rainfall, changes in land use and land cover, forest degradation, floods and glacial lake outburst floods, landslides, and shortfalls in agricultural crop production are among the many problems brought on by environmental changes. These issues need timely monitoring and supervision. Effective monitoring of the environment and an improved understanding of the same requires valuable information and data that can be extracted through application of geospatial technologies such as remote sensing and GIS.

GIS can be used most effectively for environmental data analysis and planning. It allows better viewing and understanding physical features and the relationships that influence in a given critical environmental condition. Factors, such as steepness of slopes, aspects, and vegetation, can be viewed and overlaid to determine various environmental parameters and impact analysis.

GIS can also display and analyse aerial photographs. Digital information can be overlaid on photographs to provide environmental data analysts with more familiar views of landscapes and associated data. GIS can provide a quick, comparative view of hazards (highly prone areas) and risks (areas of high risk which may occur) and areas to be safeguarded.

On completion of data analysis, GIS can help in effective planning and managing the environmental hazards and risks. In order to plan and monitor the environmental problems, the assessment of hazards and risks becomes the foundation for planning decisions and for mitigation activities. GIS supports activities in environmental assessment, monitoring, and mitigation and can also be used for generating environmental models.

GIS can aid in hazard mitigation and future planning, air pollution & control, disaster management, forest fires management, managing natural resources, wastewater management, oil spills and its remedial actions etc.

GIS in disaster management

Be it modeling through early warning systems or using decision support systems to understand which disaster is going to affect or is affecting which region the most, GIS can help in mitigating the risks of a disaster to a great extent. Using GIS, preparations can be better, efforts can be more directed and response can be faster. GIS enables the response teams to gain situational awareness, engage with the public, and understand the impact of the event. As GIS leads to better identification of the affected areas and people, recovery becomes easier and faster.

In the recent past, India has made great strides in the disaster alert systems – be it cyclone alerts, regional tsunami warnings or heavy rainfall/flood alert system. The Indian Tsunami Early Warning Centre based in Hyderabad has been successful in delivering accurate alerts. Due to timely predictions, preparations have been better, even leading to timely evacuations and thus no loss of lives.

GIS in air quality monitoring

Air quality monitoring has become an important part of healthy living, and GIS can play a very important role here as well. A GIS integrated platform by leveraging sensors and IoT for air quality monitoring, analytics, and planning, can accurately predict the PM levels in varied areas within a city. It can also tell you which areas are the most hazardous or most dangerous for everyone, more specifically for asthma patients. This analysis can help the field officers to take corrective action on time to improve the air quality. Citizen engagement is also becoming an important part of such applications. Using mobile apps, the citizens can also make the authorities aware which areas need immediate attention.

GIS in forest fire management

Wildfire causes huge loss to flora and fauna. The very first strategy to defend the forests against wildfire is to avoid it. GIS has proved its potential in forest fire management. There are different applications of GIS in forest fire management out of which the most important ones are hazard map production, forest fire simulation, and resource management. Simulation by itself has a main role in the management of forest fire. GIS uses various information layers such as Digital Elevation Model (DEM) and index of flammability along with different models for the purpose of forest fire management.

GIS in managing natural resources

GIS helps in identifying the impact of human behavior on natural resources and leads to more effective utilization of the same. Data about natural resources could be collected through remote sensing, aerial photography or satellite imagery and then they are mapped using GIS technology. The major application of GIS in natural resource management is in confronting environmental issues like a flood, landslide, soil erosions, drought, earthquake etc. It also addresses the current problems of climate change, habitat loss, population growth, pollution etc. and provides information about land area change between time periods. The information obtained from GIS help to study specific areas and monitoring can be done in and around those areas. It provides relevant information about the environmental condition and policy, including conservation programs. Maps in GIS provide the information of location and current resources.

Along with the aforementioned applications, GIS can effectively aid in wastewater management, oil spilling, sewage treatment etc. Spatial information leads to better outcomes in almost every industry and GIS provides invaluable location information that makes decision-making superior and extremely productive. The benefits that GIS can yield are only limited by human's capability to innovate and harness. We all must dedicate ourselves towards preserving our environment and technologies like GIS can be our best friends for the purpose.

UNIT- II: Environment, Bio Diversity and Disaster Management

3 x 10 = 30

Answer all the questions. Answer not exceeding 150 words each

4. Narrate the impact of urbanization on bio-diversity.

Define Urbanisation / why

1. Habitat loss
2. Human Animal conflict
3. Pollution of rivers
4. Increase in ecological footprint
5. Natural resource depletion
6. Imbalance in ecosystem
7. Decline in native species
8. Noise pollution
9. Health problem
10. Less farm lead

Pros

5. Examine the role of the National Green Tribunal in providing speedy justice in environment matters by quoting its recent decisions.

Role / Function

The National Green Tribunal has been established on 18.10.2010 under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.

It is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues. The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.

The Tribunal's dedicated jurisdiction in environmental matters shall provide speedy environmental justice and help reduce the burden of litigation in the higher courts.

The Tribunal is mandated to make and endeavour for disposal of applications or appeals finally within 6 months of filing of the same.

Initially, the NGT is proposed to be set up at five places of sittings and will follow circuit procedure for making itself more accessible.

New Delhi is the Principal Place of Sitting of the Tribunal and Bhopal, Pune, Kolkata and Chennai shall be the other four place of sitting of the Tribunal.

Judges

Green Court NGT Stands Firm On Deregistering 10-Year-Old Diesel Vehicles.

Green Court NGT Halts Tree Cutting For Diamond Mine Project In Madhya Pradesh

The Tamil Nadu government has moved the Supreme Court against a National Green Tribunal (NGT) decision to close proceedings against the Mekedatu dam project.
The tribunal had in June expressed its satisfaction over the Karnataka government's submissions that requisite environmental clearances were pending consideration before the concerned statutory authorities.

OTHER ANSWER

Structure of NGT

- ✓ The Tribunal comprises of the Chairperson, the Judicial Members and Expert Members. They shall hold office for term of five years and are not eligible for reappointment.
- ✓ The Chairperson is appointed by the Central Government in consultation with Chief Justice of India (CJI).

Powers & Jurisdiction

- ✓ The Tribunal has jurisdiction over all civil cases involving substantial question relating to environment (including enforcement of any legal right relating to environment).
- ✓ Being a statutory adjudicatory body like Courts, apart from original jurisdiction side on filing of an application, NGT also has appellate jurisdiction to hear appeal as a Court (Tribunal).
- ✓ The Tribunal is not bound by the procedure laid down under the Code of Civil Procedure 1908, but shall be guided by principles of 'natural justice'.
- ✓ An appeal against order/decision/ award of the NGT lies to the Supreme Court, generally within ninety days from the date of communication.
- ✓ The NGT deals with civil cases under the seven laws related to the environment, these include:
    - The Water (Prevention and Control of Pollution) Act, 1974,
    - The Water (Prevention and Control of Pollution) Cess Act, 1977,
    - The Forest (Conservation) Act, 1980,
    - The Air (Prevention and Control of Pollution) Act, 1981,
    - The Environment (Protection) Act, 1986,
    - The Public Liability Insurance Act, 1991 and
    - The Biological Diversity Act, 2002.

Important Landmark Judgements of NGT

- ✓ In 2012, POSCO a steelmaker company signed a MoU with the Odisha government to set up steel project. NGT suspended order and this was considered a radical step in favour of the local communities and forests.

- ✓ In 2012 Almitra H. Patel vs. Union of India case, NGT gave judgment of complete prohibition on open burning of waste on lands, including landfills – regarded as the single biggest landmark case dealing with the issue of solid waste management in India.
- ✓ In 2013 in Uttarakhand floods case, the Alaknanda Hydro Power Co. Ltd. was ordered to compensate to the petitioner – here, the NGT directly relied on the principle of 'polluter pays'.
- ✓ In 2015, the NGT ordered that all diesel vehicles over 10 years old will not be permitted to ply in Delhi-NCR.
- ✓ In 2017, the Art of Living Festival on Yamuna Food Plain was declared violating the environmental norms, the NGT panel imposed a penalty of Rs. 5 Crore.
- ✓ The NGT, in 2017, imposed an interim ban on plastic bags of less than 50-micron thickness in Delhi because "they were causing animal deaths, clogging sewers and harming the environment".

Conclusion

In the present era, equilibrium between development and environment is of utmost importance.

Therefore, NGT should not be seen as an not been seen as obstacle to development but a way to sustainable development". Thus, the government must address all underlying issues related to NGT as soon as possible.

6. Write the main points of the agreement reached at United Nations Climate Change Conference (COP 21) held at Paris in December, 2015. What was India's stand at the conference?

What is the Paris Agreement?

It is a multilateral agreement within the United Nations Framework Convention on Climate Change (UNFCCC); signed to reduce, mitigate greenhouse gas emissions.

Paris Climate Accord

- ❖ It is a legally binding international treaty on climate change that was adopted by 196 countries at the Conference of the Parties COP 21 in Paris in December 2015.
- ❖ The objective of the Paris Climate Accord was to achieve the long-term temperature goal. Countries aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate-neutral world by mid-century.
- ❖ The main goal of the Paris Climate Accord is to limit global warming to well below 2° Celsius and preferably limit it to 1.5° Celsius, compared to pre-industrial levels.

When was the Paris Agreement signed?

An agreement was signed on 22 April 2016.

How many countries signed the Paris Agreement?

Currently, 195 UNFCCC members have signed it. However, US President Donald Trump has announced his intention to withdraw from the agreement by November 2020.

The goal of the Paris Agreement

1. To curtail the rise of global temperature this century below 2-degree Celsius, above pre-industrial levels; and also pursue efforts to limit the increase to 1.5 degrees Celsius.
2. Develop mechanisms to help and support countries that are very vulnerable to the adverse impacts of climate change. An example would be countries like the Maldives facing threat due to sea-level rise.
3. Confirms the obligation that developed countries have towards developing countries, by providing them financial and technological support.

Main Points of Agreement

The agreement talks about 20/20/20 targets, i.e.

1. Carbon Dioxide emissions reductions by 20%,
2. Work on increasing the renewable energy market share by 20%
3. Target to increase energy efficiency by 20%

What is Nationally Determined Contributions (NDC)?

1. It means the contributions that need to be done by each country to achieve the overall global goal.
2. The contributions need to be reported every 5 years to UNFCCC.
3. The contributions are not legally binding.
4. The goal is to make sure that all countries have access to technical expertise and financial capability to meet the climate challenges.

Here's everything you need to know about India's commitment to the Paris climate agreement:

Indian Stand

1. While addressing a side meeting on climate change at the G20 Summit, PM Modi said India is not only meeting targets set at the Paris Agreement but is also exceeding them while calling for "an integrated, comprehensive and holistic way" to tackling climate change.
2. In the G20 summit, Modi also said that India aims to restore around 26 million hectares of degraded land by 2030.

3. Ahead of the Paris climate summit, environment minister Prakash Javadekar said, "Climate change hasn't happened in a day. It is the result of historical emissions over one hundred years. US has 25% of historical emission; EU has 22% of historical emissions; China has 13% and India has only 3%. We haven't caused this problem but as a responsible nation, we will be a part of the solution."
4. Currently, India is contributing only 6.8% of global emissions and its per capita emissions are only 1.9 tonnes (per capita).
5. India's nationally determined contribution (NDCs) under the Paris Agreement is 2 degree compliant. The country is also likely to meet and possibly overachieve its NDCs under the Paris Agreement, the emissions gap report 2020 noted.
6. The Modi government has repeatedly touted schemes as national plan on climate change; National clean air programme; Swachch Bharat mission; Pradhan Mantri Ujjwala Yojana; Namami Gange policy, etc, saying that they are helping India reach its climate goals.
7. India's installed capacity of renewable energy has also increased by 226% in the past five years to over 89 GW now and India has a target of increasing installed renewable energy capacity to 450 GW by 2030.
8. Bharat Stage VI
9. National Solar Mission
10. National Wind – Solar Hybrid Policy

UNIT- III : Indian Economy – Current Economic Trends and impact of Global Economy of India

4 x 10 = 40

Answer all the questions. Answer not exceeding 150 words each

7. Examine the factors responsible for the growing importance of India as a strategic partner of 'ASEAN'.

Association of South East Asian Nations (ASEAN)

ASEAN was established on 8 August 1967 in Bangkok by the five original member countries: **Indonesia, Malaysia, Philippines, Singapore** and **Thailand**. Later Brunei Darussalam, Vietnam, Laos and Myanmar and Cambodia joined. Besides ten members of the ASEAN, there are six "dialogue partners" which have been participating in its deliberations. They are China, Japan, India, South Korea, New Zealand and Australia. The ASEAN nations are expected to benefit from the FTA as it will reduce tariff and non-tariff barriers. The common historical and cultural background made the member countries to maintain their unity and solidarity by establishing a trade block. Foreign trade is the life blood of the ASEAN countries following globalization and prudent macroeconomic policies. The ASEAN Summit of the Heads of Governments of member countries is the highest forum for ASEAN cooperation. Its meetings are held once in three years. The ASEAN \ministerial meeting of Foreign Ministers is the next highest decision-making body.

India's relationship with ASEAN started in 1992 when India became a "sectoral dialogue partner" of ASEAN. The geographic proximity of ASEAN countries to India facilitates faster exports and lower freight costs.

There are three major reasons for this increased engagement with the ASEAN region. The first two reasons are economic in nature. First, India needs more markets for its rapidly growing economy. This remains the case even as New Delhi pushes for domestic-led growth through the Make in India initiative, which encourages national and multinational companies alike to manufacture products in India. The ASEAN region has some of the fastest-growing economies in the world, with countries like Vietnam—which set a national record last year for levels of incoming FDI—and Singapore leading the way. On the whole, ASEAN offers tantalizing economic opportunities for India. According to a McKinsey assessment, the region collectively constitutes the seventh-largest economy in the world and houses more than two hundred of the world's largest companies.

Modi is pursuing more economic engagement with ASEAN at a fortuitous moment. Just as India is keen to access new markets, the flourishing ASEAN economy needs to find new markets of its own. U.S. president-elect Donald Trump has vowed to withdraw the United States from the Trans-Pacific Partnership (TPP) accord immediately after taking office. TPP member countries like Singapore, Vietnam, and Malaysia will be keen to explore alternative arrangements that help them gain access to key markets, and the Indian market—with its young, growing population of 1.2 billion—could be quite inviting.

Second, India's economy needs not just markets but also fuel, and so the energy markets of ASEAN are also critical. Indian domestic energy supplies have been unable to keep up with the high demand of a growing economy, and Indian policymakers are well aware that they must look overseas to help bridge the supply-demand gap. For instance, India's increasing need for coal has led the country to import that fuel from Indonesia, and it has also inked energy deals for oil exploration with Vietnam. Australia, thanks to its ample natural gas and coal supplies, could be a future target for Indian energy policy planners. Keep in mind that a majority of India's current energy imports—including two-thirds of its oil imports—are sourced from the Middle East. New Delhi should, and likely does, view energy imports from the relatively more stable and closer-to-home ASEAN region as less fraught with risk and therefore better for energy security. Additionally, thanks to India's prodigious need for energy for both consumer use and economic growth, energy security is a matter of national security. To this end, a plan to diversify the sources of energy imports—and particularly in a way that would situate more of them in more stable regions—would also serve Indian national interests.

The third chief reason for India's deepening ties with the ASEAN region is strategic: It wants to gain a stronger diplomatic and economic foothold in a part of the world where China's influence and presence are considerable. India does have opportunities to enlarge its profile in Southeast Asia. In some ASEAN countries, China's deep footprint in the neighborhood isn't particularly welcome. Several of them, such as Vietnam and the Philippines, are embroiled in territorial disputes with China in the South China Sea and are deeply opposed to what they perceive as provocative Chinese moves. Not surprisingly, recent public opinion surveys by the Pew Research Center find that Vietnamese and also Filipino views of China are negative, with barely 15% of Vietnamese and less than 40% of Filipinos expressing favorable views toward China. Additionally, Myanmar, long very close to China, has in recent years sought to distance itself a bit from Beijing and forge a more independent foreign policy—a shift that has contributed in part to its detente with the United States. India has wisely taken advantage of Myanmar's policy shift by pursuing deeper cooperation, as evidenced in particular by a maritime accord concluded this past February.

In effect, in the ASEAN region, New Delhi sees an opportunity to lean in, win more friends, and gain more influence. At the same time, India may need to move quickly to take advantage of a window of opportunity that could well close. Recent efforts by Philippines president Rodrigo Duterte to expand cooperation with China highlight how even Asian nations not known for their strong ties to Beijing are trying to engineer shifts in their bilateral relations—perhaps impelled by increasing concern about less robust future U.S. leadership in the ASEAN region and in the Asia-Pacific on the whole.

8. Explain the impact of economic reforms in the Banking sector.

Recommendations of Narasimhan Committee on Financial System

The recommendations the Committee on the Financial System chaired by M.Narasimhan, former Governor of Reserve Bank of India are worth mentioning in the context of improving the working of commercial banks. The committee presented its report in December 1991 and its recommendations cover a wide spectrum of public sector banks,

financial institutions and also capital market. Some of the significant recommendations relating to banks are briefed as follows:

1. New Banking Structure Proposed: The Committee recommended some basic changes in the banking structure. The pattern should be:
    a. Three or four large banks (including State Bank of India) which could be international in character;
    b. About 10 national banks with a network o0f branches throughout the country could be engaged in universal banking;
    c. Local Banks with functions to specific regions of the country; and
    d. Rural Banks including Regional Rural Bank whose operations could be confined to rural areas only and allied business will be primarily and predominantly in financing agriculture and allied activities. Thus, a restructure of banks on four-tier system has been proposed.

2. Enhancement of Capital base of the Banks: The Committee suggested that the banks should be allowed to raise fresh capital from the public as inadequacy of capital becomes a cause of concern among banks. According to the Committee, the capital adequacy ratio in relation to risk weighted assets should be 8 per cent by March 1996, as it was only 2 per cent at the time of presenting the recommendations.
3. Deregulation of interest rates: The Committee recommended deregulation of interest on loans in order to make them reflect market conditions. It also proposed that interest rate on government borrowings should be closer to market-determined rate. However, the interest rates on bank deposits may continue to be regulated.
4. Recovery of Bad debts and Tribunals: Banks experience lot of difficulties in the recovery of loans and the overdues are mounting up. The Committee suggested that Special Tribunals should be set up to speed up the process of recovery of debts. Further, the Committee recommended the setting up of Asset Reconstruction Fund (ARF) which could take over from the banks and financial institutions, a portion of the bad debts and doubtful debts at a discount, and recover the same from the borrowers. The Committee also suggested that the banks should follow uniform accounting practices which should include non-recognition of income from non-performing assets, and provision against different types of debts.

5. Cut in S.L.R. and C.R.R: The Committee recommended to cut down Statutory Liquidity Ratio in phased manner to 25% over a period of five year from 1991. The Committee also recommended that the RBI should progressively reduce cash Reserve Ratio from its present high level.

6. End of Dual Control & Functional Autonomy: The committee suggested that the duality of control by Banking Division of Ministry of Finance and leaving the latter (i.e., RBI) to regulate the Banking system. The committee recommended functional autonomy of public sector banks; and this should be ensured by injecting 'competition' in the financial sector so as to marketwise the functioning of the banks.

7. Liberalization of Capital Market: The Committee strongly favoured dispensation of prior approval of any issue by the Government or Securities Exchange Board of India (SEBI). The issuing company should be free to decide on the nature of shares and

bonds, their terms and pricing. Further, the capital market should be gradually opened up for Foreign Portfolio Investment.

8. Abolition of Branch Licensing: The committee recommended abolition of branch licensing and the opening or closing of branches should be left to the discretion of the individual banks. This will not apply to rural branches.

9. Appointment and recruitments: The Committee strongly believes that in the matters of appointment of the Chief Executives of the banks and members of the Board of Banks, professionalism and integrity should be prime considerations.

Direct Investment: (a) Statutory liquidity Ratio (SLR): The Banking Regulation Act made a stipulation that all scheduled banks have to maintain minimum of 25 percent of their net total demand and time liabilities (NDTL) in the form of cash, gold and approved securities.

The Sri. M. Narasimham Committee recommended that the SLR should be reduced from 38.5 to 25 percent over the next 5 years. The SLR was gradually reduced to 2.5 percent by 22.10.1997 to 24% in Nov – 2008. (b) Cash Reserve Ratio (CRR): The schedule banks in India had to maintain a minimum or 3 percent of their total demand and time deposits under RBI Act 1934. The Sri. M. Narasimham committee recommended that CRR should be progressively reduced to 3 from 5 percent. ¬ Direct Credit Programmes: Banks were directed to lend at least 40 percent of Net banking Credit to priority sectors agriculture, small Industry, export and Road Transport etc. at concessional rate of interest. ¬ Structure of Interest of Rates: The Interest rates of banks on both deposits and advances were administrated by RBI. These rates were unrelated to market rate of Interest.

The Sri. M. Narasimham Committee recommended that all regulations of interest rates should be removed. Scheduled banks have now the freedom to fix their interest rates on deposits subject to minimum floor rates and maximum ceiling rates. ¬ Prudential Norms: If the balance sheets of banks are to reflect the actual financial health, there has to be proper recognition of Income, classification of assets and provisioning for bad debts on prudential basis. ¬ Asset Reconstruction Fund: To take over bad debts from commercial banks to arrange Asset Reconstruction Fund. All bad and doubtful debts were to be transferred to the ARF. The ARF should be given special recovery powers. The capital of ARF should be subscribed by public sector banks and financial institutions. ¬

Capital Adequacy: Inadequacy of Capital in the banking system in a cause for concern. The Sri. M. Narasimhan Committee recommended that the banks should achieve a minimum of 4 percent capital adequacy ratio in relation to risk weighted assets by March 1993, the capital is not less than 2 percent. The Basel standard of 8 percent should be achieved by 1996. ¬ Establishment of Private sector banks: The RBI announced guidelines for setting up of private banks as public limited companies. These Banks should be financially viable. In 1993 banks were permitted to be established in private sector with a minimum capital of Rs.200 Crores to be increased with in a period of 8 years to 300 Crores.

Structural Re-organization of banking sector: The Sri. M. Narasimham Committee recommended a substantial reduction in the number of public sector banks through merger and acquisition.

Branch Licensing:The Sri. M. Narasimham Committee recommended that licensing be abolished. Opening or closing of branches should be left to the discretion of the individual banks. Banks have also been permitted to rationalize their existing branches, to open of specialized branches and to convert the existing non-viable rural branches into satellite offices.

Foreign Banks:The Committee recommended a liberal approach in permitting foreign banks to open either branches or subsidiary bank. Joint venture between foreign banks and loan banks could also be permitted. Since 1992, 19 new foreign banks have been allowed.

Debt Recovery Tribunals: The Committee recommended setting up of special Tribunals to speed up the process of recovery. The Government passed Recovery of Debts & Due to Banks and financial Institutions Act 1993 in August 1993. By 1998 eight debt recovery Tribunals were established covering 20 States and 4 Union Territories. An Appellate Tribunal was also established in Mumbai. Supervision over Banks: The Committee recommended that dual control between the RBI and the banking division of the ministry of Finance over the banking system should end. The RBI should be the primary agency for regulation.

9. Describe the factors responsible for the low level of Human Development Index of India during the last two decades.

Low scores in the HDI is a matter of serious concern but, some reservations have been expressed about the approach as well as indicators selected to calculate the index values and ranking of the states/countries. Lack of sensitivity to the historical factors like colonisation, imperialism and neo-imperialism, socio-cultural factors like human rights violation, social discrimination on the basis of race, religion, gender and caste, social problems like crimes, terrorism, and war and political factors like nature of the state, forms of the government (democracy or dictatorship) level of empowerment are some factors that are very crucial in determining the nature of human development. These aspects have special significance in case of India and many other developing countries. Using the indicators selected by the UNDP, the Planning Commission of India also prepared the Human Development Report for India. It used states and the Union Territories as the units of analysis. Subsequently, each state government also started preparing the state level Human Development Reports, using districts as the units of analysis

this report also discussed other indicators like economic attainment, social empowerment, social distributive justice, accessibility, hygiene and various welfare measures undertaken by the state.

Indicators of Economic Attainments Rich resource base and access to these resources by all, particularly the poor, down trodden and the marginalised is the key to productivity, well-being and human development. Gross National Product (GNP) and its per capita availability are taken as measures to assess the resource base/ endowment of any country. Economic attainment and the well-being of individuals depend on economic growth, employment opportunities and access to assets. Over the years the per capita income and consumption expenditure in India has increased. As a result there has been a consistent decline in the proportion of population living below the poverty line. The percentage of

persons below the poverty line in 2011-12 has been estimated as 25.7% in rural areas, 13.7% in urban areas and 21.9% for the country as a whole

There are other factors like housing, access to public transport, air, quality and access to drinking water which also determine the standard of living. Jobless growth and rampant unemployment are some of the important reasons for higher incidences of poverty in India

10. Assess the impact of MGNREGS in reducing the intensity of unemployment in rural areas of our country.

Mahatma Gandhi National Rural Employment Guarantee Scheme (2005):

Mahatma Gandhi National Rural Employment Guarantee Scheme 2005, initially named NREGS now MGNREGS, aims at enhancing the **livelihood security of people in rural areas** by guaranteeing one hundred days of wage employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work. In view of the fact that, more than 70 per cent of India's population resides in rural areas and a vast majority of them are poor, NREGS was initiated with the objective of boosting rural incomes, stabilizing agricultural production, and reducing population pressure on urban areas by arresting rural migration. Some of the important features of this programme are:

1. Each and every rural household shall have a right to get at least 100 days of guaranteed employment in a year for at least one adult member.

2. Employment shall be provided within a radius of five kilometres of the applicant's residence; if employment is provided outside such a radius, then transport allowances and daily living allowance shall be paid, as per the programme rules.

3. Employment will be given within 15 days of application for work; if not, then daily unemployment allowance as per the Act has to be paid and liability of payment of unemployment allowance is of the States.

4. Wages may be paid in kind, or according to piece rate, or daily rate.

5. The State Council will prepare a list of preferred and permissible productive work, based on the economic, social, and environmental benefits of these works, and their impact on social equity and assets creation.

If, in a worksite, more than 20 women workers are employed, a provision shall be made for one of them to be deputed to look after any children below the age of six years who may be brought to the worksite, and so on.

Women in our study sites were more likely than men to work for MGNREGA, but there were a number of issues within the programme that created barriers to women's successful participation. In particular, the type of work available through MGNREGA and the lack of adequate child care were cited as ongoing issues for many women participants.

Women were still disadvantaged workers even within MGNREGA. In addition to receiving lower wages, women reported that they were not always treated very well by their site supervisors, and were often given work that was too difficult for them. In addition, their unpaid care responsibilities for children and home meant that they could often not work the long hours that men worked, and they were sometimes docked pay for this. In Kerala, landless women indicated that they sometimes used childcare facilities, or, more often, took their babies to the fields. In Tamil Nadu, women were more likely to put their children in Anganwadi Centres, which are childcare facilities, so that they could work in the fields. Interestingly, despite the challenges faced by women as MGNREGA workers, they generally viewed the programme as positive, perhaps because it provided them with opportunities to earn their own wages.

SECTION – B

UNIT- I: Geography of India with special reference to Tamil Nadu

3 x 15 = 45

Answer all the questions. Answer not exceeding 250 words each

11. What is watershed? Highlight the importance of watershed in conserving the natural resources

Watershed management and its importance

Watershed is a geographical area drained by a stream or a system connecting stream in which water from all over an area flow under gravity to a common drainage channel. A watershed system delivers water through rills, gullies and streams to a larger body of water.

Watershed management is proper utilization of land and water resource for optimum production with minimum hazards to natural resources. It relates to soil and water conservation proper land uses, promote afforestation and sustainable farming practices, conserve farmland and pastureland, maintaining soil fertility, proper management of local water for farming, drainage, construct small dams for flood protection, improving individuals standard of living and thereby promote ecological balance.

Key steps in watershed management

Watershed plans should first identify the characteristics of the watershed and inventory the watershed's natural resources. The first steps in watershed management planning are to:

i. Delineate and map the watershed's boundaries and the smaller drainage basins within the watershed.

ii. Map and prepare an Inventory of resources in the watershed.

iii. Prepare an Inventory and map the natural and manmade drainage systems in the watershed.

iv. Prepare an Inventory and map land use and land cover.

v. Prepare a soil map of the watershed.

vi. Identify areas of erosion, including stream banks and construction sites.
vii. Identify the quality of water resources in the watershed as a baseline; and

viii. Prepare a map and Inventory of pollution sources, both point sources (such as industrial discharge pipes) and nonpoint sources (such as municipal storm water systems, failing septic systems, illicit discharges).

Watershed Management in India:

Watershed development project in the country has been sponsored and implemented by Government of India from early 1970s onwards. Various watershed development programs like Drought Prone Area Program (DPAP), Desert Development Program (DDP), and river Valley Project (RVP), National Watershed Development Project for Rain-fed Areas (NWDPRA) and Integrated Wasteland Development Program (IWDP) were launched subsequently in various hydro-ecological regions. Entire watershed development programs primarily focused on soil conservation and rainwater harvesting during 1980s and before.

12. What is ITCZ? Explain the role of ITCZ in Indian Monsoon. Also discuss the Factors influencing the onset of SW monsoon.

ITCZ: Inter Tropical Convergence Zone is a low-pressure zone located at the equator where trade winds converge. In July, the ITCZ is located around 20°N-25°N latitudes, called as Monsoon trough. Due to shift of ITCZ, the trade winds of the southern hemisphere cross the equator between 40° and 60° E longitudes and start blowing from southwest to northeast due to Coriolis force. It becomes southwest monsoon. In winter ITCZ moves southward, and so the reversal of winds from northeast to south and southwest, takes place. They are called northeast monsoons.

THE INDIAN MONSOON

The climate of India is strongly influenced by monsoon winds. The Arabs, who had also come to India as traders named this seasonal reversal of the wind system as 'monsoon'

The monsoons are experienced in the tropical area roughly between 20° N and 20° S. To understand the mechanism of the monsoons, the following facts are important.

a. The differential heating and cooling of land and water creates low pressure on the landmass of India while the seas around experience comparatively high pressure.

b. The shift of the position of Inter Tropical Convergence Zone (ITCZ) in summer, over the Ganga plain (this is the equatorial trough normally positioned about 5°N of the equator. It is also known as the monsoon-trough during the monsoon season).

c. The presence of the high-pressure area, east of Madagascar, approximately at 20°S over the Indian Ocean. The intensity and position of this high-pressure area affects the Indian Monsoon.

d. The Tibetan plateau gets intensely heated during summer, which results in strong vertical air currents and the formation of low pressure over the plateau at about 9 km above sea level.

e. The movement of the westerly jet stream to the north of the Himalayas and the presence of the tropical easterly jet stream over the Indian peninsula during summer.

13. Explain the factors responsible for the origin of ocean currents. How do they influence regional climates, fishing and navigation?

Ocean currents

Large mass of moving water from one part of the ocean to another in a definite direction is called as ocean current. The movement is produced due to earth's rotation, temperature difference of ocean water, salinity, density and some extent due to air pressure and winds. Ocean currents can be classified on the basis of mode of origin, volume and velocity and boundaries.

Ocean currents are the general movement of a mass of surface water in a fairly defined direction.

In other words, an ocean current may be defined as any persistent, dominantly horizontal flow of the ocean water. The ocean currents, like rivers, flow with certain velocity along a certain path. There are two types of ocean currents: warm and cold currents. Warm currents originate from low latitude drifts towards poles; whereas cold currents originate from high latitudes and move towards equator.

There are many factors that influence the generation of ocean currents are:

- ✓ Differences in temperature;
- ✓ Density of ocean water (salinity);
- ✓ Winds and Atmospheric pressure;
- ✓ Coriolis force;
- ✓ Gravitational force;
- ✓ Precipitation and evaporation; and

- ✓ Melting of snow and ice.

In the order of velocity ocean currents can be classified as drifts, currents and streams.

Drifts are movement of surface water of low velocity influenced by prevailing winds.

Currents are movement of oceanic water in definite direction and greater velocity.

Streams are larger mass of water moving in a definite direction and much greater velocity than the drifts and currents. Ocean currents are distinguished by the temperature they possess.

When ocean currents originate from equator it is termed as warm current. Likewise, when a current starts from polar region it is termed as cold current.

Vertical circulation of ocean water takes place due to difference in salinity and temperature between the surface and the water deep below. Upwelling is an oceanographic phenomenon that involves movement of dense, cooler, and usually nutrient-rich water towards the ocean surface, replacing the warmer, usually nutrient-depleted surface water. Down welling is the process of accumulation and sinking of cold high saline water beneath warmer or fresher water.

These currents make up the other 90% of the ocean. Deep Ocean currents are less influenced by the Coriolis effect and generally travel at a much slower speed when compared to surface currents. Besides the landscape of the ocean floor, especially ridges and basins, impede the flow of deep-water currents. One complete circuit of this flow of seawater is estimated to take about 1,000 years.

Seas around Japan and the eastern coast of North America are such examples. The areas where a warm and cold current meet also experience foggy weather making it difficult for navigation. The mixing of warm and cold currents help to replenish the oxygen and favour the growth of planktons, the primary food for fish population. The best fishing grounds of the world exist mainly in these mixing zones.

The areas where the warm and cold currents meet provide the best fishing grounds of the World.

The significance of Ocean Currents

1. Ocean currents play an important role in the earth's climate. They distribute energy and nutrients within the ocean.
2. Fog is formed where warm current and cold current meet. For example, when the Gulf Stream and Labrador Current meet near New Found land one of the densest fogs is formed.
3. The warm ocean current increases the temperature of an area where it flows to and Cold Ocean current decreases the temperature of the area.
4. The warm current brings heavy rainfall when the wind blows over it becomes warm while the cold current brings drought when the wind blows over it becomes cold and

dry. For example, the wind blowing over the Peru Current is cold and dry causing the formation of the Atacama Desert located on the west coast of Peru.

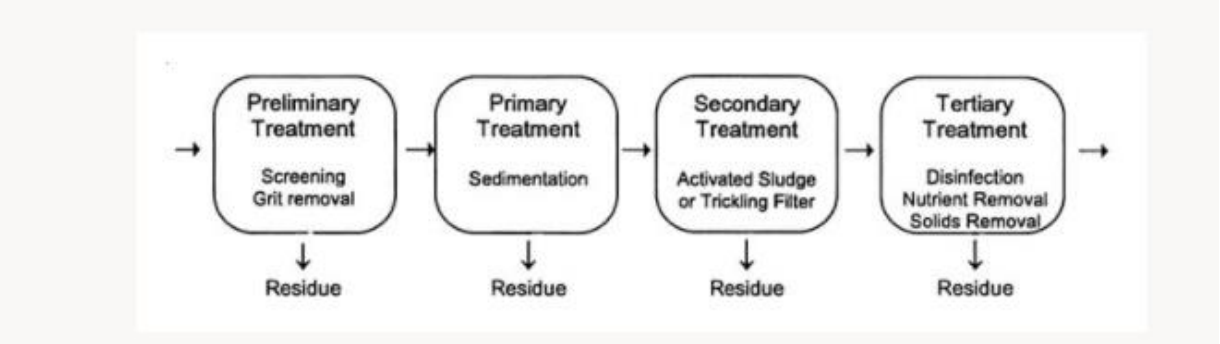
5. It regulates the global temperature. It gives free navigation. The Gulf Stream keeps ports & harbours of Russia and Scandinavia navigable throughout the year. The Kuroshio Current makes ports on Japan navigable during winter.
6. It distributes minerals and pollution added to it becomes highly diluted and later negligible.
7. It helps in growth of juveniles of certain fish and its distribution to other countries - from its place of origin. Some up welling and down welling are due to currents which bring minerals to photic zone used by phytoplankton. Major fishing grounds are located in the zones where cold current and warm current meet.

UNIT- II: Environment, Bio Diversity and Disaster Management

3 x 15 = 45

Answer all the questions. Answer not exceeding 250 words each

14. Explain the conventional methods of municipal waste water treatment. Add a note on the uses of treated waste water.



Conventional Wastewater Treatment Processes Conventional wastewater treatment consists of a combination of physical, chemical, and biological processes and operations to remove solids, organic matter, and sometimes, nutrients from wastewater.

Preliminary Treatment - Physical

Th e objective of preliminary treatment is the removal of coarse solids and other large materials often found in raw wastewater. Removal of these materials is necessary to enhance the O&M of subsequent treatment units. Preliminary treatment operations typically include coarse screening, grit removal, and, in some cases, communication of large objects.

Primary Treatment Th e objective of primary treatment is the removal of settleable organic and inorganic solids by sedimentation, and the removal of materials that will fl oat (scum) by skimming

Secondary Treatment – Biological

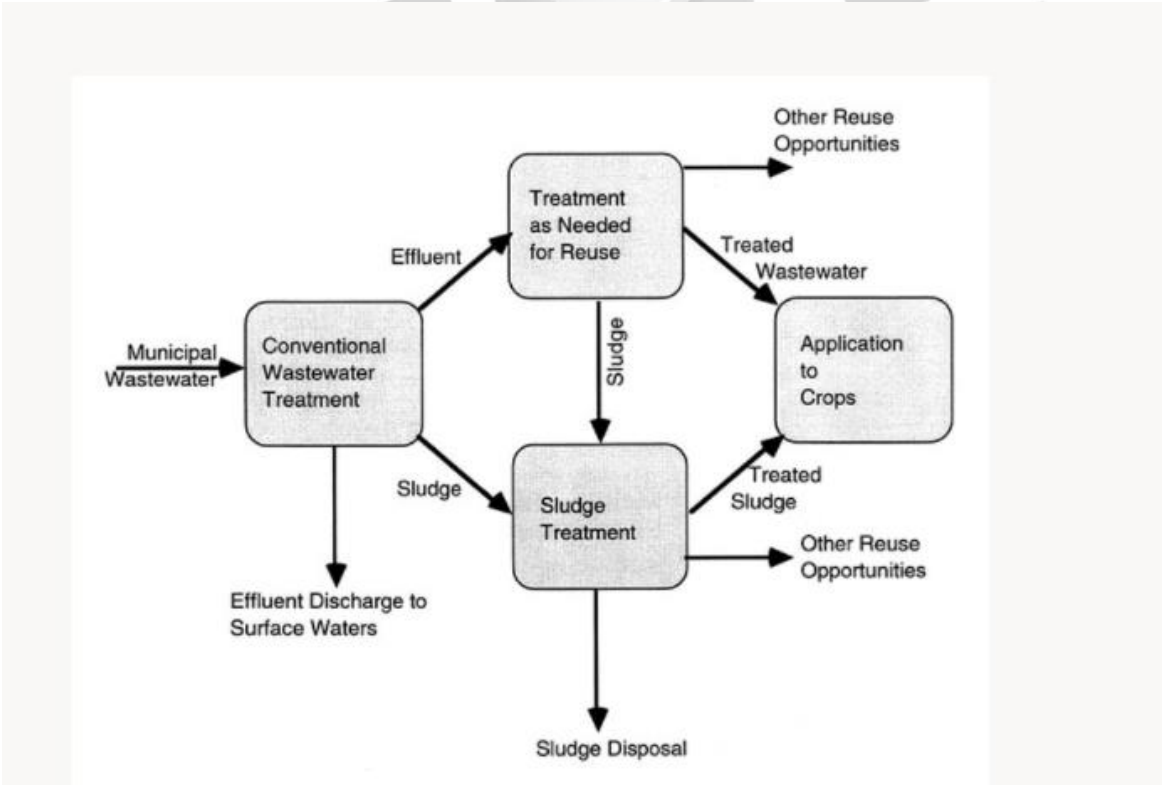
The objective of secondary treatment is the further treatment of the effluent from primary treatment to remove the residual organics and suspended solids. In most cases, secondary treatment follows primary treatment and involves the removal of biodegradable dissolved and colloidal organic matter using aerobic biological treatment processes. Aerobic biological treatment is performed in the presence of oxygen by aerobic microorganisms (principally bacteria) that metabolize the organic matter in the wastewater, thereby producing more microorganisms and inorganic end-products (principally CO2 , NH3 , and H2 O). Several aerobic biological processes are used for secondary treatment diff ering primarily in the manner in which oxygen is supplied to the microorganisms and in the rate at which organisms metabolize the organic matter. Common high-rate processes include the activated sludge processes, trickling filters or bio-filters, oxidation ditches, and rotating biological contractors (RBCs). A combination of two of these processes in series (for example bio-filter followed by activated sludge) is sometimes used to treat municipal wastewater containing a high concentration of organic material from industrial sources

Tertiary Treatment – Chemical

Tertiary wastewater treatment is employed when specific wastewater constituents which cannot be removed by secondary treatment must be removed. Th e treatment processes are necessary to remove nitrogen, phosphorus, additional suspended solids, refractory organics, heavy metals, and dissolved solids. Because advanced treatment usually follows high-rate secondary treatment, it is sometimes referred to as tertiary treatment. However, advanced treatment processes are sometimes combined with primary or secondary treatment (for example, chemical addition to primary clarifiers or aeration basins to remove phosphorus) or used in place of secondary treatment (for example, overland flow treatment of primary effluent).

Uses of treated waste water

1. Industrial purpose
2. Irrigation
3. Not potable purposes
4. Building construction
5. Lawns
6. Flushing toilets
7. Coolants – Power Plants (thermal)



15. Answer the following

a. Distinguish between a Hazard and a Disaster? Narrate various types of natural disasters, the coastal seashore areas are prone to? (10 Marks)

A hazard is any phenomena that has the potential to cause destruction to life and property. A hazard become a disaster when the potential to cause destruction is fulfilled. When there is harm to life and property of humans, the hazard is termed a disaster.

All disasters are hazards, but all hazards are not disasters.

Hazards do not necessarily cause any destruction. If an earthquake was to hit a barren mountain with no human community, it would simply be a natural phenomenon; or a natural hazard. Hazards can be geological (the most common), biological (epidemics) or chemical (nuclear power plant leaks, chemical industry leaks, etc).

A hazard is a situation where there is a threat to life, health, environment or property.	A disaster is an event that completely disrupts the normal ways of a community. It brings on human, economical, and environmental losses to the community which the community cannot bear on its own.
Hazard are occurred at the place which has less population	Disasters are mainly occurred at over populated area.
Hazard is caused by negligence	Disaster is a results of differential behavior of nature due to many conditions.
Hazards are natural or manmade phenomenon that are a feature of our planet and cannot be prevented.	These hazards are termed as disasters when they cause widespread destruction of property and human lives.
In their dormant state, hazards just pose a threat to life and property.	Once a hazard becomes active and is no longer just a threat, it becomes a disaster.

Types of natural disasters, the coastal seashore areas are prone to

Tsunami
Cyclones
Floods

b. Explain the details of Tsunami Warning System of India. (5 Marks)

The Indian Tsunami Early Warning System (ITEWS), set up at the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad in October 2007 by the Union Ministry for Earth Sciences, has monitored nearly 630 earthquakes of magnitude of about 6.5 and above to date.

Through the continuous effort of scientists, INCOIS focussed its research and development efforts towards advanced procedures such as water level inversion, real-

time inundation modelling, use of near-field GNSS measurements for real-time rupture characterisation and 3D mapping of vulnerable coastal areas.

"With the state-of-the art Tsunami Early Warning Centre, India is much safer against the threat of tsunamis. We will continue to work towards building disaster resilient coastal communities by adopting latest scientific advancements and undertaking community preparedness initiatives under a multi-hazard framework. As part of its multi-hazard focus, the ITEWS has already been enhanced with the capability to issue storm surge warnings," Dr. Srinivasa Kumar, Director, INCOIS, said in a statement.

India is the first country in the Indian Ocean Region and Odisha is the first State to achieve the Tsunami Ready recognition. Being prepared for a tsunami hazard also enhances the capacities of communities to respond effectively to other coastal hazards such as cyclones and storm surges. This needs to be expanded to other coastal communities in India.

16. What is Brundtland Report? Discuss the significance of Brundtland Report.

Brundtland Report, also called Our Common Future, publication released in 1987 by the World Commission on Environment and Development (WCED) that introduced the concept of sustainable development and described how it could be achieved. Sponsored by the United Nations (UN) and chaired by Norwegian Prime Minister Gro Harlem Brundtland, the WCED explored the causes of environmental degradation, attempted to understand the interconnections between social equity, economic growth, and environmental problems, and developed policy solutions that integrated all three area

In response to mounting concern surrounding ozone depletion, global warming, and other environmental problems associated with raising the standard of living of the world's population, the UN General Assembly convened the WCED, an international group of environmental experts, politicians, and civil servants, in 1983. The WCED (also called the Brundtland Commission) was charged with proposing long-term solutions for bringing about sustainable development and continuing it into the 21st century. It was also tasked with finding ways in which the concern for the environment might be translated into greater cooperation between countries regarding issues of development and resource use and creating processes in which all countries could address their own environmental concerns and those of the world over the long term.

The Brundtland Report included chapters covering, among other topics within sustainable development, the role of the international economy, population and human resources, food security, species and ecosystems, energy, industry, and proposed legal principles for environmental protection. Of all the topics covered, however, the Brundtland Report is most often cited for its definition of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Implicit in this definition are the concept of needs, which emphasized the goal of providing for the essential requirements of the world's poor, and the idea that technology and social organization imposes limits on the ability of the environment to provide for the world's present and future needs.

The Brundtland Report also highlighted global population growth that could not continue indefinitely. It predicted that in the 21st century the world population would stabilize somewhere between 7.7 billion and 14.2 billion people and that more people would live in cities than in rural areas. Although some of the highest population-growth rates were among developing countries, the report pointed out that the environmental impact of an additional individual born in an industrialized country was much greater than of one born in a developing country. The report noted also that declining birth rates of the industrialized world would translate into a greater burden on the younger generations to support an aging population. For the developing world improved health and education, especially among women, were presented as solutions to the resource and demographic challenges posed by high birth rates.

In addition, the Brundtland Report called on the UN to establish the UN Programme of Action on Sustainable Development to carry out the directives outlined in the report. The report laid the foundations for the Rio Summit, held in Rio de Janeiro in 1992, which then ultimately led to the creation of the UN Commission on Sustainable Development that same year.

UNIT- III : Indian Economy – Current Economic Trends and impact of Global Economy of India

6 x 15 = 60

Answer all the questions. Answer not exceeding 250 words each

17. What are the major objectives of the New Economic Policy of the Government of India 1991? How far has the policy been successful in achieving these objectives?

NEW ECONOMICS POLICY

The Prime Minister Mr. Narasimha Rao announced the New Industrial Policy on **July 24, 1991.**

The new policy radically liberalized the industrial policy itself and de-regulated the industrial sector substantially.

The primary objectives of the industrial policy were

i. to promote major industries from the clutches of bureaucrats,
ii. to abolish restrictions on foreign direct investment,
iii. to liberate the indigenous enterprise from the restrictions of MRTP Act,
iv. to maintain a sustained growth in productivity and employment
v. to achieve international competitiveness.

Important Initiatives (Objectives)

1. Industrial Delicensing
2. De reservation of the industrial sector
3. Public sector policy (de reservation and reform of PSEs)

4. Abolition of MRTP Act
5. Foreign investment policy and foreign technology policy.

Impacts

1. Increase in FOREX
2. GDP Growth
3. Increase in FDI
4. Increase in Exports

5. **Industrial Delicensing policy:** the most important objective of the new industrial policy of 1991 was the end of the industrial licensing or the license raj or red tapism. Under the industrial licensing policies, private sector firms had to secure licenses to start an industry.

6. **De reservation of the industrial sector:** Previously, the public sector was given reservation especially in the capital goods and key industries. Under industrial deregulation, most of the industrial sectors were opened to the private sector as well. Under the new industrial policy, only three sectors viz., atomic energy, mining and railways will continue as reserved for public sector. All other sectors have been opened for private sector participation.

7. **Reforms related to the public sector enterprises**: Reforms in the public sector were aimed at enhancing efficiency and competitiveness of the sector. The government identified strategic and priority areas for the public sector to concentrate. Loss making PSUs were sold to the private sector.

8. **Abolition of MRTP Act:** The New Industrial Policy of 1991 has abolished the Monopoly and Restrictive Trade Practices Act 1969. In 2010, the Competition Commission has emerged as the watchdog in monitoring competitive practices in the economy. The policy caused big changes including emergence of a strong and competitive private sector and a sizable number of foreign companies in India.

9. **Foreign investment policy:** Another major feature of the economic reform was red carpet welcome to foreign investment and foreign technology. This measure has enhanced the industrial competition and improved business environment in the country. Foreign investment including FDI and FPI were allowed. In 1991, the government announced a specified list of high-technology and high-investment priority industries wherein automatic permission was granted for foreign direct investment (FDI) up to 51 % foreign equity. The limit was raised to 74 percent and subsequently to 100 percent for many of these industries. Moreover, many new industries have been added to the list over the years. Foreign Investment Promotion Board (FIPB) has been set up to negotiate with international firms and approve foreign direct investment in select areas.

OTHER ANSWER

New Economic Policy 1991

India opened up the economy in the early nineties following a major crisis that led by a foreign exchange crunch that dragged the economy close to defaulting on loans.
These reforms were popularly known as 'structural adjustments' or 'liberalization' or 'globalization'.

Steps taken to liberalize and globalize Indian economy were:

1. Devaluation:
2. Disinvestment:
3. Dismantling of the Industrial Licensing Regime:
4. Allowing Foreign Direct Investment (FDI
5. Non-Resident Indian

Main Features of Economic Globalization

1. **Post Industrialism:** According to David Harvey, there has been a transition (shift) from 'fixed' industrial system to regime of 'flexible accumulation' characterized by flexibility in labour processes, products and patterns of consumption; and increasing mobility of capital and labour, This 'post industrial' system is marked by increasing centralization of capital in the hands of big corporations at one end, and flourishing of small business at the other, with the former dominating the latter, Capitalism is becoming more tightly organized, Since there is more centralized control over trade enabled by growth of information technology and reorganization of global financial system,

2. **World Trade**: World trade links geographically dispersed produces and consumers, While USA became the largest trading nation in 20th century, GATT established in 1947, aimed at freer trade through agreed reduced tariffs, led to the growth of world trades and reduction in relative share of major industrial powers in world trade, Major push is towards globalization of markets,

3. **Multinational Corporations**: Integration of global economy has given raise to MNC's which are powerful not only economically but politically also, Overall, 51 of the largest economies in the world are corporations, According to the UN Development Programme, 500 corporations now control 70% of the world's trade and 80% of its foreign investment

4. **New International Division of Labour**: Internalization of capital since the 1970rs had led to economic restructuring reflected in deindustrialization of developed countries and a shift to tertiary (service) sector activities such as banking, finance, specialized administrative services, etc, while manufacturing and assembly operations are exported to less developed countries where labour is cheap and laws are lax, But it was noticed that with technological innovations such as automation, computerization, the question of cheap labour does not arise; labour productivity can be enhanced with

lesser number of workers, Hence major shift in industrial organization is to new systems of flexible specialization, just-in-time delivery TQM, etc, Rather than direct investment by first world MNC's in third world through local subsidiaries, there is now a wide variety of negotiated agreements: joint ventures, marketing agreements, secondary sourcing, subcontracting various kinds of limited alliances, MNCs look at less developed countries mainly not as a source of cheap labour and raw materials but as expanding local markets and potential industrial partners,

5. **Financial Markets**: IMF has started controlling the finance aspect, As a result of debt crisis, countries turn to IMF, which then imposes devaluation of currency, structural adjustment programme and other conditions, Global financial institutions exert enormous control over the domestic policies of member countries and in 19B0's, they started advocating liberalization, privatization and globalization, MNC's have started demanding free capital movement and opening of capital and other markets,

Positive Impact of Globalization

1. Growing global markets in services, People can now execute trade services globally - from medical advice to software writing to data processing that could never really be traded before
2. Physical and geographical boundaries are crumbling and the world is becoming a global village, Nation states today no longer have to play market-making role, so wool, wine, perfumes can belong to any market anywhere in the world

Negative Impact of Globalization

1. **Low Growth of Agriculture** Sector Agriculture has been and still remains the backbone of the Indian economy, It playsa vital role not only in providing food and nutrition to the people, but also in the supply of raw material to industries and to export trade, In 1951, agriculture provided employment to 72 per cent of the population and contributed 59 per cent of the gross domestic product, However, by 2001 the share of agriculture in the GDP went down drastically to 24 per cent and further to 22 per cent in 2006-07, This has resulted in a lowering the per capita income of the farmers and increasing the rural indebtedness.

   The agricultural growth of 3.2 per cent observed from 1980 to 1997 decelerated to two per cent subsequently, The Eleventh Five Year Plan aims at four per cent growth rate in agriculture.

   The reasons for the deceleration of the growth of agriculture are given in the Economic Survey as: Low investment, imbalance in fertilizer use, low seeds replacement rate, a distorted incentive system and low postharvest value addition continued to be a drag on the sectors performance, With more than half the population directly depending on this sector, low agricultural growth has serious implications for the inclusiveness of growth

   The number of rural landless families increased from 35 per cent in 1987 to 45 per cent in 1999, further to 55 per cent in 2005,

2. **Rise in Rural-Urban** Divide Impact is clearly visible on urban life but rural life in India has not changed much, People are still living in houses made of mud barring houses of few rich and progressive farmers, Government has initiated several developmental programs for uplift of living standards of people but full benefits have not reached to the targeted population due to corruption prevalent in administrative and political systems, Pradhan Mantri Gramin Sadak Yojna has resulted in road connectivity in rural India but roads are of poor quality and without drainage support, Toilet and lavatory systems are not of standard quality and not even constructed in all houses of the village, Life in rural India is miserable due to non-availability of electricity, Several states in India claim that 40,50 or even 100 percent villages have been electrified, But supply of electricity to villages that have been electrified is not more than 3-4 hours per day.

   Globalization has widened the gap between the rich and poor, rises inequalities and mounts debt of developing countries. The World Commission report found unequal distribution of growth and disparities across the nations and increasing unemployment and poverty, According to the report, the per capita income of the 20 richest capitalist countries went up to 121 times during 1985-2001. The inequality was increased in a large number of countries; while in 16 countries inequality has static and only in case of nine countries the inequality has declined. The Human Development and the ILO studies found increase in unemployment worldwide. Globalization leads to widening income gaps within the countries

   Globalization benefits within a country only to those who have the skills and the technology, The higher growth rate achieved by an economy can be at the expense of declining incomes of people who may be rendered redundant. In this context, it has to be noted that while globalization may accelerate the process of technology substitution in developing economies, these countries even without globalization will face the problem associated with moving from lower to higher technology,

3. **Adverse Impact on Environment** Globalization has also contributed to the destruction of the environment through pollution and clearing of vegetation cover, With the construction of companies, the emissions from manufacturing plants are contributing to environmental pollution which further affects the health of many individuals, The construction also destroys the vegetation cover which is important in the very survival of both humans and other animals, Chemical Pesticides and herbicides have created health hazards, animals were pumped full of hormones and antibiotics, which has resulted in diseases among them, Such commercial, agriculture and animal raising have proved dangerous to human life, In India, Chlorine, petro-chemicals, caustic soda and such other chemical industries have sprang up in large number since 1991-92, This has encouraged import of chemicals polluting the environment

4. **Unemployment** A blackish of globalization has been widespread unemployment either due to technological innovations or diversifications or relocations or closure of companies, Employees have also been retrenched because of the companies' cost cutting measures due to the recent global slow down,

5. **Human Rights Violation** the supremacy of many state; decline and that of corporation: rise, capacity of the latter to violate the rights of people or to create conditions in which rights becomes harder to exercise or protect, has increased tremendously, Against this backdrop it is not surprising that shocking reports surface about MNCs making considerable profits at the expense often people, The Bhopal gas tragedy of December 1984 killing over 8000 people was the most corporate human rights violations and the MNC involved was none other than the chemical giant Union Carbide.

Liberalization

1. Dismantling of industrial licensing system
2. Reduction in physical restrictions on imports and import duties
3. Reduction in controls on foreign exchange, both current and capital account
4. Opening up public sector domains like power, transport, banking etc

Effects of Liberalization

I. First, the opening up of foreign trade and investment (and a competitive exchange rate) boosted exports, services and inward remittances enormously;
II. The rise of strong Indian firms, built by unshackled entrepreneurs able to compete globally Infosys, Jet, Airtel and Videocon hardly existed a decade ago,
III. Average living standards rising at almost 4 per cent a year, the poverty ratio dropped below a quarter of the population and the catch phrase of "a rising middle class" gained substance,

Privatization

Privatization is a process that reduces the involvement of the state or the public sector in the economic activities, Privatization implies many on the government sectors are sold or given to private individual hands to run them.

Serious problems are observed in the form of:

1. Insufficient growth in productivity
2. Poor project management
3. Lack of continuous technological up-gradation
4. Inadequate attention to research and development and human resources development

Positive Impact of Privatization

1. State owned enterprises usually are outdone by the private enterprises competitively, When compared the latter show better results in terms of revenues and efficiency and productivity, Hence, privatization can provide the necessary impetus to the under performing PSUs.
2. Privatization brings about radical structural changes providing momentum in the competitive sectors.
3. Privatization has a positive impact on the financial health of the sector which was previously state dominated by way of reducing the deficits and debts.

Negative Impact of Privatization

1. Private sector focuses more on profit maximization and less on social objectives unlike public sector that initiates socially viable adjustments in case of emergencies and criticalities
2. There is lack of transparency in private sector and stakeholders do not get the complete information about the functionality of the enterprise
3. Privatization has provided the unnecessary support to the corruption and illegitimate ways of accomplishments of licenses and business deals amongst the government and private bidders, Lobbying and bribery are the common issues tarnishing the practical applicability of privatization
4. There can be a conflict of interest amongst stakeholders and the management of the buyer private company and initial resistance to change can hamper the performance of the enterprise
5. Privatization escalates price inflation in general as privatized enterprises do not enjoy government subsidies after the deal and the burden of this inflation affects the common man

Impact of Economic Reforms Process on Indian Agricultural Sector

1. Agriculture income and employment
2. Agricultural prices and
3. Food security
4. Reduction in Commercial Bank credit to agriculture

Government Measures

1. Swam Jayanti Gram Swarozgar Yojana (SGSY)
2. Deen Dayal Antyodaya Yojana -National Rural Livelihoods Mission (DAY-NRLM):

18. Why are the Micro, Small and Medium Enterprises (MSMEs) considered growth engine for new India? Discuss the rationale of financial incentives given to MSMEs for their revival.

Significance of Small-Scale Industries

The small scale and cottage industries of India have a decisive role to play in the economic development of the country. By and large, small enterprises have certain definite advantages.

1. Contribution to National Income and Larger Output: The small enterprises of India were contributing a larger share of National Income when India became independent. Out of the total national income of? 8,500 crore the share of small industrial units was Rs.870 crore as against the share of Rs.610 crore by large industries. Although there has been considerable development of large-scale industries during the period of planning, even now, India remains mainly a country of small-scale production. The growth and output of small-scale industries are very credit-worthy.

2. Employment Potential: The small-scale industries are labour intensive. Labour investment ratio in their case is quite high. A given amount of capital invested in small scale industrial undertakings is likely to provide more employment, at least in the short run than the same amount of capital invested in large scale industries. This is a very important factor for a country like India where millions of people are unemployed and under employed. The handloom industry alone employs nearly 50 lakh people or nearly as many as employed in all organized industries. So it is a solution to the unemployment problem. The rapid growth of small scale sector and its employment has great relevance in our national economic policies. The growth of the small sector improves the production of the non-durable consumer goods of mass consumption. As such, it acts as an anti inflationary force.

3. Capital Light: Small industries require only a smaller amount of capital than required by large scale industries. Where there is scarcity of capital and economizing capital is essential, small scale industry is the only effective solution.

4. Skill Light: The large scale industries require high degree of skill and managerial talent of engineers, technicians, accountants and managers. In our country the supply of qualified personnel is very much limited and economizing the services of these people is also essential. Small scale sector provides the training ground for industrial experience.

5. Import Light: Small scale industries require mostly indigenous machines and equipment and they need not depend too much on imported materials. In the case of large industries, heavy engineering equipment, machines, technical skill and even raw materials have to be imported, which would create problems of foreign exchange earnings. Small industries reduce the need for foreign capital or foreign exchange earnings.

6. Quick Yielding and Decentralization: The time lag between investment and return in the case of small industries is very short and as such the project would give quick returns. Further the small industries being distributed throughout the country there will be no regional imbalance.

7. Better Distribution of Wealth: The decentralization of industries in the small scale sector secures even distribution of income and wealth. Further, small scale industry will not create slums, housing problems, sanitation, disease and squalor as in the case of large scale industries.

8. Contribution to Exports: Growth of small scale industries in the post-independent era has contributed a lot towards export earnings. Bulk of export earnings come from non-traditional items produced by small enterprises.

9. Less of Labour Unrest and Disputes: Generally, in small units, production will not be hampered due to labour trouble, and the labour relationship in small units will be comparatively good and amiable. In the small sector, the labourers are not well organized like large scale sector, and as such they could not express their resentment through strikes and other similar tools of intimidation.

Micro Units Development and Refinance Agency Bank (MUDRA Bank)

It is a public sector financial institution which provides loans at low rates to micro-finance institutions and non-banking financial institutions which then provide credit to Micro, Small and Medium Enterprises (MSMEs). It was launched on 8th April 2015.

Mudra Bank Micro Units Development and Refinance Agency Regulate and Refinance and Micro finance Institutions

The principal objectives of the MUDRA Bank are the following

1. Regulate the lender and the borrower of microfinance and bring stability to the microfinance system.
2. Extend finance and credit support to Microfinance Institutions (MFI) and agencies that lend money to small businesses, retailers, self-help groups and individuals.
3. Register all MFIs and introduce a system of performance rating and accreditation for the first time.
4. Offer a Credit Guarantee scheme for providing guarantees to loans being offered to micro businesses.
5. Introduce appropriate technologies to assist in the process of efficient lending, borrowing and monitoring of distributed capital.

19. Highlight the role of Self-Help Groups in rural women empowerment.
கிராமப்புற பெண்கள் மேம்பாட்டிற்கு சுய உதவிக்குழுக்களின் பங்களிப்பு பற்றி எழுதுக

- Origin of SHG – TN – 1989 – women development project
- 1992 – Mahalir thittam
- Kalanjiyam – P.Chinnapillai
- Micro finance through SHG
- Entrepuernship development through SHG
- Elimination of Money lenders role
- Schemes by Govt of India and TN for SHG and micro finance
- Rural women development programmes
- NABARD Bank Linkage programme

Self Help Groups -What are SHGs?

Self-help Groups (SHGs) are informal associations of people who come together to find ways to improve their living conditions. They are generally self-governed and peer-controlled.

The emergence of Self Help Groups – Origin and Development in India

- ✓ The origin of SHGs in India can be traced back to the establishment of the Self-Employed Women's Association (SEWA) in 1972.

- ✓ Even before, there were small efforts at self-organising. For example, in 1954, the Textile Labour Association (TLA) of Ahmedabad formed its women's wing in order to train the women belonging to families of mill workers in skills such as sewing, knitting, etc.
- ✓ Ela Bhatt, who formed SEWA, organised poor and self-employed women workers such as weavers, potters, hawkers, and others in the unorganised sector, with the objective of enhancing their incomes.
- ✓ NABARD, in 1992, formed the SHG Bank Linkage Project, which is today the world's largest microfinance project.
- ✓ From 1993 onwards, NABARD, along with the Reserve Bank of India, allowed SHGs to open savings bank accounts in banks.
- ✓ The Swarn Jayanti Gram Swarozgar Yojana was introduced in 1999 by GOI with the intention of promoting self-employment in rural areas through formation and skilling of such groups. This evolved into the National Rural Livelihoods Mission (NRLM) in 2011.

Functions of Self Help Groups

- ✓ They try to build the functional capacity of poor and marginalised sections of society in the domain of employment and income-generating activities.
- ✓ They offer collateral-free loans to sections of people that generally find it hard to get loans from banks.
- ✓ They also resolve conflicts via mutual discussions and collective leadership.
- ✓ They are an important source of microfinance services to the poor.
- ✓ They act as a go-through for formal banking services to reach the poor, especially in rural areas.
- ✓ They also encourage the habit of saving among the poor.

Advantages of Self Help Groups

- ✓ Financial Inclusion – SHGs incentivise banks to lend to poor and marginalised sections of society because of the assurance of returns.
- ✓ Voice to marginalised – SHGs have given a voice to the otherwise underrepresented and voiceless sections of society.
- ✓ Social Integrity – SHGs help eradicate many social ills such as dowry, alcoholism, early marriage, etc.
- ✓ Gender Equality – By empowering women SHGs help steer the nation towards true gender equality.
- ✓ Pressure Groups – SHGs act as pressure groups through which pressure can be mounted on the government to act on important issues.
- ✓ Enhancing the efficiency of government schemes – SHGs help implement and improve the efficiency of government schemes. They also help reduce corruption through social audits.

Problems of Self Help Groups (SHGs)

- ✓ Need for extending this idea into the poorest families, which is not necessarily the case at present.
- ✓ Patriarchal mindset prevailing which prevents many women from coming forward.

- ✓ Sustainability and the quality of operations of such groups have been questionable.
- ✓ There is a need for monitoring cells to be established for SHGs across the country.

Self Help Groups in India

Kalanjiyam – Madurai Based
Chinnapillai – Stree Shakti Puraskar Award

Kudumbashree in Kerala

The Kudumbashree project was started in Kerala in 1998, as a community action to eradicate poverty. It has become the largest women-empowering project in India. There are 3 components namely, microcredit, entrepreneurship and empowerment. Kudumbashree is a government agency.

Mahila Aarthik Vikas Mahamandal (MAVIM) in Maharashtra

SHGs in Maharashtra were unable to cope with the growing volume and financial transactions and needed professional help. Community managed resource centre (CMRC) under MAVIM was launched to provide financial and livelihood services to SHGs. CMRC is self-sustaining and provides need-based services.

Government Measures

1. Swarna Jayanti Gram Swarozgar Yojana – 1999
2. Deen Dayal Antyodaya Yojana – National Rural Livelihood Mission

20. Discuss the measures taken by the Government to improve education and health status in Tamil Nadu

Educational Development in Tamil Nadu

Modern period

Lord Pent land, the governor of madras from 1912-1919 introduced elementary education bill which permitted local bodies to levy education tax for development of elementary education.

A.P. Patro as education minister in Justice party in 1920's.

Sir Thomas Munroe the Governor of Madras Presidency (1820-27) was highly responsible for the introduction of Western education in Madras Presidency.

He appointed a committee to conduct a statistical survey of the condition of education. The Education Commission of Munroe recommended the creation of two principal schools (Collectorate and Tahsildar schools) in each district.

In 1835 Lord William passed a resolution favouring the introduction of western system of education in India.

Wood's Despatch of 1854 introduced the Department of Public instruction in Madras Presidency

Grant-in-aid was given to all schools. The Madras University was founded in 1857. It was the first University in Tamil Nadu under the British rule.
In 1882 the Local Boards Act was passed. The Board was empowered to open new schools and to get grants from the government. By 1938, all subjects except English were taught in Tamil in schools.

The Annamalai University was founded at Chidambaram in 1929. This was the next step in the development of higher education.

Education since independence

Free education at the secondary school level was introduced in 1964 – 65. In 1956, Midday Meal Programme was introduced in schools. Later, it was extended as Nutrition Meal Scheme in 1982 to avoid drop-outs in schools.

The perspective plan for Tamil Nadu towards learning society- by Adiseshiah in 1976

School Education in Tamil Nadu

Tamil Nadu is grouped among high Gross Enrolement Ratio (GER) States. It ranks third next only to Kerala (81%) and Himachal Pradesh (74%). The all India average is 43% and the world average is 59%.

Gross Enrolment Ratio is 118.8% for primary level(class 1-5); 112.3% for upper primary level (class 6-8), 62.7% for secondary level (class 9-10), 49.26% at Higher Secondary level (class 11-12). This has been possible mainly due to the supply of free food, cloth, foot-wear, scholarship, laptop etc.

Higher Education

As per the All India Survey on Higher Education (AISHE, 2017-18) data, Tamil Nadu State has achieved a Gross Enrollment Ratio (GER) of 48.6 and Gender Parity Index of 0.98 which reflects the conducive environment for Higher Education.

The Higher Education GER has been increased by 1.7% to 48.6. Tamil Nadu is in number one position among all States and almost double its value compared to All India Average of 25.8.

Gross Enrolment Ratio

State	2016-17
Tamil Nadu	46.9
Maharashtra	30.2
Uttar Pradesh	24.9

Odisha	21.0
Bihar	14.4
All India	25.2

(Source: All India Survey on Higher Education (AISHE) released by the Ministry of Human Resource Development- January 2018)

Health

1835 - The first Medical College in the State viz., The Madras Medical College was inaugurated

1885 - The Kasturba Gandhi Hospital was started at Triplicane

1923 - Directorate of Public Health and Preventive Medicine

1954 - Adyar Cancer Institute was started

Tamil Nadu was the first State in the country to set up an AIDS control Society way back in the year 1994.

Tamil Nadu Medical Services Corporation Ltd., (TNMSC) was set up with the primary objective of ensuring ready availability of all essential drugs and medicines in the Govt Medical Institutions throughout the State by adopting a streamlined procedure for their procurement, storage and distribution It was incorporated under the Companies Act, 1956 on 1/7/1994 and has commenced its functions of purchase, storage and distribution of drugs and medicines from January 1995.

Sl. No.	Indicators	Current level
1	Crude Birth Rate (2017)	14.9/1000 population
2	Crude Death Rate (2017)	6.7/1000 population
3	Total Fertility Rate (2016)	1.6
4	Infant Mortality Rate (2017)	16.0/1000 live births
5	Maternal Mortality Ratio (2016-17 State HMIS)	60/1,00,000 live births
6	Natural Growth Rate (2017)	0.83%

Source: Sample Registration System (SRS) – 2017.

Tamil Nadu is the seventh most populous State in the country with a population of 7.21 crore as per 2011 census with Decadal Growth Rate of 15.6%.

National Health Policy – 1983,2002,2017

April 7th – World health day

Tamil Nadu Health System Reform Program 2005

TNHSRP is a World Bank supported project implemented by Department of Health and Family Welfare of Tamil Nadu Government.

CHIEF MINISTER'S COMPREHENSIVE HEALTH INSURANCE SCHEME

Government of Tamil Nadu with the objective of ensuring universal health coverage is implementing the Chief Minister's Comprehensive Health Insurance Scheme (CMCHIS) since 11.01.2012.

The Government of Tamil Nadu has integrated the Government of India's Pradhan Mantri Jan Aarogya Yojana(PMJAY) along with CMCHIS in the State from 23.9.2018.

Transplant Authority of Tamil Nadu

Transplant Authority of Tamil Nadu; a registered society, was formed by G.O.396 dated 12.12.2014 under the Chairmanship of the Honorable Chief Minister of Tamil Nadu.

The General Body consists of 21 members including the Hon'ble Minister for Health and Family Welfare and Hon'ble Minister of Finance.

Transtan also functions as Regional Organ and Tissue Transplant Organization (ROTTO) and State Organ and Tissue Transplant Organization (SOTTO) by GOI order and was registered as a society on 18th March 2015.

Tamil Nadu has been adjudged the best in organ donation in the country for the sixth consecutive year.

Makkalai thedi maruthuvam scheme

3. Samanapalli, Krishnagiri district
4. Non Communicable diseases