

**GOVERNANCE- WELFARE SCHEMES, E-GOVERNANCE, SERVICES ETC.****Defence India Start-up Challenge 5.0**

- Recently, the Ministry of Defence launched the 5th edition of the Defence India Start-up Challenge (DISC) under Innovations for Defence Excellence - Defence Innovation Organisation (iDEX-DIO).
- Thirty-five problem statements – 13 from the Services and 22 from Defence Public Sector Undertakings (DPSUs) – were unveiled under DISC 5.0. Some of which are:
- Situational awareness, augmented reality, Artificial Intelligence, aircraft-trainer, non-lethal devices, 5G network, Underwater Domain Awareness, Drone SWARMS and data capturing.

**Innovation for Defence Ecosystem (iDEX)**

- It was launched in 2018, as an ecosystem to foster innovation & technology development in Defence and Aerospace by engaging innovators & entrepreneurs to deliver technologically advanced solutions for modernizing the Indian Military.
- It provides funding/grants to MSMEs, start-ups, individual innovators, R&D institutes and academia to carry out research and development.
- iDEX is funded and managed by “Defence Innovation Organisation”.

**Core Objectives:**

- Indigenization: Rapid development of new, indigenized and innovative technology.
- Innovation: Creates a culture of engagement with innovative startups to encourage co-creation.

**Key Points**

- DISC aims at supporting Startups/MSMEs (Micro Small and medium Enterprises)/Innovators to create prototypes and/or commercialize products/solutions in the area of National Defence and Security.
- It is meant to achieve self-reliance and foster innovation and technology development in the defence and aerospace sectors.
- It was launched by the Ministry of Defence in partnership with Atal Innovation Mission.
- Under the program, the start-ups, Indian companies and individual innovators (including research & academic institutions) can participate.
- DISC 5.0 will be a massive leap towards leveraging the startup ecosystem to develop India's defence technologies, equipment design and manufacturing capabilities.

**Significance:**

- It forms a link between youth, academia, R&D, start-ups and the armed forces.
- These challenges will also encourage startups to become more attuned to innovative concepts and inculcate the approach of creative thinking in India's budding entrepreneurs.

**Indigenisation of Defence Sector**

- Indigenisation is the capability of developing and producing any defence equipment within the country for the dual purpose of achieving Self Reliance and reducing the burden of imports.
- Self-reliance in defence manufacturing is one of the key objectives of Department of Defence Production.

**New FDI Policy in Defence Sector:**

- In May 2020, the government announced increasing the Foreign Direct Investment limit from 49 % to 74 % under the automatic route in the defence sector.

**Defence Acquisition Procedure 2020:**

- It contains policies and procedures for procurement and acquisition from the capital budget of the Ministry of Defence in order to modernise the Armed Forces including the Coast Guard.

**Defence Industrial Corridors:**

- The defence corridors will facilitate a well-planned and efficient industrial base that will lead to increased defence production in the country.

**Way Forward**

- Private Sector boost is necessary as it can infuse efficient and effective technology and human capital required for modernisation of indigenous defence industry.
- In-house design capability should be improved amongst the three services, the Navy has progressed well on the path of indigenisation primarily because of the in-house design capability, the Naval Design Bureau.
- The government can provide an autonomous status to DRDO which will improve the number of sub-contracts to the private sector and also instil confidence to private sectors.

**PM-KUSUM and Rooftop Solar Programme Phase-II**

Recently, the Ministry of New and Renewable (MNRE) has conducted a review of implementation of Prime Minister's Kisan Urja Suraksha Evam Utthan Mahabhiyan (PM-KUSUM) scheme and Rooftop Solar Programme Phase-II and suggested measures for expansion of the schemes.

**Key Points****About PM-KUSUM:**

- The PM-KUSUM scheme was launched by the MNRE in 2019, to support installation of off-grid solar pumps in rural areas and reduce dependence on grid, in grid-connected areas.
- The objective of the scheme is to enable farmers to set up solar power generation capacity on their barren lands and to sell it to the grid.
- The government's Budget for 2020-21 expanded the scope for the scheme with 20 lakh farmers to be provided assistance to install standalone solar pumps; another 15 lakh farmers to be given help to solarise their grid-connected pump sets.

**Intended Benefits of the PM- KUSUM Scheme:****Helping Farmers:**

It ensures water-security to farmers by providing a day-time reliable source of power for irrigation activities.

It also incentivises the farmers to sell surplus solar energy to the states, which in turn will augment their income.

**Helping Environment:**

If farmers are able to sell surplus power, they will be incentivised to save power and, in turn, it will mean the reasonable and efficient use of groundwater.

Also, expansion of the irrigation cover by providing decentralized solar-based irrigation and moving away from polluting diesel.

**Helping Discoms:**

As farmers will be less dependent on subsidized electricity, the PM KUSUM scheme will support the financial health of electricity distribution companies (discoms) by reducing the burden of subsidy to the agriculture sector.

Help them meet the RPO (Renewable Purchase Obligation) targets.

**Helping States:**

- Promotes decentralised solar power production, and reduces transmission losses.
- A potential way to reduce their subsidy outlay towards irrigation.

**About Rooftop Solar Programme Phase II:**

- The aim is to achieve a cumulative capacity of 40,000 MW from Rooftop Solar Projects by the year 2022.
- In a grid-connected rooftop or small Solar Voltaic Panel system, the DC power generated from the Solar Voltaic panel is converted to AC power using the power conditioning unit and is fed to the grid.
- This scheme is being implemented in the states by distribution companies (DISCOMs).
- The MNRE is providing a 40% subsidy for the first 3 kW and 20% subsidy beyond 3 kW and upto 10 kW of solar panel capacity.

**Objectives of the Rooftop Solar Programme:**

- To promote the grid-connected SPV rooftop and small SPV power generating plants among the residential, community, institutional, industrial and commercial establishments.
- To mitigate the dependence on fossil fuel based electricity generation and encourage environment-friendly Solar electricity generation.
- To create an enabling environment for investment in the solar energy sector by the private sector, state government and the individuals.
- To create an enabling environment for the supply of solar power from rooftop and small plants to the grid.
- Therefore, the installation of rooftop solar will bring down the electricity consumption of the households and save electricity expenditure.

**INTERNATIONAL RELATION****State of the Climate on Latin America and the Caribbean 2020: WMO**

Recently, the World Meteorological Organization (WMO) has released a report on the impacts of climate change and extreme weather in Latin America and the Caribbean.

2020 was a year of unprecedented heatwaves, droughts, forest fires, cyclones and food insecurity for the region.

The Intergovernmental Panel on Climate Change in its sixth assessment report had highlighted the impact of climate change on the Indian Subcontinent.

### **Key Points**

#### **Rise in Temperature:**

- 2020 was among the three warmest years in Central America and the Caribbean and the second warmest year in South America.
- Sea surface temperature in the Tropical North Atlantic Ocean was significantly warmer than normal throughout the year.
- Severe heat waves dominated the region through most of the year, with temperatures soaring above 40°C several days in a row.

#### **Intense Rainfall:**

- Intense rainfall resulted in landslides, floods and flash floods in the rural as well as urban areas of Central and South America towards the end of 2020.

#### **Forest Fires and Cyclones:**

- Deforestation has only increased in the last four years due to clearing for cattle pasture and degradation from fires.
- Deforestation in the Amazon River Basin, which stretches across nine countries in South America and stores 10% of global carbon, has already led to a decline in its ability to regulate climate.
- The Atlantic basin recorded as many as 30 cyclones in 2020 — the highest so far in a single year.

#### **Impact:**

- Extreme weather events affected over 8 million people across Central America, exacerbating food insecurity in countries already crippled by economic shocks, Covid-19 restrictions, and conflict.

#### **Suggestions:**

- Hazard-specific monitoring systems such as FAO's Agricultural Stress Index System (ASIS) is an example of a useful tool to allow governments to issue early warning alerts for specific sectors like agriculture.
- Develop Early Warning Systems (EWS) and contingency plans.
- Early warning systems were underdeveloped in the region, particularly in South America.
- Planting of the mangroves, an ecosystem of which can help sequester three-four times more carbon than most forests.
- Area under mangrove plantation declined 20% between 2001 and 2018 in the region.
- Greater political commitment and more financial support is needed to strengthen EWS and operational weather, climate and hydrological services to support risk management and adaptation.

## **INDIAN POLITY**

### **Reservation Applicable in Either of States after Division: SC**

Recently, the Supreme Court (SC) has ruled that a person belonging to a reserved category in an undivided state is entitled to claim benefit of reservation in either of the successor States.

The ruling came after a resident (Scheduled Caste) of Jharkhand, filed an appeal against the High Court order denying him appointment in state civil service examination of 2007 on the ground that his address proof showed that he was a permanent resident of Patna, Bihar.

Under the Bihar Reorganisation Act, 2000 passed by the parliament a new state, Jharkhand was created from a portion of Bihar.

Article 3 empowers the Parliament to make law relating to the formation of new states and alteration of existing states.

### **Key Points**

#### **Reservation:**

The SC has ruled that a person belonging to a reserved category is entitled to claim benefit of reservation in either of the successor States of Bihar or Jharkhand.

However he/she cannot claim benefit of the quota simultaneously in both the successor States upon their reorganisation in November, 2000. As it will defeat the mandate of Articles 341(1) and 342(1) of the Constitution.

**Article 341:** The President may with respect to any State or Union territory, and where it is a State after consultation with the Governor thereof, by public notification, specify the castes, races or tribes or parts of or groups within castes, races or tribes which shall for the purposes of this Constitution be deemed to be Scheduled Castes in relation to that State or Union territory, as the case may be.

**Article 342:** The President may with respect to any State or Union territory, and where it is a State, after consultation with the Governor thereof, by public notification, specify the tribes or tribal communities or parts of or groups within tribes or tribal communities which shall for the purposes of this Constitution be deemed to be Scheduled Tribes (ST) in relation to that State or Union territory, as the case may be

**Other State Migrants:**

Members of the reserved category, who are residents of the successor State of Bihar, while participating in open selection in Jharkhand shall be treated to be migrants and they can participate in the general category without claiming the benefit of reservation and vice-versa.

## INDIAN ECONOMY

### India's Wool Sector

Amid the rising demand of import of wool, shepherds in Uttarakhand will get a batch of lambs through crossbreeding of sheep indigenous to the region with Australian Merino sheep by the end of the year.

Australian Merino sheep are known to have the softest and finest wool used for apparels.

The main trigger for import was the deteriorating quality and quantity of carpet and apparel grades wool, largely due to inbreeding.

**Key Points**

- India is the seventh-largest producer of wool and accounts for nearly 2 to 3% of total world production.
- India has the third largest sheep population in the world with over 64 million sheep. The annual wool production is in the range of 43-46 million kg.
- Due to the insufficient domestic production, India depends on imports for raw wool, particularly on Australia and New Zealand.
- This wool is then used to prepare products like carpets, yarn, fabrics and garments for the domestic market and for exporting, especially to the United States and Europe.
- Rajasthan is the largest wool producer and is known for its superior carpet grade Chokla and Magra wool.
- Carpet grade is rougher than apparel grade and accounts for 85% of India's production.
- Apparel grade wool accounts for less than 5% of production and coarse grade fit for making rough blankets accounts for the rest.

**Significance:**

The wool textile industry provides employment to 2.7 million workers - 1.2 million in the organised sector, 1.2 million in sheep rearing and farming, and 0.3 million weavers in the carpet sector.

**Challenges:**

**Fall in use of Indigenous Wool:** In the 10 years till 2020, wool consumption by the country's processing units increased by 50%, but the use of indigenous wool fell to almost 10% of the total current sales in Bikaner (Rajasthan).

**Decrease in Pastures:** Pastures are diminishing across the country with the increase in plantations as well as urbanisation.

In Rajasthan, grazing land fell from 1.7 million hectares (ha) in 2007-08 to 1.6 million ha in 2017-18, according to state agriculture department data.

**Shift in Farmers focus:**

Farmers' focus has shifted from wool to meat.

Telangana promotes the meat-producing Nellore breed through a subsidised sheep distribution scheme and the breed now comprises 51% of the state's sheep.

**Government Initiative:**

For the holistic growth of the wool sector, Ministry of Textiles, formulated an integrated programme i.e. Integrated Wool Development Programme (IWDP).

**Way Forward**

Since most shepherds in the country rear sheep not by choice, but due to the lack of other options or because it is their traditional practice. So, there is a need to make this sector lucrative by raising awareness, improving access to pasture lands, facilitating marketing of wool, offering remunerative prices, and upgrading the supply chain for herders who are on the bottom rung of the ladder.

**IMPORTANT FACTS FOR PRELIM****Uttarakhand's Narayankoti Temple: Adopt a Heritage Project**

Recently, the Narayankoti temple (Uttarakhand) has been included under the Centre's Adopt a Heritage project.

**Key Points****Adopt a Heritage Project:**

Launched on 27th September, 2017 (World Tourism Day), it is a collaborative effort by the Ministry of Tourism, Ministry of Culture and Archaeological Survey of India (ASI), State/UTs Governments.

**Aim:**

To develop tourism amenities at heritage/ natural/ tourist sites spread across India to make them tourist friendly, in a planned and phased manner.

**Implementation:**

- The sites/monuments are selected on the basis of tourist footfall and visibility and can be adopted by private and public sector companies and individuals — known as Monument Mitras — for an initial period of five years.
- The Monument Mitras are selected by the ‘oversight and vision committee,’ co-chaired by the Tourism Secretary and the Culture Secretary, on the basis of the bidder’s ‘vision’ for development of all amenities at the heritage site.
- There is no financial bid involved.
- The corporate sector is expected to use Corporate Social Responsibility (CSR) funds for the upkeep of the site.

**Narayankoti Temple:**

- The temple is a group of ancient temples, about 2 km from Guptkashi on the Rudraprayag-Gaurikund highway.
- This is the only place in the country which has nine planetary temples in a group that are a “symbol of nine planets”.
- It is devoted to Lakshmi Narayana who is associated with Pandavas.
- It is believed that these temples were constructed in the 9th century.

**DAILY ANSWER WRITING PRACTICE**

**Qns. Diversity of religion is both India's strength and weakness. Examine. (150 words)**

**Ans.**

**Introduction**

- Indian civilization values of tolerance, cosmopolitanism and multiculturalism gives a unique character to Indian culture. We have people belonging to a variety of ethnicities and religions. While 94% of the world's Hindus live in India, there are also substantial populations of Muslims, Christians, Sikhs, Buddhists, Jains and adherents of folk religions.
- They all have the fundamental right to freedom of religion (Article 25-28) as well, making India a secular country.

**Body**

This religious diversity is India's strength in the following manner:

- It adds to India's rich cultural heritage. Diverse traditions and festivals like Holi, Diwali, Christmas, Eid give India a unique way of life. This diversity leads to rich music, dance, art and literature as well.

- It leads to diversity in intellectual viewpoints which helps to make laws more adaptable to societal values.
- India represents a model for international society in the current era marked with religious intolerance. Indian value of 'Vasudeva Kutumbhakam' can lead the world to peace and prosperity.
- Religious diversity gives opportunity for India to increase people-to-people contacts across the globe. This not only helps in expanding India's trade frontiers but also acts as backchannel diplomacy in crisis situations.

However, religious diversity creates a lot of challenges as well. Few of them are:

- It increases the chances of communal disharmony. Few people use hate speech to spread communal hatred which may lead to riots and tensions among people of different religions.
- Certain anti-national elements use religion for illegitimate interests like radicalizing youth to indulge in terrorist activities in the name of religion.
- Accommodating diverse religious practices that may not be suitable for the rest of the country. It may open a Pandora's Box to legitimize different religious practices.
- State interference in religious practices of minorities may disturb their autonomy and may hamper their belief in constitutional principles. Thus, the conflict between constitutional morality and religious morality poses difficult questions for the judiciary.

### Conclusion

- India represents the most complex amalgamation of various cultural identities. Religious diversity can be a boon or a bane depending upon the maturity of the society. If the citizens adhere to the constitutional principles of fraternity and brotherhood, only then India can truly achieve 'unity in diversity'.

### DAILY QUIZ

1. Consider the following statements:
  - 1.The World Meteorological Organization (WMO) is a UN specialised agency.
  - 2.It was established following the Vienna International Meteorological Congress, 1873.
  - 3.The 'State of the Global Climate' report is released by WMO.Which of the statements given above is/are correct?  
A. 1 only                      B. 2 and 3 only                      C. 3 only                      **D. 1 and 3 only**
2. Consider the following statements:
  - 1.Part XVI of the Indian Constitution deals with reservation of SC and ST in Central and State legislatures.
  - 2.Article 243 provides reservation of seats for SCs and STs in every Panchayat and Municipality.Which of the statements given above is/are correct?  
**A.1 only**                      B.2 only                      C.Both 1 and 2                      D.Neither 1 nor 2
3. With reference to the Tungabhadra River, Consider the following statements:
  - 1.It is a tributary of Krishna River, which drains into the Arabian Sea.
  - 2.Pampa Sagar Dam is built across Tungabhadra River.
  - 3.It's major tributaries are the Bhadra, Haridra, Vedavati, Tunga.Which of the above statements is/are correct?  
A.1 only                      B.2 only                      **C.2 and 3 only**                      D.1, 2 and 3 only
4. With reference to Adopt a Heritage Project, consider the following statements:
  - 1.It is a collaborative effort by the Ministry of Tourism, Ministry of Culture , Archaeological Survey of India and State/UTs Governments.
  - 2.The security individuals guarding the sites/monuments selected under the project are called the Monument Mitras.Which of the statements given above is/are correct?  
**A.1 only**                      B.2 only                      C.Both 1 and 2                      D.Neither 1 nor 2
5. With reference to the 'Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM KUSUM)' Scheme, consider the following statements:
  1. It has provisions for solar agriculture water pumps and solarisation of existing Grid connected Agriculture pumps.
  2. It can reduce DISCOMs' burden of subsidy on agriculture consumption of Electricity.
  3. The nodal ministry for the scheme is the Ministry of Agriculture & Farmers Welfare.Which of the statements given above is/are correct?  
A.1 only                      B.1 and 2 only                      **C.1 and 3 only**                      D.1, 2 and 3