

INDIAN HERITAGE AND CULTURE, HISTORY**Shondol**

Ladakhi Shondol dance has created history by breaking into the Guinness book of world records as the largest Ladakhi dance.

About:

- It was reported that 408 women artists performed the Shondol dance on the occasion of the Annual Naropa Festival, the ongoing Buddhist carnival near the 11th-century world-famous Hemis Monastery in Ladakh.
- Shondol, which is known as the royal dance of Ladakh, is performed by Takshoma or women dancers to praise the King of Ladakh on special occasion.

GEOGRAPHY**Atlantic Meridional Overturning Current (AMOC)**

A new study suggests that Atlantic Meridional Overturning Current (AMOC) is getting help from the Indian Ocean.

About:

- Atlantic Meridional Overturning Current (AMOC) is a large system of ocean currents operating in the Atlantic, which circulates the waters between the north and the south. It is characterized by a northward flow of warm, salty water in the upper layers of the Atlantic, and a southward flow of colder, deep waters that are part of the thermohaline circulation.
- How it operates:
- As warm water flows northwards in the Atlantic, it cools, while evaporation increases its salt content.
- Low temperature and a high salt content raise the density of the water, causing it to sink deep into the ocean.
- The cold, dense water deep below slowly spreads southward. Eventually, it gets pulled back to the surface and warms again, and the circulation is complete.
- AMOC ensures the oceans are continually mixed, and heat and energy are distributed around Earth.

New Research:

- For the last 15 years, however, scientists have been worried by signs that AMOC may be slowing, which could have drastic consequences on global climate.
- Now a new study suggests that AMOC is getting help from the Indian Ocean.
- As a result of climate change, the Indian Ocean warms faster and faster, generating additional precipitation.
- This draws more air from other parts of the world to the Indian Ocean, including the Atlantic, causing a series of cascading effects that is providing AMOC a “jump start”.

Sagittarius A*

In a research published recently, scientists have sought to explain the unusual activity of Sagittarius A* this year, which is the area around it becoming much brighter than usual.

About:

Sagittarius A* is a supermassive black hole that sits 26,000 light years away from Earth, near the Galactic Centre, or the centre of the Milky Way.

It is one of the few black holes where we can witness the flow of matter nearby.

Developments this year:

- Since the discovery of Sagittarius A* 24 years ago, it has been fairly calm. This year, however, it has shown unusual activity, and the area around it has been much brighter than usual.
- According to researchers, it may be that the Sagittarius A* has been feeding on nearby matter at a markedly faster rate. A large quantity of gas from the S0-2 star, which travelled close to the black hole last year, may now have reached the latter.
- Other possibilities of the heightened activity could be growing faster than usual in size.

GOVERNANCE- WELFARE SCHEMES, E-GOVERNANCE, SERVICES ETC.**Ganga Data Collector App**

Wildlife Institute of India (WII) has launched a mobile application “Ganga Data Collector” under the National Mission for Clean Ganga (NMCG) of Union Ministry of Jal Shakti.

- The app will provide field researchers with a complete data entry solution to monitor the aquatic population in the river.
- Ganga Prahari volunteers and staff of the forest department in 11 states of the Ganga Basin will use this application to collect data related to the quality of water, the presence of different species of fishes, amphibians and reptiles, crocodiles and turtles, dolphins, birds, water level and weather.
- It will help to improve both data visualization and security.
- The Ganga basin covers 11 states including Uttarakhand, Uttar Pradesh, Madhya Pradesh, Rajasthan, Haryana, Himachal Pradesh, Chhattisgarh, Jharkhand, Bihar, West Bengal, and Delhi.

National Mission for Clean Ganga (NMCG)

- National Mission for Clean Ganga (NMCG) is the implementation wing of the National Ganga River Basin Authority (NGRBA).
- It is a registered society, originally formed by the Ministry of Environment, Forests and Climate Change (MoEFCC) on 12th August 2011 under the Societies Registration Act, 1860.
- But now both NGRBA and NMCG have been allocated to the Ministry of Water Resources, River Development and Ganga Rejuvenation.
- The main pillars of the programme include sewerage treatment infrastructure, river-front development, river-surface cleaning, bio-diversity preservation, afforestation, public awareness industrial effluent monitoring, and Ganga gram

INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS**Taiwan**

Kiribati has become the second nation in a week to drop Taiwan as a diplomatic ally and move towards mainland China. It comes just four days after the Solomon Islands' government voted unanimously to recognize mainland China over Taiwan.

About:

- The number of countries who have diplomatic relations with Taiwan -- officially the Republic of China -- rather than the mainland Chinese government has shrunk rapidly since 2016.
- After closing its missions in the Solomon Islands and Kiribati, Taiwan would be left with recognition from only 14 out of 193 United Nations member states: Belize, Eswatini, Guatemala, Haiti, Honduras, the Marshall Islands, Nauru, Nicaragua, Palau, Paraguay, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines and Tuvalu. The Holy See also recognizes Taiwan.

INDIAN ECONOMY**Mochi Swabhimaan Initiative**

Union Minister of Skill Development and Entrepreneurship announced the launch of Mochi Swabhimaan Initiative.

About:

- Mochi Swabhimaan Initiative is a nationwide effort in which Leather Sector Skill Council (LSSC) will support the cobbler community who provide leather-based services, with CSR funds.
- This will ensure that they work in a dignified manner by bringing respect to their skills by giving them better working environment in the form of kiosks/umbrellas.

Leather Sector Skill Council (LSSC)

- LSSC is an NSDC approved non-profit organization dedicated to meet the demand for skilled workforce in the leather industry in India.

- Set up in 2012, LSSC works with a host of members from the industry, government organizations, the academia, the training partners and the assessment partners.

ISSUES RELATED TO INTERNAL SECURITY AND DISASTER MANAGEMENT**Post Disaster Needs Assessment (PDNA)**

The National Institute of Disaster Management (NIDM) is organizing a National workshop on Post Disaster Needs Assessment (PDNA). NIDM, undertook the study for developing a scientific tool on PDNA, under the National Cyclone Risk Mitigation Project (NCRMP).

About:

- PDNA is an exercise led by the government and supported by UN agencies, the World Bank, and the European Union. UN Development Group coordinates on behalf of the UN system.
- The PDNA tool was developed by the UN Development Group, the World Bank and the European Union as one of the key commitments of their 2008 agreement to develop and use common assessment and recovery planning approaches in post-crisis settings. These assessments – carried out in the aftermath of earthquakes, cyclones, floods and droughts – have formed the basis for governments and other stakeholders to develop recovery plans and allocate required resources.
- The main goal is to assess the full extent of a disaster's impact, define the needs for recovery, and, in so doing, serve as the basis for designing a recovery strategy and guide donors' funding.

**SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR, DEFENCE
ETC****N-Nitrosodimethylamine (NDMA)**

Global public health regulators claim to have taken steps to remove supplies of a popular heartburn medication currently under investigation the by U.S. FDA for the presence of human carcinogen called N-Nitrosodimethylamine (NDMA) in Zantac and its generic forms.

About:

- Name: N-Nitrosodimethylamine (NDMA) is also known as dimethylnitrosamine (DMN).
- Production: it is a semi-volatile organic chemical, produced as by-product of several industrial processes and present at very low levels in certain foodstuffs, especially those cooked, smoked, or cured.
- Properties: NDMA is water-soluble, yellow in color, and has little or no taste and odor.
- Health effect: It is toxic to the liver and other organs and is a probable human carcinogen. It is also used to create cancer in rats for cancer research.

Recent developments:

- Novartis AG's Sandoz unit recently said that it was halting worldwide distribution of generic versions of the stomach drug Zantac after regulators in the U.S. and Europe began investigating the drug.
- In India, Ranitidine (some versions of Zantac is also known by the generic name ranitidine) is used for treating gastrointestinal disorders and discomfort.

QUOTE OF THE DAY

If you cannot do great things, do small things in a great way

DAILY ANSWER WRITING PRACTICE

Qns: Which factors impact the ocean currents formation and how do they influence climate in different regions of the world?

Ans:

Ocean currents are continuous movements of water in the ocean that follow set paths, kind of rivers in the ocean. There are two type of Ocean Currents, based on depth, viz. surface currents (surface circulation- which make up about 10% of all the water in the ocean) and deep water currents (thermohaline circulation- which make up the other 90% of the ocean). Based on temperature, Ocean currents are classified into two types: cold currents (Labrador Current) and warm currents (Kuroshio current)

Factors which impact the ocean current formations are:

- **Planetary winds:** The planetary winds are permanent winds (Trade winds, Westerlies and Polar Easterlies) that blow from one pressure belt to the other. The oceanic circulation pattern roughly corresponds to the earth's atmospheric circulation pattern. E.g.: There is a change in the direction of ocean currents with a change in direction of the monsoon winds in the Indian Ocean.
- **Temperatures:** The differential heating of the Sun at the equator and the poles causes a difference in the temperature of ocean water. Warm water from the equator slowly moves along the surface towards the poles, while the cold water from the poles slowly creeps along the bottom of the sea towards the equator.
- **Salinity:** Waters of low salinity have lower density enabling them to flow on the surface of waters of high salinity while waters of high salinity flow at the bottom.
- **Earth's rotation:** According to Ferrel's law- Coriolis forces deflect winds and freely moving objects to the right in the northern hemisphere and to the left in the southern hemisphere. Therefore, the movement of ocean currents in the northern hemisphere is in the clockwise and in the southern hemisphere it is in the anti-clockwise direction.
- **Landmass:** A land mass obstructs the direction of flow of ocean current and divides the ocean current to flow in a different direction.
- The ocean currents are very important in determining the climates of different regions of the world, especially those regions bordering on the ocean.
- **Local Climate:** Warm and Cold currents affect the local climate of a region. E.g.: the North Atlantic Drift keeps the coasts of North Sea (western coast of Europe) warm which is unusual for such high latitudes. Similarly, the warm waters of the Kuroshio current in the North Pacific ocean keep the ports of the Alaskan coast ice-free in winter.
- **Precipitation:** Warm currents flow along the east coast of continents resulting in warm and rainy climates while cold currents flow along the west coast of continents.
- **Desert Formation:** Cold ocean currents have a direct effect on desert formation in west coast regions of the tropical and subtropical continents. E.g.: Peru Current, also called Humboldt Current, is a cold-water current of the southeast Pacific Ocean and a primary reason for the aridity of Atacama desert (driest desert of the world).
- **Moderating effect:** They are responsible for moderate temperatures at coasts. eg: Warm North Atlantic Drift in England, Canary cold current in Spain, Portugal etc.
- **Tropical cyclones:** They pile up warm waters in tropics and this warm water is the major force behind tropical cyclones.

Conclusion: Not only there are number of factors which impact the formation of ocean currents, but also the ocean current themselves play a major role in determining regional as well as global climate.

Qns. Multidimensional approach to assess deprivation is critical to combat poverty and achieve sustainable development goals. Discuss.

Ans:

Poverty refers to a condition where a person does not have the minimum amount of income needed to meet the minimum basic requirements like food and clothing over an extended period of time.

Focusing on income only is not enough to capture the true reality of poverty as poor can suffer from multiple disadvantages at the same time e.g. poor health, malnutrition, a lack of clean water or electricity, poor quality of work or lack of education schooling.

SDG's by highlighting the need to achieve multiple goals can address the multidimensional need of development. There are 17 SDGs, they recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality and spur economic growth.

- End poverty: Removal of poverty is the Goal 1 of SDG. It identifies income criteria for removal of poverty. This is the minimum basic condition which is first step to be address wider developmental challenges.
- Ending hunger and malnutrition: It is another crucial SDG goal which seeks to address various health issues and lifelong disabilities including cognitive which arise due to malnutrition. These health issues have long term impact on earning capacities of individuals thus impacting their capacity to raise their income and account for a crucial form of deprivation. Thus addressing malnutrition goes well beyond the basic need for food and income.
- Good Health and Well being for all and at all ages: Health affects everything from how much one enjoy life to what work we can perform. That's why there's a SDG to make sure everyone has health coverage and access to safe and effective medicines and vaccines.
- Education and learning opportunities: Education has direct impact on quality of life of individuals e.g. level of income, ability to choose profession of one's preference etc.
- Clean Water and sanitation: Everyone should have access to safe and affordable drinking water and sanitation facilities. The access to safe water and sanitation is necessary for good health as well as nutritional needs of individuals. Poor sanitation has health repercussion e.g. debilitating diseases like Polio are caused by poor sanitary conditions.
- Gender Equality: About half of the human population has restricted rights and economic opportunities because of patriarchal social norms. This deprivation reduces the capacity of women to achieve outcomes which according to their inherent capabilities e.g. wage inequality based on gender is global phenomenon.

Conclusion:

SDGs are recognition of fact that poverty cannot be addressed merely by enhancing incomes. Development is a multidimensional construct as illustrated by Human Development Index. Thus policy makers in developing societies should try to address the intertwined issues of development to address poverty. In Indian context Aspirational Districts Programme to address health & nutrition, education, agriculture & water resources, financial Inclusion & skill Development, and basic infrastructure is in right direction.

DAILY CURRENT AFFAIRS MCQS

1. Sagittarius A*, recently seen in news, is a/an
 - (a) **Black hole**
 - (b) Exoplanet
 - (c) Dwarf planet
 - (d) Comet

2. With reference to Atlantic Meridional Overturning Current (AMOC), consider the following statements:
 1. It is a large system of ocean currents operating in the Atlantic, which circulates the waters between the north and the south.
 2. It is characterized by a northward flow of colder, deep waters that are part of the thermohaline circulation.

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 N-Nitrosodimethylamine (NDMA), consider the following statements:
 1. It is a semi-volatile organic chemical, produced as by-product of several industrial processes.
 2. It is toxic to the liver and other organs and is a probable human carcinogen.

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

4. Shondol dance, is known as the royal dance of which of the following regions?
 - (a) **Ladakh**
 - (b) Kinnaur
 - (c) Tawang
 - (d) North Andaman Island

5. With reference to Mochi Swabhimaan Initiative, consider the following statements:
 1. It is a nationwide effort in which Leather Sector Skill Council (LSSC) will support the cobbler community who provide leather-based services, with CSR funds.
 2. LSSC is a National Skill Development Corporation (NSDC) approved non-profit organization dedicated to meet the demand for skilled workforce in the leather industry in India.

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

6. With reference to the Post Disaster Needs Assessment (PDNA), consider the following statements:
 1. It is an exercise led by the government and supported by UN agencies, the World Bank, and the European Union.
 2. UNESCO coordinates on behalf of the UN system.

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

7. With reference to Taiwan, consider the following statements:
 1. Taiwan and China are separated by the Sunda Strait.
 2. Taiwan is at the same latitude as Mexico and Hawaii.
 3. It is on the tropic of cancer.

Which of the statements given above is/are correct?

 - (a) 1 and 2 only
 - (b) **2 and 3 only**
 - (c) 1 and 3 only
 - (d) 1, 2 and 3

8. Consider the following statements:
 1. National Mission for Clean Ganga is the implementation wing of the National Ganga River Basin Authority.
 2. Wildlife Institute of India is an autonomous institute under the Ministry of Environment Forest and Climate change.

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