

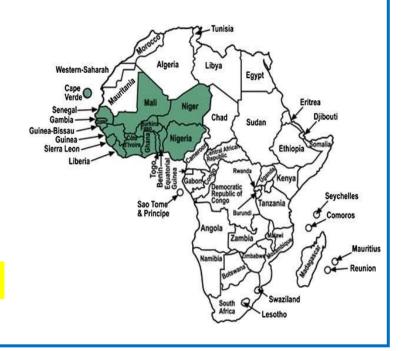
#### **Mali Crisis**



The Economic Community of West African States (ECOWAS) is attempting to mediate to solve the crisis in Mali.

# Recently in Mali

- After the takeover in 2020, the military agreed to appoint civilians as interim president and prime minister under pressure from ECOWAS.
- But Recently, soldiers detained transitional president and prime minister, releasing them after 3 days while saying that they had resigned.
- The twin arrests triggered a diplomatic uproar and marked Mali's second apparent coup within a year.
- Mali's constitutional court completed Goita's rise to full power as transitional president.





## **Background**

- The 2011 crisis in Libya led Mali along the path to chaos.
- Weapons from Libya were supplied across the Sahara Desert and fuelled a separatist conflict in northern Mali. This turned into an Islamist militant offensive which prompted a coup in the capital Bamako (Mali).
- Reasons: Mali has three overlapping sets of problems:
- 1. Political crisis that grew out of the disputed legislative elections of March 2020.
- 2. Economic crisis due to economic stagnation, corruption and further complications by the Covid-19 pandemic. There was dissatisfaction among the troops due to poor payments.
- 3. Security crisis due to the failure to contain terrorism and jihadists and the actions of the military against civilians.

## **Background**

- Military Coup (2020):
- Mali's President Ibrahim Boubacar Keita has resigned after soldiers had arrested him and Prime Minister Boubou Cisse in the capital, Bamako as part of a coup.
- O It calls itself the National Committee for the Salvation of the People and has pledged to stabilise the country by enacting a political transition and stage elections within a reasonable time.
- It would respect all the past agreements, including Mali's support for antijihadist missions in the region and 2015 peace agreement between the Malian government and armed groups in the north of the country.

## **Economic Community of West African States**

- What is it? → It is a <u>regional political and economic union</u> of fifteen countries located in West Africa.
- $\odot$  Established in  $\rightarrow$  1975, with the signing of the Treaty of Lagos.
- The goal of ECOWAS is to achieve "collective self-sufficiency" for its member states by creating a single large trade bloc by building a full economic and trading union.
- It also serves as a <u>peacekeeping force</u> in the region.
- Considered one of the <u>pillar regional blocs</u> of the continent-wide <u>African Economic</u> <u>Community</u> (AEC).
- ECOWAS includes two sub-regional blocs >
  - 1. The West African Economic and Monetary Union is an organisation of eight, mainly French-speaking states.
  - 2. The West African Monetary Zone (WAMZ), established in 2000, comprises six mainly English-speaking countries.

## **ICGS Sajag**



The National Security Advisor (NSA) has commissioned the Offshore Patrol Vessel(OPV) ICGS Sajag. (ICGS-Indian Coast Guard ship).

- © Goa Shipyard Limited has <u>indigenously</u> designed and built the Indian Coast Guard Ship Vessel "Sajag".



## **ICGS Sajag**

Significance → The ICGS Sajag is the third in a series of five offshore patrol vessels under Samarth Class.

# Offshore Patrol Vehicles(OPVs):

Offshore Patrol Vehicles(OPVs) are <u>long-range surface ships</u>. They are capable of <u>operation in maritime zones</u> of India including island territories with helicopter operation capabilities.

# **Climate Breakthroughs Summit**



Recently, world leaders convened at the Climate Breakthroughs Summit to demonstrate progress in critical sectors of the global economy, including steel, shipping, green hydrogen and nature.

- Agency involved → Climate Breakthroughs Summit is a <u>collaboration between</u> World Economic Forum,
   Mission Possible Partnership, United Nations Climate Champions and the United Kingdom Climate Change Conference (COP26) Presidency.
- It also aims to discuss the <u>breakthroughs</u> needed to <u>achieve a net-zero emission world in time</u>.



# **Climate Breakthroughs Summit**

# Key highlights of the summit:

- During the summit, the United Nations made a call for <u>coordinated action</u> to <u>secure global net-zero emissions</u>.
- O UN also demands to fulfil the goal of <u>limiting global warming to 1.5</u> degrees Celsius compared to pre-industrial levels by 2050.
- Moreover, Maersk, the world's largest container shipping line and vessel operator, joined the Race to Zero campaign during the summit.

# Climate Breakthroughs Summit

## About Race To Zero Campaign:

- Race to Zero is the <u>UN-backed global campaign</u> rallying <u>non-state actors</u> including companies, cities, regions, financial and educational institutions to take rigorous and immediate action to <u>halve global emissions by 2030</u> and deliver a <u>healthier</u>, <u>fairer</u>, <u>zero-carbon world in time</u>.
- Race To Zero mobilizes actors outside of national governments to join the Climate Ambition Alliance.

#### Climate Ambition Alliance

- The CAA currently includes <u>120 nations</u> and <u>several other private players</u> that have committed to achieving <u>zero net greenhouse gas emissions by 2050</u>.
- Signatories are responsible for 23% of current greenhouse-gas emissions worldwide and 53% of global GDP.
- India is not part of this Alliance.

#### **PM-CARES for Children Scheme**



The Prime Minister has announced a special PM-CARES for Children scheme. The scheme includes a comprehensive financial aid package for children orphaned during the pandemic.

- Eligibility → All children who have <u>lost both</u> <u>parents</u> or <u>surviving parent</u> or <u>legal</u> <u>guardian/adoptive parents</u> due to Covid 19 will be supported under the scheme.
- Need for these measures → As India <u>battles a</u> raging second wave, cases of children losing their parents to Covid-19 are also mounting.



#### **PM-CARES for Children Scheme**

- Features of the scheme
  - Fixed Deposit in the name of the child → A corpus of Rs 10 lakh for each child when he or she reaches 18 years of age.
  - School Education: For children under 10 years → Admission will be given in the <u>nearest Kendriya Vidyalaya</u> or <u>in a private school</u> as a day scholar.
  - School Education: for children between 11-18 years → The child will be given <u>admission in any Central Government residential school</u> such as Sainik School, Navodaya Vidyalaya etc.
  - Support for Higher Education → The child will be <u>assisted</u> in <u>obtaining</u> an education loan for Professional courses / Higher Education in India as per the existing Education Loan norms.

#### **PM-CARES for Children Scheme**

Health Insurance → All children will be enrolled as a beneficiary under Ayushman Bharat Scheme (PM-JAY) with a health insurance cover of Rs 5 lakhs.





Government stands with children who lost their parents due to COVID-19



Such children to get a monthly stipend once they turn 18 and a fund of 10 lakh when they turn 23 from PM CARES



**Free education to be ensured** for children who lost their parents to COVID-19



Children will be assisted to get an education loan for higher education & PM CARES will pay interest on the loan



Children will get free health insurance of 5 lakh under Ayushman Bharat till 18 years & premium will be paid by PM CARES



Children represent the future of the country and we will do everything to support and protect the children: **PM Narendra Modi** 



It is our duty, as a society, to care for our children and instil hope for a bright future: **PM Narendra Modi** 

#### Cali



The Colombian Army has tightened its control over Cali following the latest anti-government protests.

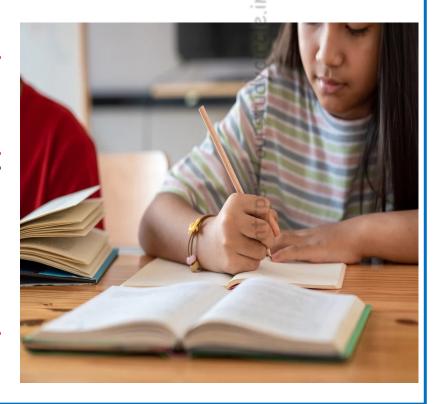
- Cali is the <u>second-largest city in Colombia</u> by area and the third most populous.
- It is the only major Colombian city with access to the Pacific Coast.
- © Cali is located in the <u>Cauca Valley</u> to the <u>west</u> of the <u>Cauca River</u>.





Ministry Of Education has launched YUVA To Mentor Young Authors.

- □ Launched by → the <u>Department of Higher</u>
   <del>Education</del> under the Ministry of Education.
- Purpose → It is an <u>Author Mentorship scheme</u> that aims to mentor authors under the age of 30. It will train them to <u>promote reading</u>, <u>writing</u>, and <u>book culture</u> in the country.
- This will allow India to <u>project its writings</u> globally.

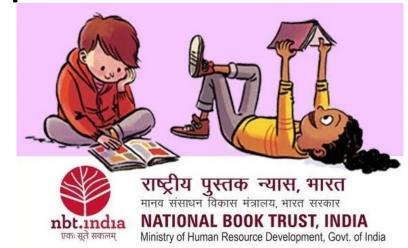


- This scheme is in line with <u>PM's vision to encourage young writers</u> to write about India's freedom struggle.
- Part of → The scheme is a part of the India@75 Project (Azadi Ka Amrit Mahotsav). The project aims to bring out the perspectives of the young generation of writers on themes like unsung heroes, freedom fighters, and others in an innovative and creative manner.
- Key Features of the YUVA Scheme >
  - Under the Scheme, a total of <u>75 authors</u> will be selected <u>through the</u>
     All India Contest.

- The themes of the contest are <u>unsung heroes</u>, <u>freedom fighters</u>,
   <u>National Movement among others</u>.
- The young authors will be <u>trained by eminent authors/mentors</u>. The books by these authors will be published by National Book Trust, India.
- The books will also be <u>translated into other Indian languages</u>. It will ensure the exchange of culture and literature thereby promoting '<u>Ek</u> Bharat Shreshtha Bharat'.
- Moreover, a consolidated <u>scholarship of Rs.50,000 per month</u> for a period of six months per author will be paid under the Mentorship Scheme.

## National Book Trust

- National Book Trust(NBT) is an <u>Indian publishing house</u>.
- O It was <u>founded in 1957</u> as an <u>autonomous body</u> under the <u>Ministry of Education</u> of the Government of India.
- Mandate → The <u>activities of the Trust include</u> publishing, promotion of books and reading, promotion of Indian books abroad, assistance to authors and publishers, and promotion of children's literature.



# Quick revision (True/False)

	Question	True / False
1.	ICGS Sajag -> nuclear-powered ballistic missile submarines.	upscpdf
2.	PM-CARES for Children Scheme -> All children who have lost both parents or surviving parent or legal guardian/adoptive parents due to Covid 19 will be supported under the scheme.	udycircle.in/
3.	<b>Economic Community of West African States -&gt; Established in 1975,</b> with the signing of the Treaty of Lagos.	//ourst
4.	YUVA (Young, Upcoming and Versatile Authors) Scheme -> Under Ministry of Skill Development and Entrepreneurship.	https:
5.	Cali -> second-largest city in Brazil by area.	

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3.	<b>Economic Community of West African States -&gt;</b> Established in 1975, with the signing of the Treaty of Lagos.	True true//
1.	YUVA (Young, Upcoming and Versatile Authors) Scheme -> Under Ministry of Skill Development and Entrepreneurship.	False 4
5.	Cali -> second-largest city in Brazil by area.	False



## Nano Urea Liquid



Recently, the Indian Farmers Fertiliser Cooperative Limited (IFFCO) introduced the world's first Nano Urea Liquid for farmers across the world.

- What is it? → It is a nutrient (liquid) to provide nitrogen to plants as an alternative to the conventional urea.
- It is developed to replace conventional urea and it can curtail the requirement of the same by at least 50%.



## Nano Urea Liquid

- It contains 40,000 mg/L of nitrogen in a 500 ml bottle which is equivalent to the impact of nitrogen nutrient provided by one bag of conventional urea.
- Conventional urea is <u>effective 30-40%</u> in <u>delivering nitrogen to plants</u>, while the effectiveness of the Nano Urea Liquid is <u>over 80%</u>.
  - Its effectiveness has been <u>tested in over 11,000 farmers' fields</u> for <u>94</u>
     <u>crops</u> like rice and wheat.
  - An <u>average 8% increase in yield</u> has been witnessed.
- O Developed At
  - It has been indigenously developed at Nano Biotechnology Research <u>Centre</u>, Kalol, Gujrat in line with Atmanirbhar Bharat and Atmanirbhar Krishi.
  - India is <u>dependent on imports</u> to meet its urea requirements.

## Nano Urea Liquid

- Significance >
  - It has been <u>found effective and efficient</u> for plant nutrition which <u>increases the production</u> with improved nutritional quality.
  - It will also have a <u>huge positive impact</u> on the <u>quality of underground</u> water, a very significant reduction in global warming with an impact on climate change and sustainable development.

#### **Bell of Faith Scheme**



Kerala's 'Bell of Faith' scheme will be expanded to the villages to reach senior citizens staying alone. Earlier, the scheme was successfully implemented in a number of urban households in Kerala.

- Bell of Faith Scheme was <u>launched by the Kerala Police</u> in <u>2018</u>.
- It aims to provide <u>security to senior citizens</u> <u>staying alone</u> as part of Kerala's Community Policing Scheme.
- O Under the Scheme, police have <u>installed a</u> <u>bell</u> in the senior citizens' houses.



#### **Bell of Faith Scheme**

- The <u>neighbour will get an alert</u> with an alarm when the senior citizen rings the bell during an emergency.
- The neighbour can <u>immediately rush to the house</u> or <u>contact the police</u> or <u>hospital</u>.

## **Significance of the Scheme:**

- The Bell of Faith scheme sets an <u>example for community participation</u> to ensure the well-being and safety of the elderly.
- Moreover, this scheme can be of great support for the senior citizens during the COVID-19 pandemic as many live in fear for their health.

## **AmbiTag**



Indian Institute of Technology, Ropar has developed a first-of-its-kind IoT device called AmbiTag (Available at the production cost of Rs. 400).

- What is it? → AmbiTag is the <u>first-of-its-kind</u>
   Internet of Things(IoT) device.
- Purpose → The device will be <u>helpful in the secure transportation of vaccines</u>, <u>blood</u> and <u>body organs</u>, perishable products (food and dairy) among others.



# **AmbiTag**

- O How does the device work?
  - It generates an <u>alert</u> when the <u>temperature goes beyond a pre-set</u> limit.
  - That recorded temperature further <u>helps</u> to know <u>whether that</u> <u>particular item transported from anywhere</u> in the world is <u>still usable</u> or perished because of temperature variation.
  - Shaped as USB device, AmbiTag continuously records the temperature of its immediate surroundings <u>from -40 to +80 degrees</u> in <u>any time zone</u> <u>for a full 90 days</u> on a <u>single charge</u>.
- Developed under AWaDH (Agriculture and Water Technology Development Hub) and its Startup ScratchNest developed the device.

# **AmbiTag**

- Significance
  - AmbiTAG is India's <u>first indigenous temperature data logger</u> for the cold chain management
  - Moreover, the device is also particularly <u>critical for vaccines</u> including the Covid-19 vaccine, organs, and blood transportation.

## **AWaDH**

- AWaDH is a <u>research center at IIT Ropar</u>.
- © Established with support from the Department of Science and Technology(DST) and the Science and Engineering Research Board (SERB).
- It <u>carries out extensive research</u> in the <u>field of agriculture and water</u>.

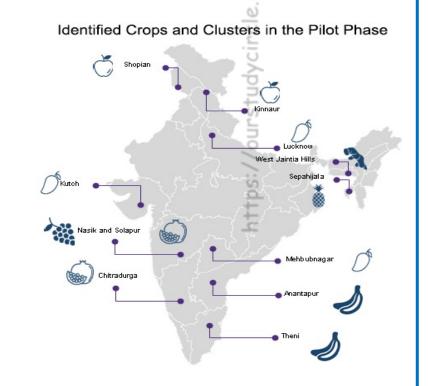
# Horticulture Cluster Development Programme



The Union Minister of Agriculture and Farmers Welfare has launched the Horticulture Cluster Development Programme(CDP).

Horticulture: Art or practice of gardening and cultivating plants and trees. Ex-Fruits and vegetables, Decorative indoor plants and Medicinal plants.

- What is it? → It is a <u>central sector</u> <u>programme</u> aimed at growing and developing <u>identified horticulture clusters</u> to make them globally competitive.
- O Horticulture cluster is a <u>regional</u>/ <u>geographical concentration</u> of targeted horticulture crops.



# Horticulture Cluster Development Programme

- Nodal Agency → The nodal agency for the programme will be the <u>National</u> <u>Horticulture Board</u>(NHB).
- Coverage →
  - The Ministry of Agriculture and Farmers' Welfare(MoA&FW) has identified <u>53 horticulture clusters</u>. Of which <u>12</u> have been <u>selected for</u> <u>the pilot launch</u> of the programme.
    - Based on the learnings from the pilot project, the programme will be scaled up to cover all the identified clusters.
  - These clusters will be implemented through <u>Cluster Development</u> <u>Agencies</u>(CDAs). CDAs are appointed on the recommendations of the respective State/UT Government.

# Horticulture Cluster Development Programme

- Objectives
  - To <u>address all major issues</u> related to the Indian horticulture sector including pre-production, production, post-harvest management, logistics, marketing and branding.
  - To <u>leverage geographical specialisation</u> and <u>promote integrate</u>d and <u>market-led development</u> of horticulture clusters.
  - To converge with other initiatives of the Government such as the <u>Agriculture Infrastructure Fund</u>.

# World Neglected Tropical Diseases (NTD) Day



Delegates at the 74th World Health Assembly unanimously adopted a proposal by the United Arab Emirates. to declare January 30 as 'World Neglected Tropical Diseases (NTD) Day".

# **About Neglected Tropical Diseases**

- Neglected Tropical Diseases(NTD) are a group of infections. These diseases are most common in the tropical regions of Africa, Asia, and the Americas among marginalized communities.
- The basic reason behind them is no access to clean water or safe ways to dispose of human waste.



# World Neglected Tropical Diseases (NTD) Day

- Caused by A variety of pathogens such as viruses, bacteria, protozoa, and parasitic worms.
- These diseases generally receive <u>less funding for research</u> and <u>treatment</u> than diseases like tuberculosis, HIV-AIDS, and malaria.
- Some examples of NTDs include snakebite <u>envenomation</u>, <u>scabies</u>, <u>yaws</u>, <u>trachoma</u>, <u>Leishmaniasis</u>, and <u>Chagas disease</u>.
- Cases NTDs affect more than a billion people globally. However, the diseases are preventable and treatable.

# World Neglected Tropical Diseases (NTD) Day

- The WHO's new road map for 2021–2030 calls for three strategic shifts to end NTDs →
  - From measuring process to measuring impact.
  - From <u>disease-specific planning</u> and programming to <u>collaborative work</u> across sectors.
  - From <u>externally driven agendas</u> <u>reliant</u> to programmes that are country-owned and country-financed.
- Why was January 30 chosen? →
  - It was on this day that the <u>London Declaration on NTDs</u> was adopted, January 30, 2012.
  - The first World NTD Day was celebrated informally in 2020.

# Quick revision (True/False)

	Question	True / False
1.	<b>Bell of Faith Scheme -&gt;</b> launched by the Kerala Police. provide security to senior citizens staying alone.	/upscpdf
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# **National Human Rights Commission**



The President of India appointed Justice Arun Kumar Mishra as the Chairman of the National Human Rights Commission (NHRC).

#### About NHRC

- NHRC, established in 1993, is an independent statutory body as per the provisions of the Protection of Human Rights Act of 1993.
- Objective → To protect and promote human rights related to life, liberty, equality and dignity of individuals.

### **Controversy**

- Justice Mishra stoked controversy in February 2020, when as a sitting of the apex court, he described Prime Minister Narendra Modi as an "internationally acclaimed visionary who could think globally and act locally" at an international conference.
- Leader of Opposition in Rajya Sabha have registered his dissent after the Committee didn't accept his suggestion to appoint a member from either Dalit, Adivasi or Minority communities.
- He argued that since most complaints at the NHRC pertained to these socially disadvantaged groups, there should be at least one representative from these communities in the Commission.

THE NATIONAL HUMAN RIGHTS COMMISSION (NHRC)				
	The Protection of Human Rights Act, 1993	The Protection of Human Rights (Amendment) Bill 2019		
Chairperson	The Commission shall consist of a Chairperson who has been a Chief Justice of the Supreme Court.	The Bill amends this to provide that a person who has been Chief Justice of the Supreme Court or a Judge of the Supreme Court will be the chairperson of the NHRC.		
Other Members	The Act provides that NHRC must consist of two Members to be appointed from amongst persons having knowledge of, or practical experience in, matters relating to human rights.	The Bill amends this to allow three members to be appointed, of which at least one will be a woman.		
Ex-officio members	The Chairpersons of the National Commission for Minorities, the National Commission for the Scheduled Castes, the National Commission for the Scheduled Tribes and the National Commission for Women shall be deemed to be Members of the Commission.	The Bill provides for including the chairpersons of the National Commission for Backward Classes, the National Commission for the Protection of Child Rights, and the Chief Commissioner for Persons with Disabilities as members of the NHRC.		
Term	The Act states that the chairperson and members of the NHRC will hold office for five years or till the age of seventy years, whichever is earlier.	The Bill reduces the term of office to three years or till the age of seventy years, whichever is earlier.		
Reappointment	The Act allows for the reappointment of members of the NHRC for a period of five years.	The Bill removes the five-year limit for reappointment.		
Powers of Secretary- General	The Act provides for a Secretary- General who shall be the Chief Executive Officer of the Commission and shall exercise powers as may be delegated to them.	The Bill amends this and allows the Secretary-General to exercise all administrative and financial powers (except judicial functions), subject to the chairperson's control.		

# National Human Rights Commission

Appointment A Selection Committee will recommend the candidates to the President. The Selection Committee includes:

- Prime Minister (Chairman)
- Speaker of Lok Sabha
- Union Home Minister
- Deputy Chairman of Rajya Sabha
- Leaders of the Opposition in both Houses of the Parliament.
- - <u>Summoning and enforcing</u> the attendance of witnesses and examining them on oath;
  - Discovery and production of any document;
  - Receiving evidence on affidavits.

#### **One Nation One Standard Mission**



The Research Design and Standards Organisation (RDSO) became the first Institution to be declared Standard Developing Organisation (SDO) under the "One Nation One Standard" mission.

- The 'One Nation One Standard' Mission was <u>first</u> deliberated in <u>September, 2019</u>.
- The mission was envisioned on the line of 'one nation, one ration card' scheme in order to ensure quality products in the country.
- The purpose is to <u>converge multiple standards</u> with the BIS which is a recognised national body for standardisation in India.



#### **One Nation One Standard Mission**

- The recognition is <u>valid for 3 years</u> and will <u>require renewal</u> after completion of the validity period.
- Objectives →
  - Aggregating and integrating the existing capabilities and dedicated domain specific expertise available with various organizations in the country engaged in standards development in their specific sectors.
  - The idea is to develop one template of standard for one given product instead of having multiple agencies set it.
  - Enable convergence of all standard development activities in the country resulting in One National Standard for One Subject.
- Senefits This will help in establishing in the long run Brand India. This will also ensure market relevance for the Indian standards.

#### One Nation One Standard Mission

### Bureau of Indian Standards

- It has been established for the <u>harmonious development of the activities</u> of <u>standardization</u>, <u>marking and quality certification of goods</u> and for matters connected therewith or incidental thereto.
- It was established by the <u>Bureau of Indian Standards Act</u>, <u>1986</u> which came into effect in December 1986. It works under the aegis of the <u>Ministry of Consumer Affairs</u>, <u>Food & Public Distribution</u>.
- A new <u>Bureau of Indian standard (BIS) Act 2016</u> has been brought into force with effect from October 2017.
  - The Act establishes the Bureau of Indian Standards (BIS) as the **National Standards Body of India**.

# **IPO** grey market



Paytm's stock has risen from ₹11,500 to ₹21,000 in four days in the grey market.

- But, an IPO grey market is an <u>unofficial</u> market where IPO shares or applications are bought and sold before they become available for trading on the stock market.

# **IPO** grey market

- It is also termed a <u>parallel market</u> or an <u>over-the-counter market</u>.
- Is it allow? How is it governed? →
  - Since it's unofficial, inevitably, there are <u>no regulations</u> that govern it.
     The Securities and Exchange Board of India (SEBI), stock exchanges, and brokers have <u>no part to play in it</u>. These transactions are <u>undertaken in cash on a one-on-one basis</u>.
- Kostak (price of application) rate? →
  - It relates to an IPO application. So, the <u>rate at which an investor buys</u> an IPO application before the <u>listing</u> is termed the Kostak rate.
- Why do investors trade in the Grey Market? >>
  - It's an <u>excellent opportunity for investors</u> to purchase a company's shares even <u>before they are listed</u>, especially if they feel that the company's stock will increase in value.

# **IPO** grey market

- If an <u>investor</u> has <u>missed the deadline for the IPO application</u> or wishes to buy more shares then they can <u>approach the IPO grey market</u>.
- What is in it for the companies?
  - For companies, the grey market is a great way to know how the demand for their shares is and how the company's shares might perform once it is listed.

# **National Commission for Protection of Child Rights**



The National Commission for Protection of Child Rights(NCPCR) has informed the Supreme Court that nearly 10,000 children need immediate care and protection due to the impact of Covid-19.

- NCPCR is a <u>statutory body</u> established in <u>2007</u> under the <u>Commission for Protection of Child</u> Rights Act (CPCR), 2005.
- Nodal Ministry → It is under the administrative control of the Ministry of Women & Child Development.



# National Commission for Protection of Child Rights

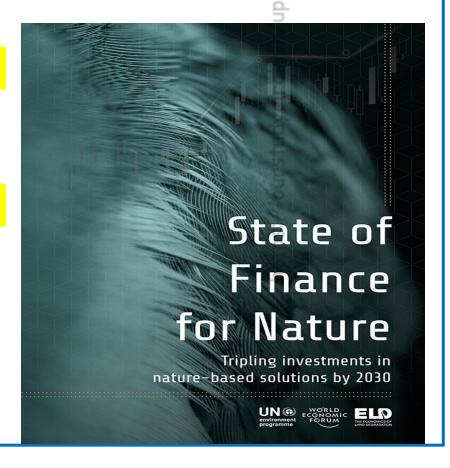
- Mandate → The Commission's Mandate is to ensure that all Laws, Policies, Programmes, and Administrative Mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child.
- Composition →
  - This commission has a <u>chairperson</u> and <u>six members</u> of which at least two should be women.
  - All of them are appointed by Central Government for three years.
  - The maximum age to serve in commission is 65 years for Chairman and 60 years for members.

# **State of Finance for Nature Report**



The State of Finance for Nature Report has been released. The report recommended more investments in "Nature-based solutions".

- Purpose → The report <u>tracks the global trends</u> <u>in public and private investment</u> in nature-based solutions.
- By this, it aims to improve data quality and identify opportunities for governments, businesses and financiers.



# **State of Finance for Nature Report**

- Nature-based solutions(NbS) refer to <u>sustainable management</u> and <u>the use</u> of nature to tackle <u>socio-environmental challenges</u>.
- These challenges range from disaster risk reduction, climate change and biodiversity loss to food and water security as well as human health.

# Key Findings

The current investments in Nature-based solutions amount to USD 133 billion. This is about 0.10% of global GDP.

The largest proportion of <u>public investment</u> is carried out by the <u>United</u>
<a href="States">States</a>, with approximately \$36 billion a year in NbS spending.

It is <u>followed by China</u>, <u>Japan</u>, <u>Germany</u> and <u>Australia</u>.



Recently, the 74th World Health Assembly (WHA) has adopted a new resolution to accelerate efforts to end malaria.

### 👉 About

- The resolution is led by the <u>United</u>
  <u>States of America</u> and <u>Zambia</u>.
- Aim → The aim of the resolution is to <u>urge the Member States</u> to <u>step up progress</u> on containing the disease.
- It is in <u>line with WHO's updated</u> <u>global malaria strategy</u> and the <u>WHO Guidelines for malaria</u>.



- The resolution called on countries to <u>expand investment</u>, <u>scale-up funding</u> for a global response.
- Also, it will boost investment in the research and development of new tools.

# **WHOs Global Malaria Program:**

- The WHO Global Malaria Program is responsible for <u>coordinating WHO's</u> global efforts to <u>control and eliminate malaria</u>.
- The work of the program is guided by the "Global technical strategy for malaria 2016–2030".

#### **Malaria:**

- Malaria is a life threatening mosquito borne blood disease caused by plasmodium parasites.
- O It is predominantly found in the <u>tropical and subtropical areas</u> of Africa, South America as well as Asia.
- The parasites spread through the <u>bites of infected female Anopheles</u> mosquitoes.
  - After entering the human body, parasites initially multiply within the liver cells and then attack the Red Blood Cells (RBCs) resulting in their rupture.
- There are 5 parasite species that cause malaria in humans, and 2 of these species Plasmodium falciparum and Plasmodium vivax pose the greatest threat.

- Symptoms of malaria include <u>fever and flu-like illness</u>, including shaking chills, headache, muscle aches, and tiredness.
- It is <u>preventable</u> as well as <u>curable</u>.

https://ourstudycircle.in/upsc|

# Quick revision (True/False)

	Question	True / False
1.	National Human Rights Commission -> is a Constitutional body.	.pscpdf
2.	Bureau of Indian Standards -> works under the aegis of the Ministry of Commerce and Industry.	lycircle.in/l
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5.	Malaria -> mosquito borne blood disease caused by plasmodium parasites.	True





The Union Cabinet has approved the Model Tenancy Act for circulation to all States / Union Territories for adaptation by way of enacting fresh legislation or amending existing rental laws suitably. It will help overhaul the legal framework with respect to rental housing across the country.

- The government had <u>first released</u> the draft of the MTA <u>in 2019</u>.
- The Act aims to <u>bridge the trust deficit</u> between tenants and landlords by clearly delineating their obligations.



# Highlights of the Model Law

- Applicable prospectively and will not affect the existing tenancies.
- Written agreement is a must for all new tenancies. The agreement will have to be submitted to the concerned district 'Rent Authority'.
- The law also speaks about <u>roles and responsibilities of landlord and</u> tenants.
- No landlord or property manager can withhold any essential supply to the premises occupied by the tenant.
- If tenancy has not been renewed, the tenancy shall be deemed to be renewed on a month-to-month basis on the same terms and conditions as were in the expired tenancy agreement, for a maximum period of six months.

- Compensation in case of non-vacancy: On the expiry of extended period of six months of agreed tenancy period or the termination of tenancy by order or notice, the tenant shall be a tenant in default and liable to pay compensation of double of the monthly rent for two months and four times of the monthly rent thereafter.
- A landowner or property manager may enter a premise in accordance with written notice or notice through electronic medium served to the tenant at least twenty-four hours before the time of entry.
- Significance → It is an important piece of legislation that promises to ease the burden on civil courts, unlock rental properties stuck in legal disputes, and prevent future tangles by balancing the interests of tenants and landlords.

# **Model Tenancy Act**



- Will not affect the existing tenancies
- Written agreement must for all new tenancies
- Separate rent authorities, courts and tribunals to be set up in every district
- States and Union territories can adopt Model Tenancy Act by enacting fresh legislation or they can amend their existing rental laws suitably

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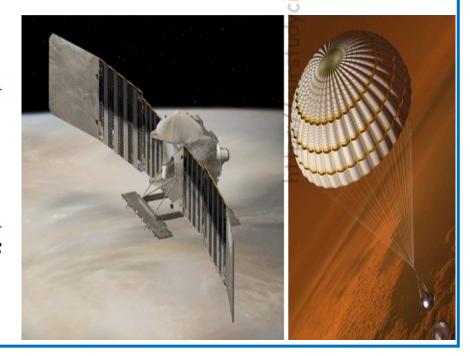
#### **Rent Control Act**

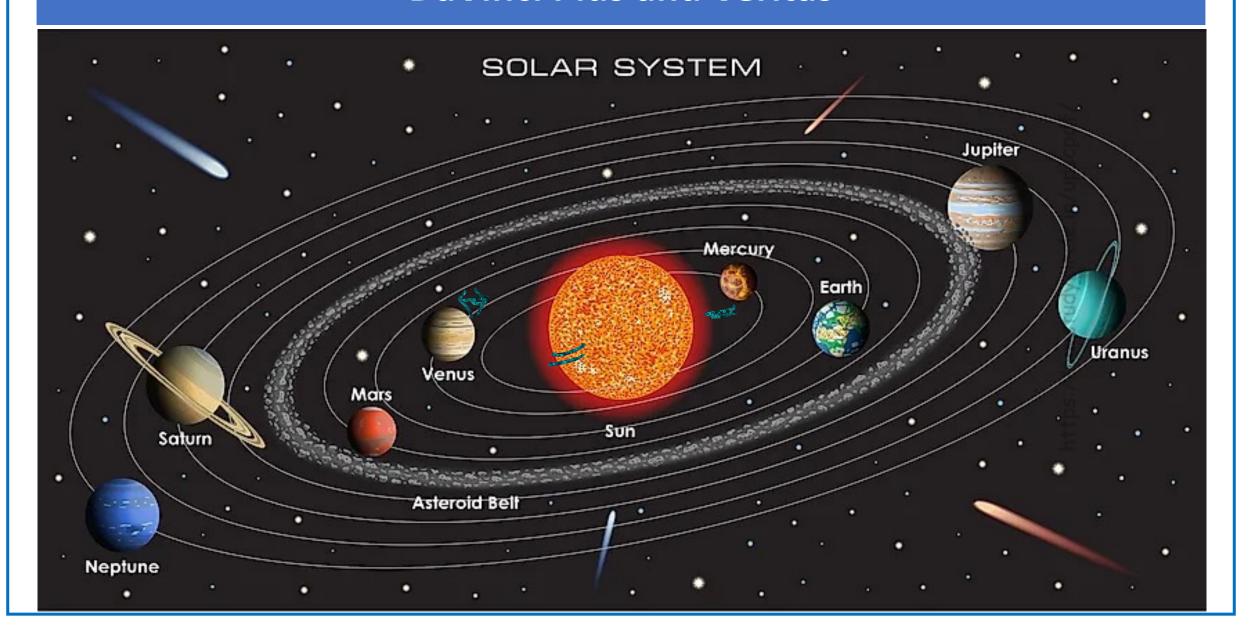
- Transfer of Property Act, 1882.
- O DRC Act, 1958, last amended in 1988
- Leave and license agreements, on the other hand, are entered into for a period of 11 months, with an option to renew the agreement at the expiration of the agreement. As a rental agreement that is 11 months long is just a license for the tenant to occupy the premises for a short duration, rent control laws do not apply.



NASA has announced two new Venus Missions. It will examine the planet's atmosphere and geological features.

- Aim → The two sister missions aim to understand how Venus became an infernolike world capable of melting lead at the surface.
- The new missions will give fresh views of the planet's atmosphere, made up mostly of carbon dioxide, down to the core.





- DaVinci Plus →
  - Davinci+ stands for <u>Deep Atmosphere Venus Investigation of Noble</u> gases, <u>Chemistry</u>, and <u>Imaging</u>.
  - Ohim → The mission will measure the planet's atmosphere to gain insight into how it formed and evolved. It will also aim to determine whether Venus ever had an ocean and was possibly habitable.
  - Significance → This would be the <u>first U.S.-led mission</u> to Venus' atmosphere <u>since 1978</u>. The results from the mission could reshape our understanding of terrestrial planet formation in our solar system and beyond.
- Veritas →
  - VERITAS stands for <u>Venus Emissivity</u>, <u>Radio Science</u>, <u>InSAR</u>, <u>Topography</u>, and <u>Spectroscopy</u>.

- O Aim → The mission will map the planet's surface to understand its geologic history and investigate how it developed so differently than Earth.
- The mission will use a form of radar to chart surface elevations and discover whether volcanoes and earthquakes are still happening.
- Indian Initiative → India plans to launch a new orbiter named Shukrayaan to Venus in 2024.

### **Venus**

- O It is named after the Roman goddess of love and beauty. It is the second planet from the Sun and sixth in the solar system in size and mass.
- O It is the second brightest natural object in the night sky after the Moon, probably that is the reason why it was the first planet to have its motions plotted across the sky, as early as the second millennium BC.
- O Unlike the other planets in our solar system, <u>Venus and Uranus spin</u> clockwise on their axis.
- O It is the hottest planet in the solar system because of the high concentration of carbon dioxide which works to produce an intense greenhouse effect.
- A day on Venus is longer than a year. It takes Venus longer to rotate once on its axis than to complete one orbit of the Sun.

# **Shanghai Cooperation Organisation**



The Union Cabinet of India has approved the ratification of an Agreement on "Cooperation in the field of Mass Media" between all the Member States of Shanghai Cooperation Organisation. The Agreement was signed in June, 2019.

- What is it? → The SCO is a <u>permanent</u> <u>intergovernmental international organisation</u>.
- O It is a Eurasian political, economic, and security alliance and has been the primary security pillar of the region.
- History → It was established in 2001. It was preceded by the Shanghai Five mechanism.



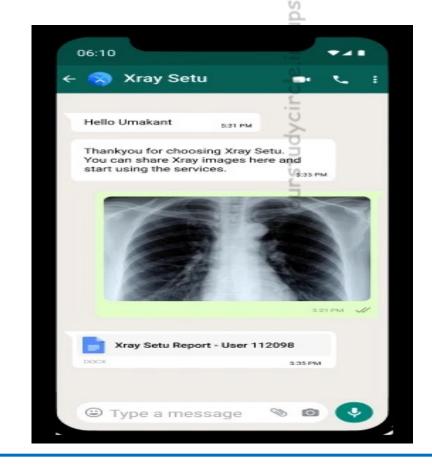
# **Shanghai Cooperation Organisation**

- The Heads of State Council (HSC) is the <u>supreme decision-making body</u> in the SCO. It <u>meets once a year</u> and adopts decisions and guidelines on all important matters of the organisation.
- The SCO's official languages are <u>Russian</u> and <u>Chinese</u>.
- The organisation has two permanent bodies
  - the <u>SCO Secretariat</u> based in <u>Beijing</u>.
  - the Executive Committee of the Regional Anti-Terrorist Structure (<u>RATS</u>) based <u>in Tashkent</u>.
- Membership →
  - Eight member states: <u>India</u>, <u>Kazakhstan</u>, <u>China</u>, <u>Kyrgyzstan</u>, <u>Pakistan</u>, <u>Russia</u>, <u>Tajikistan</u>, and <u>Uzbekistan</u>.
  - Four observer states: <u>Afghanistan</u>, <u>Belarus</u>, <u>Iran</u> and <u>Mongolia</u>.



The government has launched XraySetu service for rapid screening of COVID 19. with the help of Chest X-ray interpretation over WhatsApp for doctors who have access to X-ray machines.

- What is it? → XraySetu is an <u>Artificial</u>
   Intelligence (AI) driven Xray interpretation platform.
- □ Purpose → It has been developed to identify COVID-19 positive patients even from low-resolution Chest X-Ray images sent over WhatsApp (8046163838).



- Developed by → <u>ARTPARK</u> (AI & Robotics Technology Park) in <u>collaboration with</u> Bangalore-based <u>HealthTech startup Niramai</u> and <u>Indian Institute of Science</u>(IISc).
- How does XraySetu work? →
  - A doctor takes a <u>phone picture of the Chest X-Ray</u> of a suspected patient.
  - Then the doctor <u>sends the X-Ray pic</u> over to a <u>Whatsapp number of</u>
     <u>XraySetu</u> via chatbot.
  - At XraySetu end, image review is <u>done</u>, and then it is <u>sent to the</u>
     <u>XraySetu Al service</u>.
  - XraySetu Al Service then <u>analyses the X-ray</u> using <u>specialized machine</u> <u>learning and deep learning algorithms</u> built for detecting unique Covid features in the lungs.

- After analysing, a <u>full report</u> with a probability of COVID, pneumonia, markings on the lung image is <u>automatically generated</u>.
- The doctor then receives the report from the same WhatsApp number on his phone. The doctor then reads the report and appropriately advises the patient.

#### **About ARTPARK**

- ARTPARK (AI & Robotics Technology Park) is a <u>not-for-profit foundation</u>. It was <u>established by</u> the Indian Institute of Science (<u>IISc</u>), <u>Bengaluru</u>, with support from the Department of Science & Technology(<u>DST</u>).
- Purpose → To promote technology innovation missions in AI (Artificial Intelligence) and Robotics. These missions should have a <u>societal impact in sectors</u> such as healthcare, education, mobility, infrastructure, agriculture, retail, and cyber-security.

# Quick revision (True/False)

	Question	True / False
1.	DaVinci Plus -> designed to better understand the geology of Mars and seek signs of ancient life.	/upscpdf
2.	Model Tenancy Act -> Under the act, written agreement is not necessary for new tenancies.	circle.in
3.	Regional Anti-Terrorist Structure (RATS) of SCO -> based in Beijing, China.	/ourstudy
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Venus -> It is the hottest planet in the solar system.	True
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#### H10N3 strain of Bird Flu



China has reported the world's first case of a human infected with H10N3 avian influenza in its eastern province of Jiangsu.

- H10N3 strain of bird flu is a subtype of the Influenza A virus which is commonly known as the bird flu virus.
- The virus is normally <u>fatal to wild</u> <u>birds and poultry</u> because among animals it can be spread through respiratory droplets.



# World: After Covid we Will be Happy



#### H10N3 strain of Bird Flu

- Risk → H10N3 is a low pathogenic or relatively less severe strain of the avian flu in poultry. Its risk of spreading on a large scale is very low.
- Human-Human Transmission → There was no indication or cases of human-to-human transmission of the H10N3 virus.
- Is it a Common Virus? → H10N3 is not a very common virus and only around 160 isolates of the virus were reported in the 40 years to 2018.
  - However, still, flu viruses can <u>mutate rapidly</u> and <u>mix with other strains</u> circulating on farms or among migratory birds.
  - This is known as <u>reassortment (mixing of the genetic material)</u>. This reassortment can make genetic changes that pose a transmission threat to humans.



Recently, the third edition of the Sustainable Development Goals (SDG) India Index and Dashboard 2020–21 was released by NITI Aayog.

#### About Index

- The SDG India Index was <u>launched in 2018 by NITI Aayog</u>. It was developed in collaboration with the United Nations.

# **Report Card**

Niti Aayog unveils 2020-21 SDG India Index

Tracks progress of states on social indicators

Index in line with global SDG-2030

# CURRENT POSITION

12 more states join frontrunner category

#### Maximum improvement on clean water & sanitation

Fares in better affordable, clean energy

#### STATES ABOVE NATIONAL AVERAGE

Kerala, HP, TN, Andhra Pradesh, Goa, Karnataka, Uttarakhand

#### STATES BELOW NATIONAL AVERAGE

Manipur, MP, Bengal, Chhattisgarh, Nagaland, Odisha

#### **WORST PERFORMERS**

Bihar, Jharkhand, Assam, UP, Rajasthan

- The index aims to <u>instil competition among States</u> to improve their performance across social indices.
- Indicators Covered → The third edition of the index covered 16 SDG Goals on 115 quantitative indicators.
- In 2018, around 13 SDG goals with 62 indicators were covered.
- Methodology →
  - Scoring: A composite score for SDG Index is computed in the range of <u>0-100</u> for each State/UT based on its aggregate performance across 16 SDGs.
  - The <u>higher the score</u> of a State/UT, the <u>closer it is towards achieving</u> the <u>2030 national targets</u>.

 Classification: States/UTs are classified based on the SDG India Index Score as follows:

Aspirant: 0–49

Performer: 50–64

Front Runner: 65–99

Achiever: 100.

#### **Key Findings**

- India's overall SDG score improved by 6 points from 60 in 2019 to 66 in 2020-21.
  - This is due to <u>improvement in providing facilities</u> including clean water and sanitation, affordable and clean energy among others.

s://ourstudycircle.in/upscpo

- Categories → Currently, there are no states in the aspirant and achiever category. Around 15 states/UTs are in the performer category and 22 states/UTs in the front runner category.
- State Wise Performance →
  - Kerala has topped the index with a score of 75.
  - It was <u>followed by Himachal Pradesh</u> and <u>Tamil Nadu</u> with a score of
     74.
  - Bihar, Jharkhand and Assam were the worst-performing states in the SDG India index.
- UTs → Chandigarh maintained its top spot among the UTs with a score of 79, followed by Delhi (68).
- Top Gainers → Mizoram, Haryana and Uttarakhand are the top gainers in 2020-21 in terms of improvement in score from 2019.

### World Employment and Social Outlook: Trends 2021



Recently, the International Labour Organisation (ILO) has released the World Employment and Social Outlook: Trends (WESO) report 2021.

- The report <u>analyses key labour market issues</u> including unemployment, labour underutilisation, working poverty, income inequality, labour income share and factors that exclude people from decent work.





#### World Employment and Social Outlook: Trends 2021

# **Key Findings**

- © Covid-19 induced jobs loss will reach 75 million in 2021, before falling to 23 million in 2022.
- Unemployment is expected to stand at 205 million people in 2022.
- The quality of newly <u>created jobs</u> would likely <u>deteriorate in developing</u> and <u>emerging economies</u>.
- Compared to 2019, an additional <u>108 million workers</u> worldwide are now <u>categorized as poor</u> or <u>extremely poor</u>.

#### World Employment and Social Outlook: Trends 2021

# International Labour Organisation

- O It was created in 1919, as part of the Treaty of Versailles that ended World War I, to reflect the belief that universal and lasting peace can be accomplished only if it is based on social justice.
  - It became a <u>specialized agency of the United Nations</u> in 1946.
- Olt is a tripartite organization, the only one of its kind bringing together representatives of governments, employers and workers in its executive bodies.
- Members
  - India is a founding member of the ILO with a total 187 member States.
  - In 2020 India assumed the Chairmanship of the Governing Body of ILO.
- Meadquarter Geneva in Switzerland.

### Seed Minikit Programme



The Seed Minikit Programme was launched by Union Agriculture Minster by distributing Seed Minikits (higher yielding varieties of seeds) of Pulses and oilseeds to farmers.

- Launched by 
   Ministry of Agriculture.
- Seed Minikit Programme aims to <u>distribute</u> <u>high yielding varieties of seeds</u> of pulses and oilseeds to farmers.



### **Seed Minikit Programme**

- Nodal Agencies The <u>seed mini-kits</u> are being provided by the following central agencies
  - National Seeds Corporation(NCS)
  - NAFED
  - Gujarat State Seeds Corporation.
- Significance → This programme is a major tool for introducing new varieties of seeds in fields and instrumental in increasing the seed replacement rate.

### **Devika Project of Udhampur**



Recently, the Ministry of Personnel, Public Grievances & Pensions has said that Devika Project is for all and therefore suggestions are welcome from every Party.

- It is <u>North India's first- of- its- kind</u> <u>project</u> located in Udhampur, Jammu & Kashmir.



### **Devika Project of Udhampur**

- The activities involved under the project are →
  - Bathing "ghats" (places) on the banks of the Devika River will be developed;
  - Encroachments will be removed;
     and
  - Natural water bodies will be restored and catchment areas will be developed along with cremation ground.
- The project includes the construction of <u>three sewage treatment plants</u> of.



### **Devika Project of Udhampur**

#### **About Devika River**

- It holds great religious significance as it is revered by Hindus as the sister of river Ganga.
- In the Nilmat Puran that was written in the 7th century by Nela Muni, it is mentioned that the Devika River is a manifestation of the mother Goddess Parwati herself to benefit the people of Mader Desha.
- It originates from the <u>hilly Suddha Mahadev temple</u> in <u>Udhampur</u> <u>districtof Jammu & Kashmir</u> and flows down towards western Punjab (now in Pakistan) where it <u>merges with the Ravi River</u>.

#### **Industrial Deep Decarbonisation Initiative**



India along with Govt. of United Kingdom has recently launched a new workstream to promote industrial energy efficiency under the Industrial Deep Decarbonization Initiative (IDDI) at the 12th Chief Energy Ministerial (CEM).

#### About IDDI

- O It is a <u>Clean Energy Ministerial's (CEM's)</u> <u>initiative</u>.
- O It is a global coalition of public and private organisations who are working to stimulate demand for low carbon industrial materials.



#### **Industrial Deep Decarbonisation Initiative**

- In <u>collaboration with national governments</u>, <u>IDDI works to standardise carbon assessments</u>, establish ambitious public and private sector procurement targets, incentivise investment into low-carbon product development and design industry guidelines.
- Supporting Countries → Coordinated by <u>UN Industrial Development</u> <u>Organization</u> (UNIDO), the IDDI is <u>co-led by the UK and India</u> and current members include <u>Germany and Canada</u>.

### **Industrial Deep Decarbonisation Initiative**

# Clean Energy Ministerial Initiative

- O It was established in <u>December 2009</u> at the <u>UN's Framework Convention</u> on <u>Climate Change conference</u> of parties in Copenhagen.
- Purpose → CEM is a <u>high-level global forum</u> to <u>promote policies and programs</u> that advance clean energy technology, to share lessons learned and best practices, and to encourage the transition to a global clean energy economy.
- Members
  - 29 countries are part of CEM.
  - <u>India</u> is also a member country.

#### **Red Tourism**



As the Chinese Communist Party celebrates its 100th anniversary this year, the popularity of 'red tourism' is at an all-time high in the country and is bringing in huge revenues for China.

- □ Launched in 2004, Red Tourism involves visiting places that are of historical and cultural importance to the Communist Party's history, while also providing an impetus to tourism and local businesses.
- O It <u>reminds people of the sacrifices</u> made by the leaders of the Communist party to forge a modern China.



# Quick revision (True/False)

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07-June-2021

#### Anti-hail gun



To help out horticulturists who face crop damage due to hailstorms, the Himachal Pradesh government will be testing the use of indigenously developed 'anti-hail guns'.

## About Anti-hail gun

- What is it? → An anti-hail gun is a <u>machine</u> that <u>generates shock waves</u> to disrupt the growth of hailstones in clouds.
- Developed by → developed indigenously by IIT
   Bombay along with Dr Y S Parmar University of
   Horticulture and Forestry at Nauni (Solan). They
   are likely to be much cheaper than the imported
   ones.



### Anti-hail gun

But, what is the need? Why is hail a big issue in HP? →

Every summer from March to May, frequent hailstorms in the fruit-growing areas of Himachal destroy apples, pears and other crops, causing massive losses to farmers.

In some hail-prone areas such as <u>Narkanda and Theog</u>, the <u>entire apple</u>
 <u>crop in an orchard</u> may sometimes get <u>destroyed</u> during such storms.



### Anti-hail gun

- How do anti-hail guns prevent a hail storm? →
  - Anti-hail gun comprises a <u>tall</u>, <u>fixed structure</u> somewhat resembling an inverted tower, <u>several meters high with a long</u> and <u>narrow cone</u> opening towards the sky.
  - The gun is "fired" by feeding an explosive mixture of acetylene gas & air into its lower chamber. This releases a shock wave (waves that travel faster than the speed of sound, such as those produced by supersonic aircraft).
  - These shock waves supposedly <u>stop water droplets</u> in clouds from <u>turning into hailstones</u>, so that they fall simply as raindrops.

### **SAGE** initiative and **SAGE** portal



The Minister of Social Justice and Empowerment, launched the SAGE (Senior care Aging Growth Engine) initiative and SAGE portal to support India's elderly persons.

- SAGE Initiative and SAGE Portal have been launched with an aim to provide "one-stop access" for elderly care. The portal will provide access to all elderly care products and services developed by credible start-ups.
- The Ministry of Social Justice & Empowerment will act as a facilitator for this scheme.



### **SAGE** initiative and **SAGE** portal

# Key Features of the Initiative

- Helping start-ups → The initiative aims to <u>help startups</u> that are <u>interested</u> in the field of providing services for elderly care.
  - Selection of start-ups → Start-ups will be selected by an independent screening committee of experts.
  - Basis of selection → The committee will select the startups on the <u>basis</u>
     of their innovative products and services across sectors. Such as health,
     housing, care centres, food, wealth management and legal guidance.
  - Fund → A fund of up to Rs 1 crore as one-time equity will be granted to each selected start-up.

#### **Blue Finned Mahseer**



Recently, the International Union for Conservation of Nature (IUCN) has moved Blue-finned Mahseer from Endangered to the Least Concern' status on its Red List.

#### **About Blue Finned Mahseer**

- The Mahseer belongs to the <u>genus Tor</u>, of which there are <u>several subspecies to be found in India</u> and in other range countries in South Asia.
- The Blue-finned Mahseer or Tor Khudree is one of the subspecies of the Mahseer.



#### **Blue Finned Mahseer**

- IUCN Status → Least Concern (LC).
- Features →
  - It is a <u>silvery-bluish coloured fish</u> with <u>blood-red fins</u> or fins tipped with a bluish tinge.
  - Indicator species: Blue finned Mahseer is <u>very sensitive</u> to <u>dissolved</u> <u>oxygen levels</u>, <u>water temperature</u> and <u>sudden climatic changes</u>. It just cannot bear pollution.
  - Hence, it acts as an <u>indicator of ecosystem health</u> because its prime requirement is a clean and pure environment.
- Diet The fish <u>feeds on plants</u>, <u>fruits</u>, <u>insects</u>, <u>shrimps</u>. They are also <u>predatory and prey on smaller mahseer</u>.

### **Blue Finned Mahseer**

- Habitat → Blue Finned Mahseer is found in the Mula-Mutha River close to the Indian city of Pune, a part of the Krishna River basin. It is also found in other rivers of the Deccan Plateau.
- The species is <u>migratory</u> and <u>moves upstream</u> during rains.
- Conservation Initiative by Tata power:
- Tata Group is involved in the conservation of the blue-finned and golden mahseer for 50 years in an <u>Artificial Lake</u> at the <u>Walvan Hatchery in Lonavala (near Pune), Maharashtra</u>.
- The company created a huge lake by damming the Indrayani River. It is at this artificial lake where Blue-Finned and Golden species of Mahseer congregate. Once the eggs hatch, they remain in the lake for 4-6 months.
- They are then <u>handed over to various fisheries departments</u> across the country, who in turn introduce them to lakes and rivers in their states.

## **Project-75I**



Defence Acquisition Council (DAC) headed by the Defence Minister has approved a Request For Proposal (RFP) for the construction of six conventional submarines under Project-75I.

### **About**

- The six submarines under Project-75I will be built <u>under the strategic partnership</u> <u>model</u>.
- $\odot$  Estimated cost  $\rightarrow$  Rs 43,000 crore.



## **Project-75I**

- Features → The submarines will be equipped with <u>air-independent</u> <u>propulsion (AIP) systems</u> that will enable the vessels to <u>stay underwater</u> for longer periods and enhance their combat capabilities.
- The <u>first submarine</u> built under the project is likely to be <u>delivered by 2030</u>.
- Two Indian companies shortlisted as strategic partners are <u>Mazagon Dock</u> <u>Shipbuilders Limited</u> (MDL) and <u>Larsen & Toubro</u>.
- The <u>foreign manufacturers</u> selected for the project are <u>French</u> Naval Group, <u>German</u> conglomerate Thyssenkrupp Marine Systems, <u>Russia's</u> Rubin Design Bureau, <u>Spain's</u> Navantia and <u>South Korea's</u> Daewoo Shipbuilding & Marine Engineering Company.

## **Project-75I**

- Significance of this Project-75I →
  - This is the <u>first project</u> to be approved under the <u>Strategic Partnership</u> <u>Model</u>.
  - This would be <u>one of the largest 'Make in India' projects</u>. It will create an industrial ecosystem for submarine construction in India.
  - From a strategic perspective, Project-751 will help <u>reduce current</u> <u>dependence on imports</u> and <u>gradually ensure greater self-reliance</u>.
- Strategic Partnership Model → It is a part of the Defence Procurement Procedure. The model envisages indigenous manufacturing of major defence platforms by an Indian strategic partner. Indian partner will collaborate with a foreign original equipment manufacturer (OEM) to set up production facilities in the country.

### **Black Carbon**



The World Bank has released a report titled "Glaciers of the Himalayas, Climate Change, Black Carbon and Regional Resilience".

## About Himalaya, Karakoram and Hindu Kush (HKHK) mountain region

- The glaciers in the HKHK mountain ranges, containing <u>almost 55000 glaciers</u>. They <u>store</u> <u>more freshwater</u> than any region outside the North and South Poles.
- Their ice reserves feed into three major river basins in South Asia—the Indus, Ganges, and the Brahmaputra. These rivers are home to 750 million people.



### **Black Carbon**

### About Black Carbon (BC):

- O Black carbon (BC) is a <u>short-lived climate pollutant</u>. It is the <u>second-largest</u> <u>contributor to warming</u> the planet after carbon dioxide(CO2).
- O It <u>absorbs solar energy</u> and <u>warms</u> the atmosphere. When it falls to earth with precipitation, it <u>darkens the surface</u> of snow and ice. Thus <u>reducing their albedo</u> (the reflecting power of a surface), and warming the snow, resulting in the faster glacial melting.
- Mowever, unlike other greenhouse gas emissions (GHGs), Black carbon is quickly washed out and can be eliminated from the atmosphere if emissions stop.
- Source of Black Carbon in HKHK region ->
  - Industry [primarily brick kilns] and residential burning of solid fuel together account for 45–66% of Black carbon emissions; On-Road diesel fuels(7–18%) and Open burning (less than 3% in all seasons).

### **Black Carbon**

## **Key findings**

- O Black carbon (BC) deposits produced by human activity accelerate the pace of glacier and snow melt in the Himalayan region.
- The rate of retreat of HKHK glaciers is estimated to be 0.3 metres per year in the west to 1.0 metre per year in the east. Black carbon adds to the impact of climate change.
- Deposits of Black carbon <u>act in two ways</u> hastening the pace of glacier melt: by <u>decreasing surface reflectance of sunlight</u> and by <u>raising air</u> <u>temperature</u>.

# Quick revision (True/False)

	Question	True / False
1.	Anti-hail gun -> developed indigenously by DRDO.	'upscpdf
2.	<b>SAGE</b> initiative -> aims to help startups that are interested in the field of providing services for elderly care.	lycircle.in/
3.	Blue Finned Mahseer -> IUCN: Endangered.	ours†uc
4.	<b>Project-75I -&gt;</b> six submarines under Project-75I will be built under the strategic partnership model.	//:sd††h
5.	Black Carbon -> is a long-lived climate pollutant.	

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5.	Black Carbon -> is a long-lived climate pollutant.	False



### **Burkina Faso**



Suspected fundamentalists linked to Al-Qaeda and Islamic State have killed at least 160 civilians in Burkina Faso near the borders with Mali and Niger (village of Solhan).

### **Issue**

- The country's president, Roch Kabore, has declared three days of national mourning.
- U.N. Secretary-General António Guterres condemned the latest attack in which at least seven children were killed.
- © Guterres called it a "heinous attack." He said it underscores the urgent need for the international community to help governments in the region fight violent extremism.
- O It is deadliest attack since 2015 (After President Blaise Compaoré)







### **Burkina Faso**

- Burkina Faso is a <u>landlocked country</u> in <u>western Africa</u>.
- □ Location → It is bounded by Mali to the north and west, Niger to the northeast, Benin to the southeast, and Côte d'Ivoire, Ghana, and Togo to the south.
- O It is a <u>low-income Sahelian country</u> with limited natural resources.
- O Its economy is largely <u>based on agriculture</u>, which employs 80% of the workforce, although gold exports have increased.
- The country occupies an <u>extensive plateau</u>, and its geography is characterized by a <u>savanna</u> that is grassy in the north and gradually gives way to sparse forests in the south.

### **I-Familia**



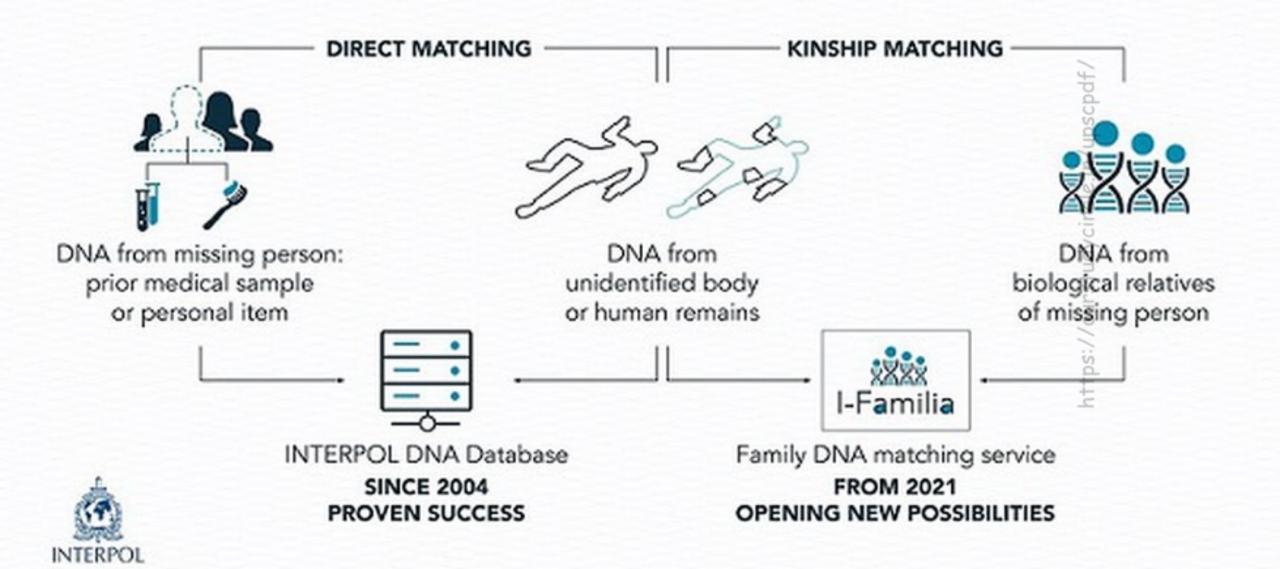
The Interpol has launched a new global database named 'I-Familia'. It will identify missing persons or unidentified human remains around the world through DNA of relatives.

### **About**

- What is it? → I-Familia is a <u>global database</u> launched to <u>identify missing persons through family DNA</u>. It will help the police to solve cases in member countries.
- Interpol applies <u>cutting-edge scientific research</u> and <u>uses the DNA</u> of relatives to identify missing persons or unidentified human remains around the world.



#### TWO TYPES OF DNA MATCHING



### **I-Familia**

- O DNA kinship matching is used mostly in cases where a direct sample of the missing person is not available.
- Components → I-Familia has three components:
  - <u>Dedicated global database</u> to host the DNA profiles provided by relatives. It is held separately from any criminal data;
  - <u>DNA matching software</u> called <u>Bonaparte</u> developed by Dutch company Smart Research; and
  - Interpretation guidelines developed by Interpol.

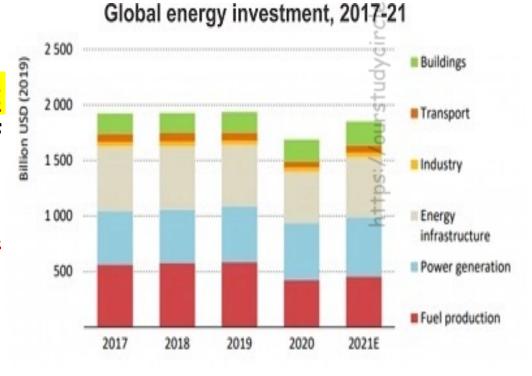
## **World Energy Investment Report 2021**



Recently, the International Energy Agency (IEA) published the World Energy Investment Report, 2021.

## **About**

- The report presents the <u>latest data</u> and <u>analysis of how energy investment</u> <u>flows</u> are <u>recovering</u> from the shock of the Covid-19 pandemic.
- This includes <u>full-year outlook</u> estimates for 2021.



## **World Energy Investment Report 2021**

## **Key Findings**

- O Global energy investments are set to recover by nearly 10% in 2021 to \$1.9 trillion reversing the decline in 2020.
- Global Power Sector which saw flat investments in 2020 is set to receive the highest ever funding i.e. up by about 5% to more than \$820 billion. Among them, Renewables are forecast to account for 70% of the total.
- The <u>technologies</u> like Carbon Capture and Storage(CCS) are <u>yet to attain</u> <u>commercial success</u>. So, the investments in oil are expected to grow by about 10%.
- Net Zero Plan: The commitments to the Net Zero plan is gaining momentum, but its transition to actual action is not visible.

## **World Energy Investment Report 2021**

## International Energy Agency

- O It is an <u>autonomous Intergovernmental Organisation</u> established in <u>1974</u> in Paris, France.
- IEA mainly focuses on its energy policies which include economic development, energy security and environmental protection. These policies are also known as the 3 E's of IEA.
- India and IEA
  - India became an <u>Associate member of IEA</u> in <u>March 2017</u> but it was in engagement with IEA long before its association with the organization.
  - Recently, India has <u>inked a Strategic Partnership Agreement</u> with the IEA to <u>strengthen cooperation</u> in global energy security, stability and sustainability.

Reports World Energy Investment Report, World Energy Outlook Report, Global Energy Review.

## **Performance Grading Index**



The Union Education Minister has approved the release of Performance Grading Index (PGI) 2019-20 for States and Union Territories.

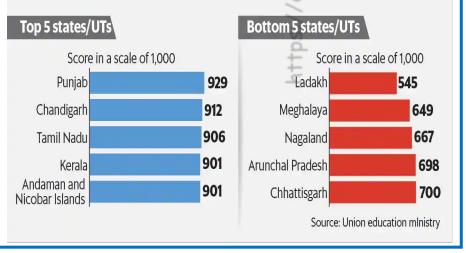
## **About**

- Performance Grading Index (PGI) is a <u>tool to</u> <u>provide insights</u> on the <u>status of school</u> education in States and UTs.
- This includes key levers that drive their performance and critical areas for improvement.

#### **Improved performance**

Andaman & Nicobar Islands, Arunachal Pradesh, Manipur, Puducherry, Punjab and Tamil Nadu have improved overall score in the performance grading index by 10%.

Score of states in school performance index



## **Performance Grading Index**

- Parameters → The index is structured in two categories namely: Outcomes and Governance & Management. These categories comprise a set of 70 indicators aggregate with a total weightage of 1000. These indicators are related to:
  - Learning outcomes
  - Access
  - Infrastructure and facilities
  - Equity and
  - Governance and management.
- Data → The index is based on the data drawn from the Unified District Information System for Education, National Achievement Survey (conducted by NCERT in 2017), Mid-Day Meal, Public Financial Management System, and the Shagun portal (92 lakh teachers and 26 crore students) all maintained by the department of school education.

## **Performance Grading Index**

○ First Released in → The Index was first published in 2019 with the reference year 2017-18.

## Important Findings

- Punjab scored highest: <u>Punjab</u> has recorded the <u>highest score</u> in the index with a <u>total of 929 out of 1,000</u>. This is a huge improvement from 769 in 2020.
- Punjab, <u>Tamil Nadu</u> and <u>Kerala</u> have <u>all scored higher than 90%</u> in the Index for 2019-20.
- Gujarat drops from second to 8th place.
- Madhya Pradesh and Chhattisgarh also saw a severe drop in their scores. Thus pushing both States to an overall performance that was worse than in the previous edition of the index.

## Lamu port



Kenya recently launched its newest mega infrastructure project, the Lamu port, which is a part of an ambitious transport corridor between Lamu (a small archipelago north of Mombasa in Kenya), South Sudan and Ethiopia.

### **About**

- The Lamu port is going to be <u>Kenya's second</u> <u>deep-water port</u> after Mombasa.
- The port is <u>part of the wider US \$23 billion</u>
   Lamu Port South Sudan-Ethiopia Transport
   (LAPSSET) <u>corridor</u> and has been constructed by China Communications Construction Company, with the first three of the planned 32 berths coming at a cost of US \$367 million.





### **Saltwater Crocodile**



Recently, a saltwater or estuarine crocodile has been found dead in the Patasala river near Silapokhari village within the Bhitarkanika National Park (BNP) in Odisha (only State in India with all crocodiles species: Gharial, Mugger and Saltwater crocodiles).

### **About**

- O It is considered as the <u>Earth's</u> <u>largest living crocodile species</u>.
- The estuarine crocodile is <u>infamous</u> globally as a known maneater.



## Lamu port

- Habitat →
  - It is found in <u>Odisha's Bhitarkanika National Park</u>, the <u>Sundarbans in</u> <u>West Bengal</u> and the <u>Andamans and Nicobar Islands</u>.
  - It is also found across <u>Southeast Asia</u> and <u>northern Australia</u>.
- O Protection Status
  - IUCN Red List: <u>Least Concern</u>
  - Wild Life (Protection) Act, 1972: Schedule I
  - CITES: <u>Appendix I</u> (except the populations of Australia, Indonesia and Papua New Guinea, which are included in Appendix II).
- Threats → Illegal hunting, habitat loss, and antipathy toward the species because of its reputation as a man-eater continue to put pressure on the population.

## Lamu port

- Conservation Efforts
  - In 1975, the Ministry of Environment, Forest and Climate Change and the <u>United Nations Development Programme</u> (<u>UNDP</u>) started a <u>crocodile breeding and rearing project</u>.
  - Efforts have <u>increased</u> the number of crocodiles in BNP to 1,768 in <u>January 2021</u> from just 96 in 1974.

# Quick revision (True/False)

	Question	True / False
1.	I-Familia -> is a global database launched to identify missing persons through family DNA.	ı/upscpdf
2.	International Energy Agency -> established in 1957 in Vienna, Austria.	ycircle.ir
3.	Burkina Faso -> is a landlocked country in western Africa.	ours†ud
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5.	Saltwater Crocodile -> The chambal river in the northern slopes of the Vindhya mountains (Madhya Pradesh) is known as the primary habitat of Saltwater Crocodile.	

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### Sea Snot



There has been growing environmental concern in Turkey over the accumulation of 'sea snot', a slimy layer of grey or green sludge in the country's seas, which can cause considerable damage to the marine ecosystem.

### About Sea Snot

- It is a <u>slimy layer of grey</u> or <u>green sludge</u> (गाद), which can cause considerable damage to the marine ecosystem.
- It is formed when <u>algae are overloaded</u>
   with nutrients.





### Sea Snot

- A 'sea snot' outbreak was <u>first recorded in the country in 2007</u>. Back then, it was also spotted in the Aegean Sea near Greece.
- Overloading of nutrients happens because of warm weather caused by global warming, water pollution, uncontrolled dumping of household and industrial waste into the seas etc.

### Where has it been found?

- Turkey's <u>Sea of Marmara</u>, which <u>connects the Black Sea to the Aegean Sea</u>, has witnessed the largest outbreak of 'sea snot'.
- The sludge has also been spotted in the adjoining Black and Aegean seas.



### Sea Snot

## How badly can the crisis affect the marine ecosystem?

- O Divers have said that it has <u>caused mass deaths</u> among the <u>fish population</u>, and also killed other aquatic organisms such as corals.
- The mucilage is now <u>covering the surface</u> of the sea and has also <u>spread to</u> <u>80-100 feet below the surface</u>.
- If unchecked, this can <u>collapse to the bottom</u> and <u>cover the sea floor</u>, causing <u>major damage</u> to the marine ecosystem.
- Over a period of time, it could <u>end up poisoning all aquatic life</u>, including fishes, crabs, oysters (घाँघा/ सीप) and sea stars.

#### **ASEAN**



China is hosting Foreign Ministers from the 10 ASEAN countries. The event also marks the 30-year anniversary of relations.

#### About ASEAN

- The Association of Southeast Asian Nations is a regional organization which was established to promote political and social stability.



#### **ASEAN**

- ASEAN Secretariat 
   Indonesia, Jakarta.
- Formation → Established in 1967 with the signing of the ASEAN Declaration (Bangkok Declaration) by its founding fathers.
- Founding Fathers of ASEAN are → Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Ten Members Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.
- Significance of ASEAN for India →
  - Against the backdrop of aggressive moves by China, including the Ladakh standoff, India <u>placed the ASEAN at the centre</u> of <u>India's Act</u> <u>East policy</u> and held that a cohesive and responsive ASEAN is essential for security and growth for all in the region.

#### **UN's CEO Water Mandate**



NTPC Ltd. has become a signatory to the United Nations' Global Compact's CEO Water Mandate.

#### **About**

- □ It is a special initiative of the <u>UN Secretary-</u>
   □ <u>General</u> and <u>the UN Global Compact</u>, implemented in partnership with the <u>Pacific Institute</u>.
- $\odot$  Established in  $\rightarrow$  2007.



#### **UN's CEO Water Mandate**

- Olt is a global commitment platform for corporate water stewardship. Water stewardship is the use of water in ways that are socially equitable, environmentally sustainable, and economically beneficial.
- It has six commitment areas
  - Direct operations (i.e. Measuring and Reducing water use).
  - Supply chain and watershed management.
  - Collective action.
  - Public policy.
  - Community engagement.
  - Transparency.

https://ourstudycircle.in/

#### **UN's CEO Water Mandate**

#### United Nations Global Compact Initiative:

- United Nations Global Compact is a <u>non-binding United Nations Initiative</u>.
- Purpose → It aims to encourage companies worldwide to adopt sustainable and socially responsible policies. For that, the UN categorised 10 principles range from human rights, anti-corruption, environment, labour, etc.
- © Launched in → The initiative was announced by the then <u>UN Secretary-General in 1999</u>. It was <u>officially launched</u> at UN Headquarters in <u>New York City in 2000</u>.

#### **G7** corporate tax deal



A group of the world's richest nations reached a landmark deal to close cross-border tax loopholes used by some of the world's biggest companies.

#### **About**

- The Group of Seven (G7) would support a minimum global corporation tax rate of at least 15%.
- They would put in place measures to ensure taxes were paid in the countries where businesses operate.



#### **G7** corporate tax deal

- How will it work? →
  - Global minimum tax rate would apply to Overseas profits.
  - Governments could <u>set whatever local corporate tax rate</u> they want, but if companies pay lower rates in a particular country, their home governments could top-up their taxes to the minimum rate, thus eliminating the advantage of shifting profits.
  - The Organisation of Economic, Cooperation and Development (<u>OECD</u>)
    has also been <u>coordinating tax negotiations</u> on <u>rules for taxing cross-border Digital Services</u> and <u>curbing tax base erosion</u>, including a global corporate minimum tax.
  - Also, countries would lose the device used to push policies that suit them once a global minimum rate is put in place.

#### **G7** corporate tax deal

#### **United Nations General Assembly**



In a first for the Maldives, Foreign Minister Abdulla Shahid was elected the President of the UN General Assembly for 2021-22. This time the UNGA head will be chosen from the Asia-Pacific grouping.

#### About UNGA

- The General Assembly is the <u>main deliberative</u>, <u>policymaking</u> and <u>representative organ of the</u> UN.
- All <u>193 Member States</u> of the UN are represented in the General Assembly, making it the only UN body with <u>universal</u> <u>representation</u>.



#### **United Nations General Assembly**

- The <u>President</u> of the General Assembly is <u>elected each year</u> by assembly to <u>serve a one-year term</u> of office.
- The presidency <u>rotates annually</u> between the <u>five geographic groups</u>: African, Asia-Pacific, Eastern European, Latin American and Caribbean, and Western European and other States.
- How are the decisions taken?
  - <u>Decisions on important questions</u>, such as those on peace and security, admission of new members and budgetary matters, require a twothirds majority of the General Assembly.
  - <u>Decisions on other questions</u> are by simple majority.
  - The Assembly has <u>no binding votes</u> or <u>veto powers</u> like the UN Security Council.

#### Lynetteholm Island

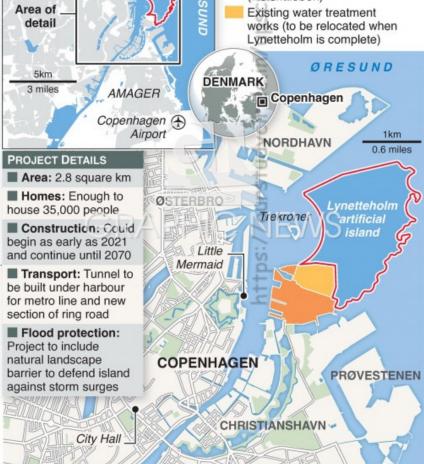


Recently, Denmark has approved the building of Lynetteholm, an artificial island off the coast of Copenhagen (capital of Denmark, located near Baltic Sea).

#### **About**

- The <u>275-hectare project</u> was designed as a housing and business district for around 35,000 people.
- It will be <u>built using soil</u> from construction projects in Copenhagen and the surrounding area.

# Copenhagen's Lynetteholm island plan Denmark's Parliament is to debate the construction of Lynetteholm – an artificial island in Copenhagen's North Harbour. The massive engineering project would require an investment of over \$3 billion\* Lynetteholm proposed area Existing artificial island (Refshaleøen) Existing water treatment works (to be relocated when



Sources: Bloomberg, By & Havn, The Daily Scandinavian \*20bn Danish crowns @ GRAPHIC NEWS





#### Lynetteholm Island

- Concerns Raised
  - Transportation of materials by road will involve a large number of vehicles. About 350 lorry journeys will be required in a day through Copenhagen once the construction has started.
  - Movement of sediment at sea and the possible impact on water quality, ecosystems of the Baltic Sea environment.
  - Following this, a case against the development of Lynette Holm has been filed before **European Court of Justice** by environmental groups.

# Quick revision (True/False)

	Question	True / False
1.	Sea Snot -> formed when algae are overloaded with nutrients.	/upscpdf
2.	Sea of Marmara -> connects the Black Sea to the Caspian Sea.	/circle.im
3.	ASEAN -> Established in 1967. Secretariat - Indonesia, Jakarta	ourstud
4.	Lynetteholm Island -> In Indian ocean.	https://

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#### Srivilliputhur-Megamalai Tiger Reserve



Administrative and financial sanction for improvement and maintenance of a forest road not in use for decades in the core zone of Srivilliputhur - Megamalai Tiger Reserve (SMTR) has come as a shocker to the activists.

# About Srivilliputhur-Megamalai Tiger Reserve

- © Establishment → Srivilliputhur-Megamalai Tiger Reserve is the <u>fifth Tiger Reserve of Tamil Nadu</u> and the <u>51st tiger reserve of India</u>.
- O It was jointly declared as a Tiger Reserve by the Centre and Tamil Nadu governments in February 2021.



#### Srivilliputhur-Megamalai Tiger Reserve

- For this, the <u>Megamalai WLS</u> and the <u>adjoining Srivilliputhur WLS</u> were clubbed together.
- Vegetation → It has a mix of <u>tropical evergreen forests</u> and <u>semi-evergreen forests</u>, <u>dry deciduous forests</u> and <u>moist mixed deciduous forests</u>, <u>grassland</u>.
- Fauna →
  - Meghamalai has a large population of <u>spotted deer</u>, <u>Indian gaurs</u>, <u>wild</u> <u>boars</u> and <u>other carnivores</u>.
  - The adjoining Srivilliputhur hosts <u>grizzled giant squirrels</u>, <u>flying squirrels</u>, <u>leopards</u>, <u>Nilgiri tars</u>, <u>jungle cats</u>, <u>Sambars</u>, <u>elephants</u>, <u>liontailed macaques</u> and many species of birds.

#### Srivilliputhur-Megamalai Tiger Reserve

- $\odot$  Srivilliputhur-Megamalai Tiger Reserve will be the <u>5th tiger reserve</u> of Tamil Nadu. The <u>other four</u> are  $\rightarrow$ 
  - 1. Mudumalai (MTR)
  - 2. Anamalai (ATR)
  - 3. Sathyamangalam (STR)
  - 4. Kalakkad Mundanthurai Tiger Reserve (KMTR)

https://ourstudycircle.in/upscpd



The Chemical Weapons Convention (international chemical weapons watchdog) told the U.N. Security Council that Syria had likely or definitely used chemical weapons in 17 cases.

#### About OPCW

- OPCW is an <u>intergovernmental organization</u> and the implementing body for the Chemical Weapons Convention.
- This convention has been in <u>force since 1997</u> and <u>193 members</u>.



- Functions →
  - The OPCW is authorized to <u>perform inspections</u> to verify that signatory states are complying with the convention.
  - It can also <u>perform testing of sites</u> and <u>victims of suspected</u> chemical weapons attacks.
- Meadquarters The Hague, Netherlands.
- Significance → The OPCW was awarded the Nobel Peace Prize in 2013.

#### Chemical Weapons Convention

- © Chemical Weapons Convention (CWC) is a <u>multilateral treaty</u> that <u>bans</u> <u>chemical weapons</u> and <u>requires their destruction</u> within a specified period of time.
- History → The negotiations for the convention <u>started in 1980</u> at the <u>UN</u>
   <u>Conference on Disarmament</u>. The convention opened for <u>signature in 1993</u>
   and entered into <u>force in 1997</u>.
- Purpose The convention <u>prohibits the large-scale use</u>, <u>development</u>, <u>production</u>, <u>stockpiling</u> and <u>transfer of chemical weapons</u> and <u>their precursors</u>, except for very limited purposes (research, medical, pharmaceutical or protective).

- - <u>Israel</u> has <u>signed but has yet to ratify</u> the convention.
  - Three states have neither signed nor ratified the convention are Egypt,
     North Korea and South Sudan.
- Significance → A unique feature of the Convention is its incorporation of the 'challenge inspection'. Under this, any State Party in doubt about another State Party's compliance can request a surprise inspection.



Aducanumab (Aduhelm), from the company Biogen, is the new drug approved by the US Food and Drug Administration (FDA) for treating Alzheimer's disease.

#### **About**

- Aduhelm is <u>not a cure</u>, but it <u>slows down</u> <u>cognitive decline</u>.
- Alzheimer's disease causes the <u>accumulation of</u> the <u>debris</u> caused by the breakdown of neurons in the brain, leading to <u>plaque formation</u>.
- So, Aducanumab is designed to <u>reduce</u> the <u>presence of amyloid beta</u>, a protein that forms plaques in the brain.

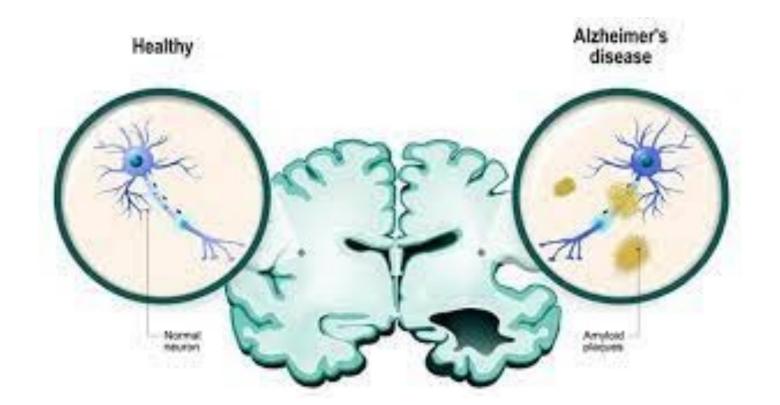


- O Aducanumab aims at <u>altering the course of the disease</u> by slowing the deterioration of brain function by reducing plaque formation.
- Significance → Since there is no treatment so far, the drug that can slow down Alzheimer's disease holds much promise and is a ray of hope.

#### Alzheimer's Disease

- Alzheimer's disease is a <u>progressive neurologic disorder</u> that causes the <u>brain to shrink</u> (atrophy) and <u>brain cells to die</u>.
- The disease is the most common <u>cause of dementia</u> a continuous decline in thinking, behavioural and social skills that affect a person's ability to function independently.
- Caused by → Alzheimer's disease is thought to be caused by the abnormal build-up of proteins in and around brain cells.
- One of the proteins involved is called <u>amyloid</u>, deposits of which form <u>plaques around brain cells</u>.
  - The other protein is called <u>tau</u>, deposits of which form tangles within brain cells.

○ Vulnerability → Alzheimer disease most commonly affects older adults, but it can also affect people in their 30s or 40s.



https://ourstudycircle.in/upscpdf

#### Surakshit Hum Surakshit Tum Abhiyan



NITI Aayog and Piramal Foundation launched Surakshit Hum Surakshit Tum Abhiyaan in 112 Aspirational Districts.

#### **About**

- The Abhiyaan is being part of a special initiative, Aspirational Districts Collaborative, in which local leaders, civil societies and volunteers work with district administrations to address emerging problems across key focus areas of the Aspirational Districts Programme.



#### Surakshit Hum Surakshit Tum Abhiyan

O It will be <u>led by district magistrates</u> in partnership <u>with over 1000 local NGOs</u>, which will enlist and train over 1 lakh volunteers to connect with patients through inbound/outbound calls.

#### Aspirational Districts Programme

- It was launched in <u>January 2018</u>, the '<u>Transformation of Aspirational</u> <u>Districts' Programme</u> (TADP).
- Objective → To <u>transform some of the most underdeveloped districts</u> of the country.
- Ministry → At the Government of India level, the programme is <u>anchored</u> <u>by NITI Aayog</u>. In addition, <u>individual Ministries</u> have assumed responsibility to drive the progress of districts.

#### **Central Adoption Resource Authority**



The Supreme Court has directed the States/UTs to take stringent action against private individuals and NGOs who invite people to illegally adopt children orphaned by the COVID-19 pandemic.

#### About CARA

- © Central Adoption Resource Authority (CARA) is the <u>nodal body for adoption of Indian children</u>.
- © CARA primarily deals with <u>adoption of orphan</u>, <u>abandoned</u> and <u>surrendered children</u> through its associated /recognised adoption agencies.



Ministry of Women & Child Development

Government of India

#### **Central Adoption Resource Authority**

- Working → It regulates <u>in-country</u> and <u>inter-country adoptions</u> (in accordance with the provisions of <u>The Hague Convention</u> on Inter-Country Adoption, 1993, ratified by Government of India in 2003).
- Status → It is an <u>autonomous</u> and a <u>statutory body</u> of the <u>Union Women</u> and <u>Child Development Ministry</u>.
- The mandatory registration of CCIs and linking to CARA has been provided in Juvenile Justice (Care and Protection of Children) Act, 2015.
- Set up in → 1990.
- In 2018, CARA has <u>allowed</u> individuals in a <u>live-in relationship</u> to <u>adopt</u> <u>children</u>.
- HQ → New Delhi.

#### **QS World University Rankings 2022**



Jawaharlal Nehru University (JNU) has entered the top 1,000 of the QS World University rankings for the first time, as its new undergraduate engineering programme now makes it eligible for the rating.

#### **About**

- Released by → Quacquarelli Symonds (QS), a
   British company specialising in the analysis of
   higher education institutions around the
   world.
- Purpose → It is an <u>annual publication</u> of university rankings which <u>comprises the</u> <u>global overall and subject rankings</u>.



#### **QS World University Rankings 2022**

### **Key Findings**

- Top 5 universities in World → Massachusetts Institute of Technology (MIT), University of Oxford, UK; Stanford University, USA; Cambridge University, UK; Harvard University, USA.
- Indian scenario → Only three educational institutes from India, the <u>IIT Bombay (177)</u>, <u>IIT Delhi (185)</u> and <u>IISc Bengaluru (186)</u> feature in the top 200 list.

2022 global rank	Name	
177=	Indian Institute of Technology, Bombay	
185	Indian Institute of Technology, Delhi	
186=	Indian Institute of Science, Bengaluru	
255=	Indian Institute of Technology, Madras	
277=	Indian Insititute of Technology, Kanpur	
280	Indian Insititute of Technology, Kharagpur	
395=	Indian Insititute of Technology, Guwahati	
400=	Indian Institute of Technology, Roorkee	
501-510 (ranking band)	University of Delhi	
561-570 (ranking band)	Jawaharlal Nehru University, Delhi	

# Quick revision (True/False)

	Question	True / False
1.	Central Adoption Resource Authority -> Under Ministry of Social Justice and Empowerment.	/upscpdf
2.	Chemical Weapons Convention -> Three countries that have neither signed nor ratified the convention are India, Pakistan and China.	ycircle.in
3.	Alzheimer's Disease -> is a progressive neurologic disorder.	//ourstud
		https:/

# Quick revision (True/False)

Question	True / False
Central Adoption Resource Authority -> Under Ministry of Social Justice and Empowerment.	False pdsdn/
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Alzheimer's Disease -> is a progressive neurologic disorder.	True pnts.mo//
	https:/
	Central Adoption Resource Authority -> Under Ministry of Social Justice and Empowerment.  Chemical Weapons Convention -> Three countries that have neither signed nor ratified the convention are India, Pakistan and China.



# **UN Secretary-General**



The United Nations Security Council (UNSC) approved ninth UN Secretary-General António Guterres for a second term for five more years starting January 1, 2022.

# About Selection process

- The Secretary-General is appointed by the UN General Assembly (UNGA) on the recommendation of the UNSC.
- The five permanent members of the <u>15-nation-strong UNSC</u> are the <u>most powerful players</u> in the process of selection of Secretary-General, as <u>any one of them can eliminate a</u> candidature by a veto.



# **UN Secretary-General**

- [Five permanent members of the UNSC China, France, Russia, the United Kingdom, and the United States.]
- The 10 elected non-permanent members of the UNSC, of which India is currently a part, do not have veto powers.
- But their backing is still crucial as a candidate requires <u>at least nine out of</u>
   <u>15 votes</u> to be recommended for the top job.

## **Functions of UN Secretary-General:**

- The UN Charter refers to the Secretary-General as the <u>UN chief</u> administrative officer.
- Mandate → UN Secretary-General shall <u>act and perform such functions as</u>
   <u>given to him</u> by the UN Security Council, General Assembly, Economic and
   <u>Social Council and other United Nations organs.</u>

# **UN Secretary-General**

- Functions The Secretary-General's day-to-day work includes:
  - <u>attendance at sessions</u> of United Nations bodies;
  - consultations with world leaders, government officials and
  - worldwide travel intended to keep the Secretary-General in touch with the peoples of the UN member states.

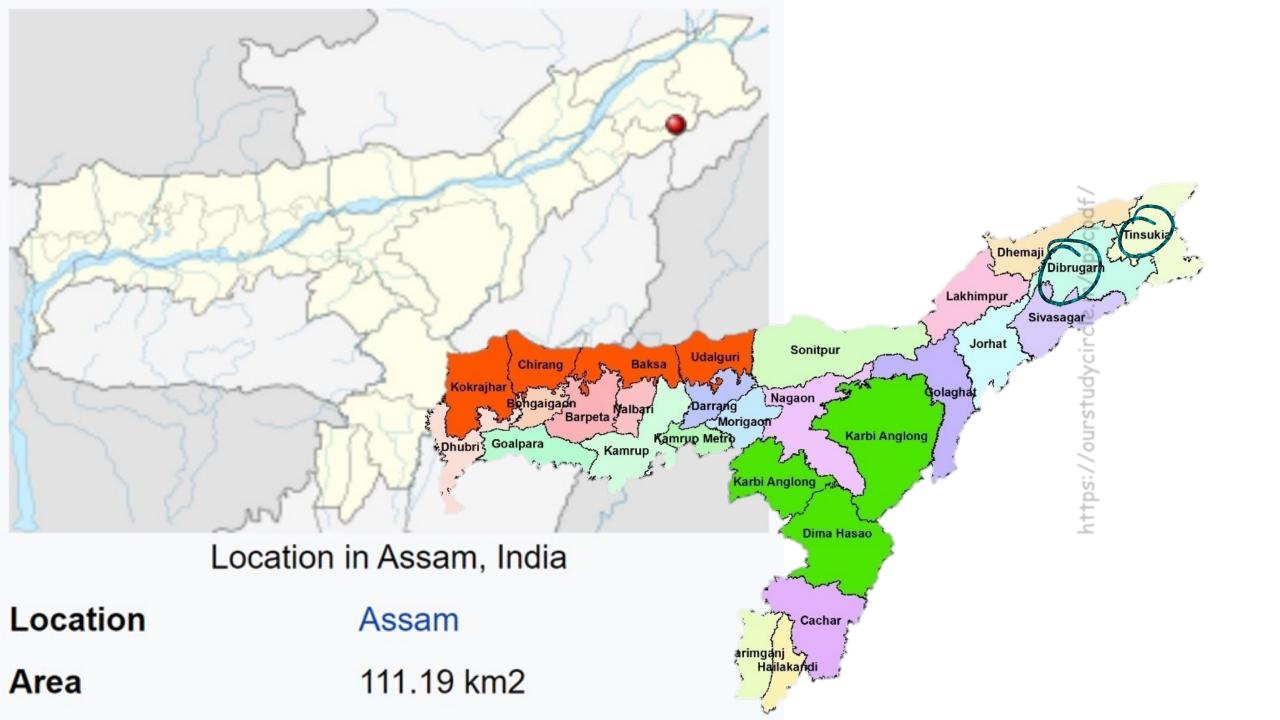


Recently, the Assam government notified Dehing Patkai as the 7th National Park of the state.

# **About Dehing Patkai**

- □ It is located within the <u>larger Dehing Patkai</u>
   <u>Elephant Reserve</u>, which spreads across the coal- and oil-rich districts of <u>Upper Assam</u>
   (Dibrugarh and Tinsukia districts).
- The <u>oldest refinery of Asia</u> in Digboi and '<u>open</u> <u>cast' coal mining at Lido</u> are located near the sanctuary.





- The Dehing Patkai Wildlife Sanctuary is also known as the <u>Jeypore</u> <u>Rainforest</u>.
- Naming → Dehing is the <u>name of the river</u> that flows through this forest and Patkai is the hill at the foot of which the sanctuary lies.
- Flora → It is believed to be the <u>last remaining contiguous patch</u> of <u>lowland</u> rainforest area in <u>Assam</u>.
- 🔘 Fauna 🛨
  - Rare fauna found in the region include <u>Chinese pangolin</u>, <u>flying fox</u>, <u>wild pig</u>, <u>sambar</u>, <u>barking deer</u>, <u>gaur</u>, <u>serow</u> and <u>Malayan giant</u> <u>squirrels</u>.
  - It is the only sanctuary in India which is home to seven different species of wild cats - tiger, leopard, clouded leopard, leopard cat, golden cat, jungle cat and marbled cat.

- Assamese macaque, a primate found in the forest, is in the red list of Near Threatened species.
- It has the highest concentration of the rare endangered White Winged Wood Duck.



- National Paks in Assam
  - <u>Kaziranga</u>, <u>Manas</u>, <u>Nameri</u>, <u>Orang</u>, <u>Dibru-Saikhowa</u> and <u>Raimona</u>
     National Park.

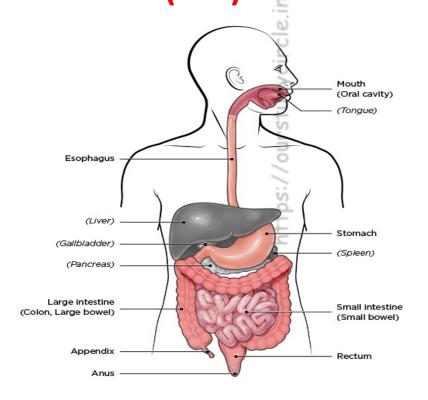
# Inflammatory bowel disease



According to a study published in the American Journal of Gastroenterology (branch of medicine focused on the digestive system and its disorders), Pfizer or Moderna Covid-19 vaccines are safe for patients with inflammatory bowel diseases(IBD).

## **About**

- Inflammatory bowel disease(IBD) represents a group of intestinal disorders that cause prolonged inflammation of the digestive tract.
- - Ulcerative Colitis(<u>UC</u>) involves inflammation of the large intestine.



- Crohn's disease can cause inflammation in <u>any part of the digestive</u> tract. However, it mostly <u>affects the tail end of the small intestine</u>.
- Causes of IBDs Family history and genetics, Weak Immune System, Smoking, Age and Environmental Factors among others.
- Treatment → Treatment may include <u>immunosuppressive drugs to control</u> the inflammation.

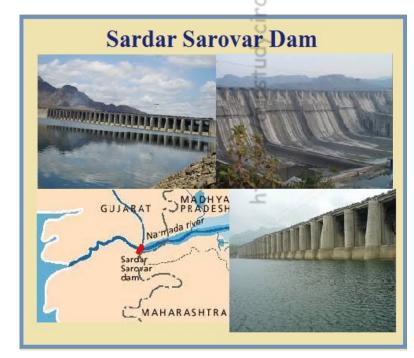
## Sardar Sarovar Dam



In the ongoing summer, the Sardar Sarovar Narmada dam released about 1.3 Million Acre Feet (MAF) water for irrigation between April 1 and May 31 in its command area of 21.29 lakh hectares.

## About Sardar Sarovar Dam

- The Sardar Sarovar Narmada Dam or Sardar Sarovar Project (SSP) is a gravity dam built on the Narmada River in Narmada district of Gujarat.
- O It is the <u>second biggest dam</u> in <u>terms of volume</u> of concrete used in it. It is the third highest concrete dam in India.



## Sardar Sarovar Dam

- The Sardar Sarovar Project (SSP) involves a <u>series of large irrigation</u> and <u>hydroelectric multi-purpose dams</u>.
- O It took form in 1979 as part of a development scheme to increase irrigation and produce hydroelectricity.
- The power benefits from the project are to be shared thus: Madhya Pradesh at 57%, Maharashtra at 27% and Gujarat at 16%

## Sardar Sarovar Dam

## **←** Narmada River

- O Narmada is the <u>largest west flowing river</u> of the <u>peninsular region</u> flowing through a rift valley <u>between the Vindhya Range on the north</u> and the <u>Satpura Range on the south</u>.
- O It rises from Maikala range near Amarkantak in Madhya Pradesh.
- It drains a <u>large area in Madhya Pradesh</u> besides some areas in the states of <u>Maharashtra</u> and <u>Gujarat</u>.
- The river near Jabalpur (Madhya Pradesh) forms the <u>DhuanDhar Falls</u>.
- There are several islands in the estuary of the Narmada of which <u>Aliabet</u> is the largest.
- Major Tributaries: <u>Hiran</u>, <u>Orsang</u>, <u>the Barna</u> and <u>the Kolar</u>.
- The major Hydro Power Projects in the basin are <u>Indira Sagar</u>, <u>Sardar Sarovar</u> etc.

# https://ourstudycircle.in/upscpdf/

## **Indo-Thai CORPAT**



Recently, the 31st edition of India-Thailand Coordinated Patrol (Indo-Thai CORPAT) between the Indian Navy and the Royal Thai Navy is being conducted.

## **About**

- The two navies have been carrying out CORPAT along their International Maritime Boundary Line <a href="twice a year since 2005">twice a year since 2005</a>.
- The aim of the Indo-Thai CORPAT exercise is to keep the vital part of the <u>Indian Ocean safe</u> and secure for commercial shipping and international trade.



## **Indo-Thai CORPAT**

- It builds up the <u>understanding</u> and <u>interoperability between navies</u>.
- The Indian Naval Ship (INS) Saryu, and His Majesty's Thailand Ship (HTMS) Krabi, along with Dornier Maritime Patrol Aircraft from both navies are participating in the CORPAT.
- Other Military Exercises between India and Thailand:
- Exercise MAITREE (Army).
- Exercise SIAM BHARAT (Air Force).

## **Indo-Thai CORPAT**

- **INS Saryu**
- It is an indigenously built **Naval Offshore Patrol Vessel** (NOPV)
- It is designed and built by **Goa Shipyard Limited**.
- It is aimed at meeting the increasing ocean surveillance and patrolling requirements of the Indian Navy.

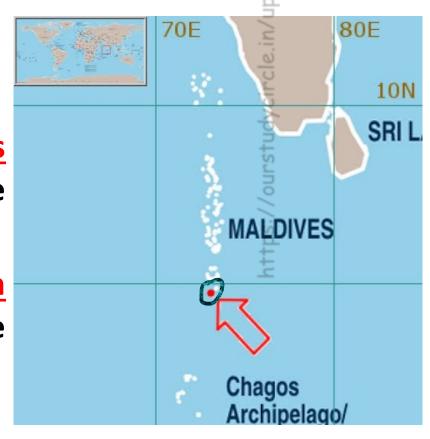
## Addu Atoll



President Ibrahim Mohamed Solih has said that the Maldives has made no decision on opening an Indian consulate in its southern Addu Atoll.

# **About**

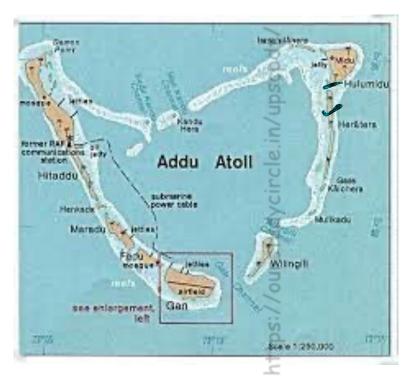
- Addu Atoll, also known as <u>Seenu Atoll (Atoll is ring-shaped coral reef, island)</u>, is the <u>southernmost atoll of the Maldives</u>.
- Apart from its <u>strategic location in the Indian</u> <u>Ocean</u>, Addu is the second largest city in the archipelago, home to <u>over 30,000 people</u>.



## **Addu Atoll**

O Addu Atoll, together with <u>Fuvahmulah</u>, <u>extend the Maldives</u> into the

**Southern Hemisphere**.



## Argostemma quarantena



A new plant species belonging to the coffee family has been spotted in the Wagamon hills in Kerala.

## **About**

- O It has been named <u>Argostemma</u> <u>quarantena</u> to <u>commemorate the millions</u> who have died in the pandemic.
- It is a herbaceous species from the <u>family</u>
   <u>Rubiaceae</u>.
  - Herbaceous plants are plants that have no persistent woody stem above ground.



# Quick revision (True/False)

	Question	True / False
1.	UN Secretary-General -> appointed by the UN General Assembly (UNGA) on the recommendation of the UNSC.	/upscpdf
2.	Argostemma quarantena -> spotted in the Wagamon hills in Kerala.	ycircle.in
3.	Dehing Patkai NP -> Madhya Pradesh.	/ourstud
4.	Sardar Sarovar Dam -> is a gravity dam built on the Tapi River.	https:/
5.	CORPAT exercise -> between the Indian Navy and French Navy.	

# Quick revision (True/False)

	Question	True / False
1.	UN Secretary-General -> appointed by the UN General Assembly (UNGA) on the recommendation of the UNSC.	True Jpdosdn/
2.	Argostemma quarantena -> spotted in the Wagamon hills in Kerala.	True lycincle.in
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4.	Sardar Sarovar Dam -> is a gravity dam built on the Tapi River.	False sd
5.	CORPAT exercise -> between the Indian Navy and French Navy.	False



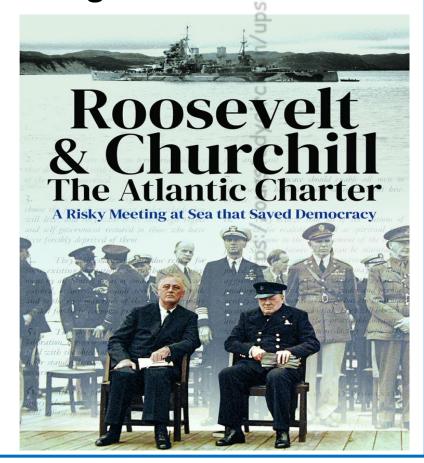
## **Atlantic Charter**



UK Prime Minister Boris Johnson and US President Joe Biden have signed a new Atlantic Charter aimed at working together on global challenges during their first-ever in-person meeting.

## **About**

- The Atlantic Charter was a statement issued on 14 August 1941 that set out American and British goals for the world after the end of World War II.
- The charter's adherents <u>signed the Declaration</u> <u>by United Nations</u> on <u>1 January 1942</u>, which was the basis for the modern United Nations.



## **Atlantic Charter**

- The charter inspired several <u>other international agreements</u> and <u>events</u> that followed the end of the war.
- The <u>dismantling of the British Empire</u>, the <u>formation of NATO</u>, and the General Agreement on Tariffs and Trade (<u>GATT</u>) all derived from the Atlantic Charter.

# Why sign new charter?

- At their meeting, the two leaders plan to sign what they're calling a <u>new</u> <u>Atlantic Charter</u>, pledging to "<u>defend the principles</u>, <u>values</u>, and <u>institutions of democracy and open societies</u>."
- O US hopes to <u>reassure European allies</u> that the US had shed the transactional (लेन-देन संबंधी) tendencies of Donald Trump's term and is a reliable partner again.

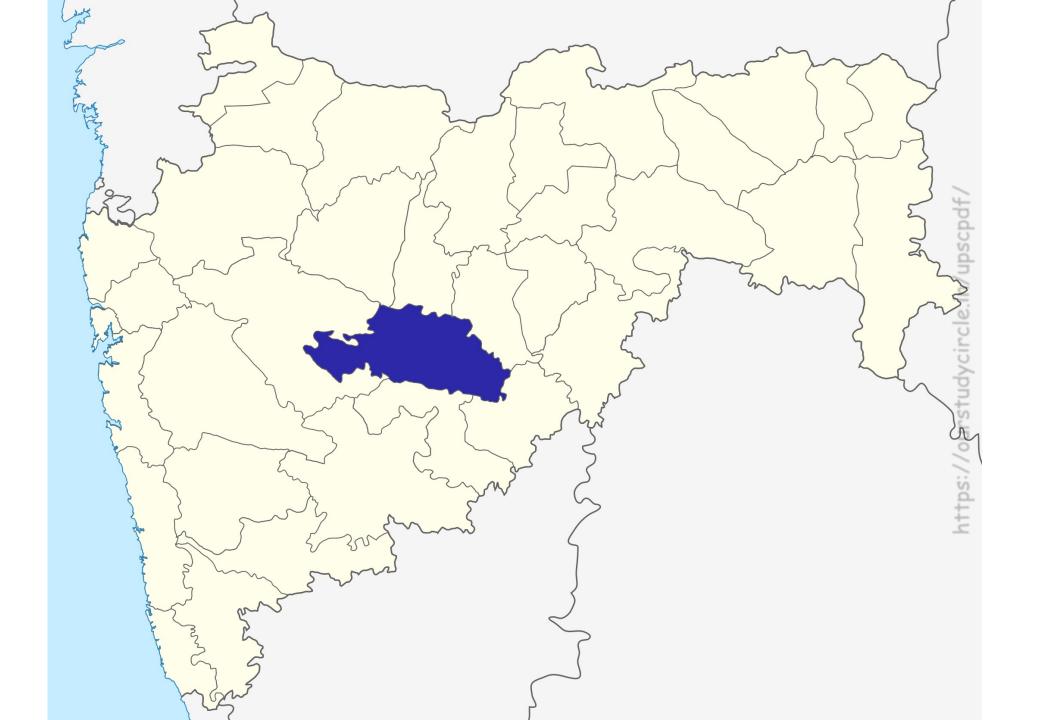


Maharashtra government has asked for state-wide implementation of the 'Beed model' of the crop insurance scheme Pradhan Mantri Fasal Bhima Yogna (PMFBY).

# About Beed Model of Crop Insurance

- O Under this model, the insurance company provides a <u>cover of 110% of the premium</u> <u>collected</u>.
- In case the compensation amount <u>exceeds the</u> <u>110% mark</u>, the <u>state government would pay</u> the bridge amount.





O But if the compensation was less than the premium collected, the insurance company would keep 20% of the amount as handling charges and reimburse the rest to the state government.

# 

- Beed is a <u>drought-prone district</u> in Maharashtra. Farmers here have <u>repeatedly lost crops</u> either to failure of rains or too heavy rains.
- Due to this, insurance companies have <u>sustained losses</u> given high payouts. Moreover, the state government also had a difficult time getting bids for tenders to implement the scheme in Beed.
- Hence, the Maharashtra Government decided to modify the crop insurance guidelines for the district.

# **Effects on the state government**

- In a normal season where farmers report minimal losses, the <u>state</u> government is expected to get back money that can form a corpus to fund the scheme for the following year.
- O However, the state government would have to bear the financial liability in case of losses due to extreme weather events.

- 👉 Pradhan Mantri Fasal Bhima Yojna
- Launched in 2016, the flagship PMFBY insures farm losses against inclement weather events.
- O It is a central scheme implemented by state agriculture departments as per central guidelines.
- Coverage of crops It covers <u>food crops</u>, <u>oilseed crops</u>, <u>annual commercial/horticultural crops</u>.
- Premium The prescribed premium is
  - 2% for Kharif crops
  - 1.5% for Rabi crops
  - 5% for commercial and horticultural crops.
- **❖** Completely voluntary → The enrolment under the scheme is 100% voluntary for all farmers. Earlier, the scheme was compulsory for loanee farmers.

## **UPSC GS Prelim 2016**

- Q. With reference to 'Pradhan Mantri Fasal Bima Yojana', consider the following statements:
- 1. Under this scheme, farmers will have to pay a uniform premium of two percent for any crop they cultivate in any season of the year.
- 2. This scheme covers post-harvest losses arising out of cyclones and unseasonal rains.

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

# Pakke tiger reserve



More than 200 contingency workers of the Pakke Tiger Reserve in Arunachal Pradesh went on an indefinite strike over non-payment of wages since December 2020.

## **About**

- □ Location → It is located in the Pakke Kessang district of Arunachal Pradesh.
- Names → Pakke Tiger Reserve, also known as <u>Pakhui Tiger Reserve</u>, is a Project Tiger reserve.



# Pakke tiger reserve

- This Tiger Reserve has won India Biodiversity Award 2016 in the category of 'Conservation of threatened species' for its Hornbill Nest Adoption Programme.
- O It is bounded by <u>Bhareli</u> or <u>Kameng River</u> in the west and north, and by <u>Pakke River</u> in the east.
- Neighbours → Papum Reserve Forest in Arunachal Pradesh, Assam's Nameri National Park, Doimara Reserve Forest and Eaglenest Wildlife Sanctuary.

## **UPSC PRELIMS 2018**

Q. In which one of the following States is Pakhui Wildlife Sanctuary located?

- a) Arunachal Pradesh
- b) Manipur
- c) Meghalaya
- d) Nagaland

https://ourstudycircle.in/upscpdf

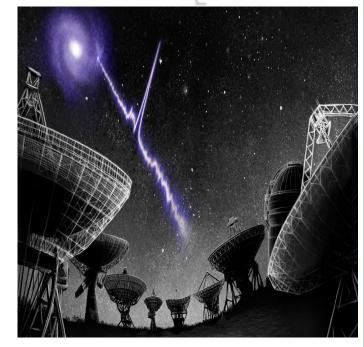
## **Fast Radio Bursts**



Recently, researchers from the Pune-based Tata Institute for Fundamental Research (TIFR) and the National Centre for Radio Astrophysics (NCRA), have assembled the largest collection of Fast Radio Bursts (FRBs) catalogue-सूची

## About FRBs

- © FRBs are <u>bright bursts of radio waves</u> (radio waves can be <u>produced by astronomical objects</u> with changing magnetic fields) that blaze for a few milliseconds before vanishing without a trace.
- They are spotted in various and distant parts of the universe as well as in our own galaxy. However, their origins are still unknown, and their appearance is highly unpredictable.



## **Fast Radio Bursts**

- The <u>first FRB</u> was <u>spotted in 2007</u>. Since then, scientists had only caught sight of around 140 bursts in their telescopes.
- Source → Magnetars could be the source of some fast radio bursts (FRBs).
- Magnetar → It is a type of neutron star. The magnetic field of such a star is very powerful. It can be over a thousand times stronger than a typical neutron star's magnetic field.
- Neutron → The formation of a neutron star occurs when the <u>core of a</u> massive star undergoes gravitational collapse at the end of its life.

## **Gharial**



Odisha has announced a cash reward of Rs 1,000 for rescuing gharials, a critically endangered crocodile species, and informing wildlife personnel.

## About Gharial

- O It is a species of Asian crocodilian distinguished by their <u>long</u>, <u>thin snouts</u> which <u>resembles a pot</u> (ghara in Hindi).
- Habitat → They prefer to <u>live in riverine</u>
   <u>habitats</u> with deep, clear, fast-moving water and steep, sandy banks.



#### **Gharial**

- Distribution It was <u>once found</u> <u>across Bangladesh</u>, <u>Bhutan</u>, <u>India</u>, <u>Myanmar</u>, <u>Nepal</u> and <u>Pakistan</u>. However, currently it survives in several severely fragmented populations in India and Nepal.
- O In India, Gharials are <u>present in Son River</u>, <u>Girwa River</u>, <u>the Ganges</u>, <u>Mahanadi River</u> and <u>the Chambal River</u>.
- Protected areas → National Chambal Sanctuary and Katarniaghat Wildlife Sanctuary.
- O Protection Status
  - IUCN Red list: <u>Critically Endangered</u>
  - Wild Life (Protection) Act, 1972: <u>Schedule I</u>
  - CITES: <u>Appendix I</u>.
- Threat → Construction of Dam, barrages, and water abstraction, entanglement in fishing nets, River bed cultivation and sand mining.

#### **Gharial**

○ Conservation Efforts → Breeding Centres of <u>Kukrail Gharial Rehabilitation</u> <u>Centre in Lucknow, Uttar Pradesh</u>, <u>National Chambal Sanctuary</u> (Gharial Eco Park, Madhya Pradesh).

#### **Mahanadi River**

- The Mahanadi River system is the <u>third largest of peninsular India</u> after Godavari and Krishna, and the largest river of Odisha state.
- The catchment area of the river extends to <u>Chhattisgarh</u>, <u>Madhya Pradesh</u>, <u>Odisha</u>, <u>Jharkhand</u> and <u>Maharashtra</u>.
- Source → It rises from a place <u>near Sihawa in Bastar hills</u> in the <u>state of Chhattisgarh</u> to the <u>south of Amarkantak</u>.
- Major Tributaries Seonath River, Hasdeo river, Mand river, Ib river, Jonking river, Tel river

#### **Gharial**

Q. If you want to see gharials in their natural habitat, which one of the following is the best place to visit?

- a) Bhitarkanika Mangroves
- b) Chambal River
- c) Pulicat Lake
- d) Deepor Beel

https://ourstudycircle.in/upscpd

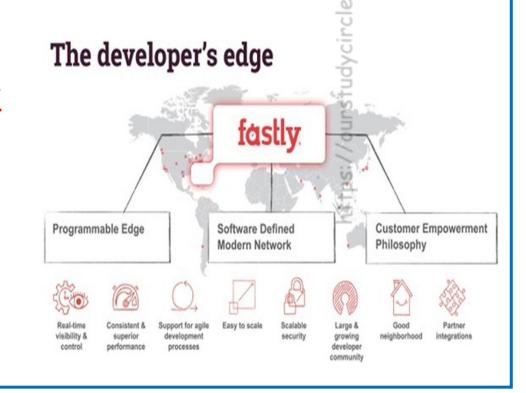
# **Fastly**



On 8 June 2021, Fastly reported problems with their CDN service which caused many major websites, such as Reddit, gov.uk, Twitch, Spotify and Amazon, along with major news sources such as The New York Times, The Guardian, CNN and the BBC, to become unavailable.

#### **About**

- Services provider.
- It is designed to help developers extend their core cloud infrastructure to the edge of the network, closer to users.



# **Fastly**

- The Fastly edge cloud platform includes their <u>content delivery network</u> (CDN), <u>image optimization</u>, <u>video and streaming</u>, <u>cloud security</u>, and <u>load balancing services</u>.
- O A content delivery network is an arrangement that <u>allows customer</u> websites to store data such as images and videos on various mirror servers across countries so that the data is closer to users, and thus shows up faster.

# Quick revision (True/False)

	Question	True / False
1.	Beed model -> Related to cultured pearl Farming.	upscpdf
2.	Atlantic Charter -> statement issued on 14 August 1941 that set out American and British goals for the world after the end of World War II.	tudycircle.in/
3.	Pakke tiger reserve -> Assam.	:://ours
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3.	Pakke tiger reserve -> Assam.	False Sino
4.	Mahanadi River -> Major Tributaries: Seonath River, Hasdeo river, Mand river, Ib river, Jonking river, Tel river.	True #



#### **Brood X Cicadas**



Recently, a swarm (বল) of cicadas 'Brood X' bombarded the plane Air Force One which led to delay of US President Joe Biden's first trip abroad.

#### About Brood X

- The term 'brood' refers to a <u>population of cicadas</u> that is <u>isolated from other populations</u> because of differences in their year of emergence or locality.
- O It is found in <u>Pennsylvania</u>, <u>northern Virginia</u>, <u>Indiana</u> and <u>eastern Tennessee</u>.



#### **Brood X Cicadas**

#### **Cicadas**

- © Cicadas live underground for extended periods of time, typically 13 or 17 years, and feed on roots of trees both underground and above it.
- Among periodical cicadas, there are <u>seven species</u> and there are <u>also some</u> <u>annual cicadas</u>, which come out every year.
- They do not bite or sting, but when the males sing, their collective chorus can reach up to 100 decibels.
- What do cicadas do underground?
  - The males emerge from underground once they become adults, which take about <u>17 years for some periodical cicadas</u>.

# **Global Liveability Index**



Auckland (New Zealand) has topped the Economist Intelligence Unit's (EIU) Global Liveability Index of 140 cities around the world.

#### About Index

- The index assesses the locations that provide the <u>best and the worst living conditions</u> around the world. It <u>assesses 140 cities</u> around the world.



# **Global Liveability Index**

- Parameters → The index takes into account more than 30 qualitative and quantitative factors. These factors are spanning five broad categories: stability (25%), healthcare (20%), culture and environment (25%), education (10%), and infrastructure (20%).
  - However, due to the pandemic, the EIU added <u>new indicators</u> to it. It includes <u>stress on healthcare resources</u> as well as <u>restrictions</u> around local sporting events, theatres, music concerts, restaurants, and schools.
- Scores → Each factor in a city is rated as acceptable, tolerable, uncomfortable, undesirable, or intolerable.
- Factor-wise scores are then compiled and weighted to provide a score of 1-100 where 1 is considered intolerable and 100 is considered ideal.

# **Global Liveability Index**

# Key Takeaways

- Top Five Liveable Cities → <u>Auckland</u> (New Zealand), <u>Osaka</u> (Japan),

  <u>Adelaide</u> (Australia), <u>Wellington</u> (New Zealand), and <u>Tokyo</u> (Japan).
- Top Five Least Liveable Cities → <u>Damascus</u> (Syria), <u>Lagos</u> (Nigeria), Port <u>Moresby</u> (Papua New Guinea), <u>Dhaka</u> (Bangladesh), and <u>Algiers</u> (Algeria).

# **Economist Intelligence Unit**

- The Economist Intelligence Unit is the <u>research and analysis division</u> of <u>The Economist Group</u>, which is the sister company to The Economist newspaper.
- Founded > 1946.
- Meadquarters location London, United Kingdom.

India's ranking in the 'Ease of Doing Business Index' is sometimes seen in the news. Which of the following has declared that ranking?

- (a) Organization for Economic Cooperation and Development (OECD)
- (b) World Economic Forum
- (c) World Bank
- (d) World Trade Organization (WTO)

# Which of the following is/are the indicator/indicators used by IFPRI to compute the Global Hunger Index Report?

- 1.Undernourishment
- 2. Child stunting
- 3. Child mortality

# Select the correct answer using the code given below.

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

https://ourstudycircle.in/upscpdf,

#### **EnVision mission**



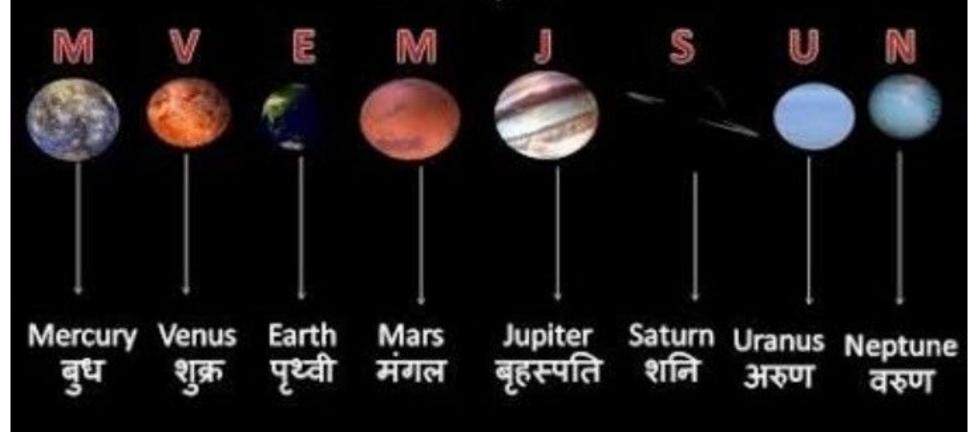
Following NASA's footsteps, the European Space Agency (ESA) announced that it has selected EnVision as its next orbiter that will visit Venus sometime in the 2030s.

#### **About**

- **○** It is an <u>European Space Agency</u> (ESA) <u>led mission</u> with contributions from NASA.
  - The earliest launch opportunity for EnVision is 2031, followed by 2032 and 2033.
- The spacecraft will take about 15 months to reach Venus and will take 16 more months to achieve orbit circularisation.
  Europe's Revolutionary Mission to Venus



# Solar System



#### **EnVision mission**

- The spacecraft will carry a <u>range of instruments</u> to <u>study the planet's</u> <u>atmosphere and surface</u>, <u>monitor trace gases</u> in the atmosphere and analyse its surface composition.
- A radar provided by NASA will help to image and map the surface.
- Significance → It will follow another ESA-led mission to Venus called 'Venus Express' (2005-2014) that focussed on atmospheric research and pointed to volcanic hotspots on the planet's surface.

#### **EnVision mission**

#### **Other Missions**

- ∪s →
  - NASA has announced two new robotic missions to Venus <u>DAVINCI</u>+ and VERITAS. It will be launched between 2028-2030.
  - Mariner series 1962-1974, <u>Pioneer Venus 1</u> and <u>Pioneer Venus 2</u> in 1978, Magellan in 1989.
- Russia → Venera series of space crafts 1967-1983, Vegas 1 and 2 in 1985.
- Japan Akatsuki spacecraft has been studying the planet's atmosphere since 2015.
- Indian Initiative → India plans to launch a new orbiter named Shukrayaan to Venus in 2024.

# Which of the following pair(s) is/are correctly matched?

# Spacecraft Purpose

- 1.Cassini-Huygens : Orbiting the Venus and transmitting data to
- the Earth
- 2.Messenger : Mapping and investigating the Mercury
- 3. Voyager 1 & 2 : Exploring the outer solar system

## Select the correct answer using the codes given below.

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

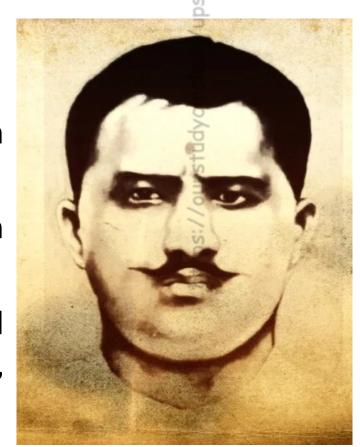
#### Ram Prasad Bismil



Recently, the Ministry of Culture has paid tribute to Shaheed Ram Prasad Bismil on his birth anniversary at Shahjahanpur (UP) as a part of Azadi Ka Amrit Mahotsav.

#### **About**

- He was <u>associated with the Arya Samaj</u> from an early age.
- He wrote <u>powerful patriotic poems</u> in Urdu and Hindi under the pen name of names of '<u>Bismil</u>', '<u>Ram</u>' and '<u>Agyat</u>'.



#### Ram Prasad Bismil

- The <u>ideals of freedom and revolution</u> got first ingrained in his mind <u>after</u> he read the <u>death sentence passed on Bhai Parmanand (founder member</u> <u>of the Ghadar Party)</u>, an Indian nationalist and Arya Samaj missionary.
- Organisations against British Rule >
  - He organised <u>Matrivedi and Shivaji Samiti</u> along with <u>Genda Lal Dixit</u> and youths from Etawah, Mainpuri, Agra and Shahjahanpur districts.
  - He formed the <u>Hindustan Republican Association</u> with leaders like Bhagat Singh and Chandrasekhar Azad.
  - He participated in the <u>Mainpuri conspiracy of 1918</u> and <u>the Kakori conspiracy of 1925 (village near Lucknow, on 9 August 1925)</u> with Ashfaq Ullah Khan and Roshan Singh to protest against the British Rule.

#### Ram Prasad Bismil

- He published a pamphlet titled '<u>Deshwasiyon ke Naam</u>' and distributed it along with his poem '<u>Mainpuri ki Pratigya</u>' in 1918.
- He wrote 'Mera Rang De Basanti Chola' and 'Sarfaroshi Ki Tamanna' which became the anthem for freedom fighters.

# Sub-Mission on Agricultural Mechanization



Recently, the Government of India has released funds for various activities of Farm Mechanization under the Sub-Mission on Agricultural Mechanization (SMAM) scheme.

#### **About**

- SMAM was launched in <u>2014-15</u> by the <u>Ministry of Agriculture and Farmers Welfare</u>.
- Under it, <u>subsidy</u> is provided for <u>purchase of various</u> <u>types of agricultural equipment and machinery</u> to the extent of 40-50% for States other than NER (North Eastern Region) States and for NER States it is 100% limited to Rs.1.25 lakhs per beneficiary.



# **Sub-Mission on Agricultural Mechanization**

- The agriculture ministry has also developed a <u>Multilingual Mobile App</u>, <u>'CHC (Custom Hiring Centres)- Farm Machinery</u>' which connects farmers with Custom Hiring Service Centres situated in their locality.
- O Aim → Increasing the reach of farm mechanization to small and marginal farmers and to the regions and difficult areas where farm power availability is low.
- Objectives
  - Promoting '<u>Custom Hiring Centres</u>' and '<u>Hi-tech Hubs of High-Value</u>
     <u>Machines</u>' to offset the adverse economies of scale arising due to small
     and fragmented landholding and high cost of individual ownership.
  - <u>Creating awareness</u> among stakeholders through demonstration and capacity building activities.

# Sub-Mission on Agricultural Mechanization

Note → Agriculture mechanization is the <u>process of replacing human and</u> <u>animal labour with machines</u> in the agriculture sector. The use of tractors, threshers, harvesters, pump sets is a part of farm mechanization.

## **Heritage Trees**



The Maharashtra government has proposed amendments to the Maharashtra (Urban Areas) Protection and Preservation of Trees Act of 1975, to introduce provisions for the protection of 'heritage trees'.

#### About

- A tree with an <u>estimated age of 50 years</u> or <u>more</u> shall be defined as a heritage tree. It may <u>belong</u> to <u>specific species</u> which will be notified from time to time.
- Method to determine the age of the tree: The environment department in <u>consultation with</u> <u>the forest department</u> will <u>issue guidelines</u> to determine the age of the tree.



## **Heritage Trees**

- Compensatory Plantation >
  - Compensatory plantation will include <u>planting the number of trees</u>
     <u>equivalent to the age of trees to be cut</u>.
  - The saplings need to be <u>six to eight feet in height</u> while planting, and they will <u>undergo geo-tagging</u> with <u>seven years</u> of caring period.
  - The option of monetary compensation has also been given, instead of the compensatory plantation.
- Tree Authority →
  - As per amendments, <u>tree Authority</u> will be formed in <u>local civic bodies</u> and <u>councils</u> which will take all decisions regarding the protection of trees.
  - It will have to <u>ensure tree census</u> to be carried out <u>every five years</u> along with counting of heritage trees.

## **Heritage Trees**

- The Tree Authority is tasked with "increasing the tree cover in urban areas and protecting the existing ones."
- A proposal to cut more than 200 trees of age 5 years or more, will be referred to the state tree authority.
- Tree Cess → The State authority will <u>issue directions</u> for the <u>use of tree</u> <u>cess</u>. The fine amount cannot be more than ₹1 lakh per tree in case of violations.

# Quick revision (True/False)

	Question	True / False
1.	Global Liveability Index -> Released by UN-Habitat.	upscpdf
2.	<b>EnVision mission -&gt; ISRO led mission. will visit Venus sometime in the 2030s.</b>	dycircle.in/
3.	Brood X -> an anti-aircraft weapon system.	ourstuc
4.	Ram Prasad Bismil -> formed the Hindustan Republican Association with leaders like Bhagat Singh and Chandrasekhar Azad.	https://
5.	<b>Sub-Mission on Agricultural Mechanization -&gt; launched in 2014-15 by</b> the Ministry of Agriculture and Farmers Welfare.	

# Quick revision (True/False)

	Question	True / False
1.	Global Liveability Index -> Released by UN-Habitat.	False bd
2.	EnVision mission -> ISRO led mission. will visit Venus sometime in the 2030s.	False july
3.	Brood X -> an anti-aircraft weapon system.	False ts
4.	Ram Prasad Bismil -> formed the Hindustan Republican Association with leaders like Bhagat Singh and Chandrasekhar Azad.	True 'sdttu
5.	Sub-Mission on Agricultural Mechanization -> launched in 2014-15 by the Ministry of Agriculture and Farmers Welfare.	True



# Pyrostria Laljii



A 15-meter-tall tree that belongs to the genus of the coffee family has recently been discovered from the Andaman Islands by a team of researchers from India and the Philippines.

#### 👉 About

- The new species Pyrostria Ialjii, is also the first record of the genus Pyrostria in India. Trees belonging to these species are usually found in Madagascar.
- © Conservation Status → <u>Critically</u>
   <u>endangered</u> as per IUCN status.







# Pyrostria Laljii

- O Physical features
  - The tree is distinguished by a <u>long stem</u> with a <u>whitish coating on the trunk</u>.
  - Other physical features that distinguish the tree from other species of the genus is its <u>umbellate inflorescence (छतरदार पुष्पगुच्छ</u>) with <u>8-12 flowers</u>.
  - The <u>colour of the flowers</u> varies from <u>white to cream</u>, and turns brown after pollination.
  - The fruit drupes (fruit that usually contains a single seed) of the tree are obovoid (egg-shaped) or subglobose (not quite globe-shaped), green to yellow or white, when mature turning pale yellow to brown.
- Named after → The tree has been named Pyrostria Ialjii after Lal Ji Singh, Joint Director, Andaman and Nicobar Regional Centre, Botanical Survey of India.

## Pyrostria Laljii

- Where was the tree found?
  - It was <u>first</u> reported from <u>South Andaman's Wandoor forest</u>.
  - The <u>other places</u> in the Andaman and Nicobar Islands where the tree could be located are the <u>Tirur forest near the Jarawa Reserve Forest</u> and <u>the Chidia Tapu (Munda Pahar) forest</u>.

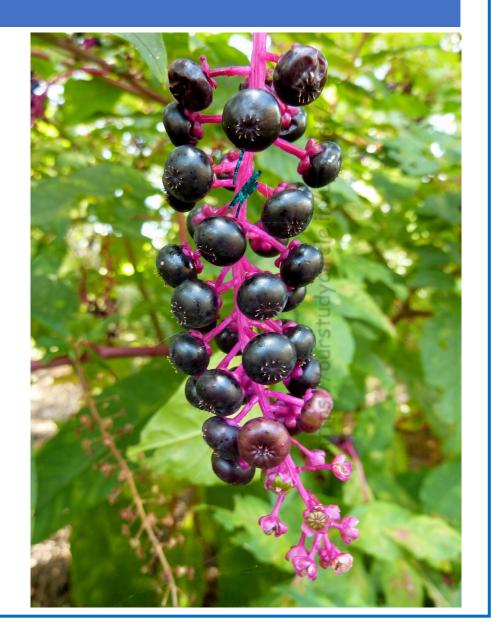
# New species Pokeweed Species

- Researchers have also discovered a new species of pokeweed named <u>Rivina</u> <u>andamanensis</u>. It is a North American plant with red stems, spikes of cream flowers, and purple berries.
- It was found growing <u>under large trees</u>, <u>shaded and rocky areas</u>, along with <u>herbs and shrubby plants</u>.



# Pyrostria Laljii

This discovery of new species, representing the <u>first record of the pokeweed family Petiveriaceae</u> in the <u>Andaman and Nicobar Islands</u>, adds one more family to the islands' flora.



### **Question: Prelims GS 2016**

Q. Recently, our scientists have discovered a new and distinct species of banana plant which attains a height of about 11 metres and has orange-coloured fruit pulp. In which part of India has it been discovered?

- a) Andaman Islands
- b) Anaimalai Forests
- Maikala Hills
- d) Tropical rain forests of northeast



The Defence Minister has approved the budgetary support of Rs 498.8 crore for iDEX-DIO (Innovations for Defence Excellence — Defence Innovation Organisation) for the next five years.

### **About**

- It was launched by the Government in <u>April</u>
   2018.



- It will also <u>provide grants/funding</u> and <u>other support to them</u> to carry out R&D. However, R&D should have a good potential for future adoption for Indian defence and aerospace needs.
- Objectives of IDEX →
  - <u>Facilitate rapid development</u> of new, indigenized, and innovative technologies for the Indian defence and aerospace sector in shorter timelines.
  - <u>Create a culture of engagement</u> with innovative startups, to encourage co-creation for defence and aerospace sectors.
  - <u>Empower a culture of technology co-creation</u> and co-innovation within the defence and aerospace sectors.
- Nodal Body → iDEX will be funded and managed by <u>Defence Innovation</u> <u>Organisation</u> (DIO).

# Defence Innovation Organization (DIO)

- O Defence Innovation Organisation(DIO) is a <u>not-for-profit Organisation</u>, incorporated under Section 8 of the Companies Act.
- Founding Members → Its two founding members are Hindustan Aeronautics Limited (HAL) & Bharat Electronics Limited (BEL).
- Functions → DIO will <u>provide high-level policy guidance</u> to iDEX. However, iDEX will be <u>functionally autonomous</u>. The CEO of both DIO and iDEX will be the same. It will <u>facilitate coordination</u> and <u>separation of functions</u> also without any conflicts.

### **Other Related Initiatives**

- Defence Industrial Corridors → To <u>support the growth of the Defence</u> <u>sector and enhance manufacturing capacity</u> in the sector, two Defence Industrial Corridors are being set up in India, one in Uttar Pradesh and another in Tamil Nadu.
- Artificial Intelligence in Defence
  - N Chandrasekaran Task Force was set up in 2018 to study implications of AI in national security.
  - Defence Artificial Intelligence Project Agency (DAIPA) was created in March, 2019.
  - DAIPA aims for greater thrust on Artificial Intelligence (AI) in Defence, formulation of an AI roadmap for each Defence PSU and Ordnance Factory Board to develop AI-enable products.

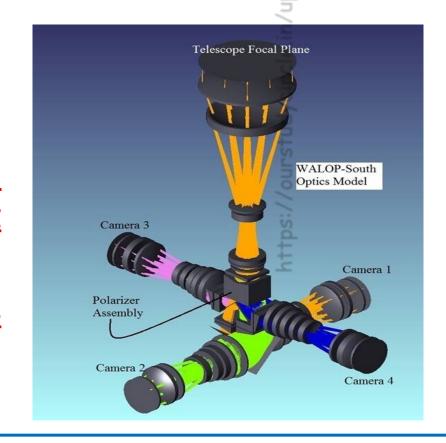
### **PASIPHAE Survey**



The Wide Area Linear Optical Polarimeter (WALOP), a vital instrument for the PASIPHAE Project, is being developed at Inter-University Centre for Astronomy and Astrophysics (IUCAA), India.

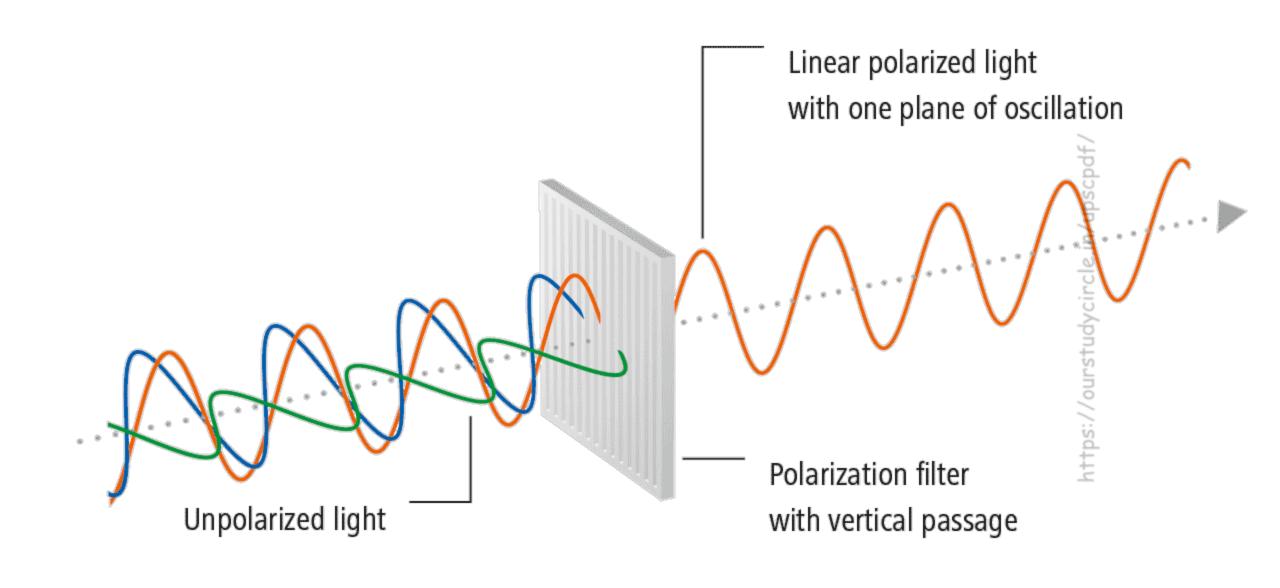
### **About**

- O Polar-Areas Stellar-Imaging in Polarisation High-Accuracy Experiment (PASIPHAE) is an international collaborative sky surveying project.
- The project has been <u>funded by the world's</u> <u>leading institutions</u> from USA, Norway, South Africa and Private foundations.



### **PASIPHAE Survey**

- Scientists aim to <u>study the polarisation in the light coming from millions of stars</u>.
- The survey will use two high-tech optical polarimeters to observe the northern and southern skies, simultaneously.
- It will focus on <u>capturing starlight polarisation</u> of <u>very faint stars</u> that are so far away that polarisation signals from there have not been systematically studied.
- The distances to these stars will be obtained from measurements of the GAIA (Global Astrometric Interferometer for Astrophysics) satellite (of European Space Agency)
- O By combining these data, astronomers can create a 3-Dimensional model of the distribution of the dust and magnetic field structure of the galaxy using a novel polarimeter instrument known as WALOP (Wide Area Linear Optical Polarimeter).



### **PASIPHAE Survey**

### **WALOP**

- Wide Area Linear Optical Polarimeter (WALOP) is an <u>instrument</u>, when mounted on <u>two small optical telescopes</u>, that will be <u>used to detect</u> <u>polarised light signals</u> emerging from the stars.
- A WALOP each will be mounted <u>on the 1.3-metre Skinakas Observatory</u>, <u>Crete</u> (Greek islands), and on the <u>1-metre telescope</u> of the South African Astronomical Observatory located in Sutherland.
- Once built, they will be <u>unique instruments</u> offering the <u>widest ever field of view</u> of the sky in polarimetry. In simple terms, the images will simultaneously have the <u>finest of details of a star</u>.
- 200 kg weighing WALOP will be capable of observing hundreds of stars concurrently present both in the northern and the southern skies

### **PENCIL Portal**



Union Minister of Women and Child Development and Textiles, has appealed to citizens to report the instances of Child Labour on PENCIL Portal or by calling on Childline-1098.

### **About**

- PENCIL Portal stands for <u>Platform for Effective</u> Enforcement for No Child Labour.
- □ Purpose → It is an electronic platform that aims at achieving the target of a child labour free society. For this aim, it coordinates actions of the Centre, State, District, Governments, civil society, and the public.



### **PENCIL Portal**

### **CHILDLINE 1098**

- O CHILDLINE 1098 is a <u>free</u>, <u>emergency phone service for children</u> in need of aid and assistance.
- The helpline responds to the <u>emergency needs of children</u>. Further, it also links them to relevant services for their long-term care and rehabilitation.
- The helpline is managed and monitored by the <u>CHILDLINE India</u> <u>Foundation</u>(CIF).

# Quick revision (True/False)

	Question	True / False
1.	Pyrostria Laljii -> genus of the coffee family has recently been discovered from the Western Ghat.	/upscpdf
2.	iDEX-DIO -> funded and managed by Defence Research and Development Organisation.	lycircle.in
3.	PASIPHAE Survey -> aim to study the polarisation in the light coming from millions of stars.	/ourstuc
4.	<b>PENCIL Portal -&gt;</b> an electronic platform that aims at achieving the target of a child labour free society.	https:/

# Quick revision (True/False)

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3.	PASIPHAE Survey -> aim to study the polarisation in the light coming from millions of stars.	True July 1
4.	<b>PENCIL Portal -&gt;</b> an electronic platform that aims at achieving the target of a child labour free society.	True sdtty

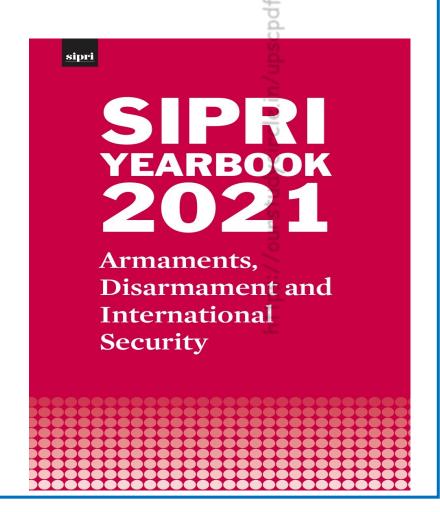




Swedish think tank Stockholm International Peace Research Institute (SIPRI) has released its Year Book 2021.

# About Key Findings

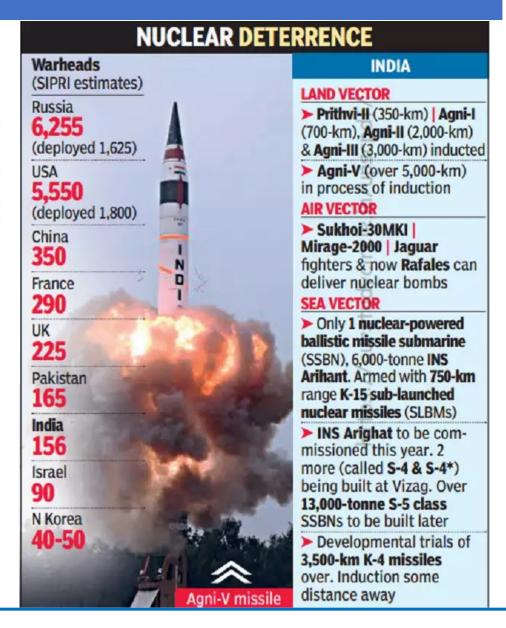
- India possessed an estimated 156 nuclear warheads at the start of 2021, compared with 150 at the start of last year, while Pakistan had 165 warheads, up from 160 in 2020.
- China's nuclear arsenal consisted of 350 warheads, up from 320 at the start of 2020.



- The nine nuclear armed states the U.S., Russia, the U.K., France, China, India, Pakistan, Israel and North Korea together possessed an estimated 13,080 nuclear weapons at the start of 2021.
- Russia and the <u>U.S.</u> together <u>possessed over 90%</u> of global nuclear weapons.

#### World nuclear forces, January 2021

Country	Deployed warheads*	Other warheads**	Total 2021	Total 2020
USA	1 800	3 750	5 550	5 800
Russia	1 625	4 630	6 255	6 375
UK***	120	105	225	215
France	280	10	290	290
China		350	350	320
India		156	156	150
Pakistan		165	165	160
Israel		90	90	90
North Korea****		[40–50]	[40–50]	[30-40]
Total	3 825	9 255	13 080	13 400



### Stockholm International Peace Research Institute

- O It is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.
- It was established in 1966 at Stockholm (Sweden).
- It provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

### Prelims 2015

# With reference to Agni-IV Missile, which of the following statement(s) is/are correct?

- 1. It is surface-to-surface missile.
- 2. It is fuelled by liquid propellant only.
- 3. It can deliver one tonne nuclear warhead about 7500 km away.

### Select the correct answer using the codes given below.

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

https://ourstudycircle.in/upscpdf

# **Prelims 2014**

Answer (a)

https://ourstudycircle.in/upscpdf/



Recently, the Indian Coast Guard has pressed into service an aircraft for 'Operation Olivia' to protect Olive Ridley turtles.

# **About Operation Olivia**

- Operation Olivia was launched <u>by the Indian Coast Guard</u> in the <u>early 1980s</u>.
- Purpose → The operation aims to <u>protect</u> <u>Olive Ridley turtles</u> when they arrive at the Odisha coast for breeding and nesting from November to December.



Indian Coast Guards(ICGs) execute this operation. As part of the operation, ICGs conducts round-the-clock surveillance. Assets of Indian Coast Guards such as fast patrol vessels, interceptor craft, and Dornier aircraft are used in this operation to enforce laws near the rookeries (colony of breeding animals).

# Olive Ridley Turtles:

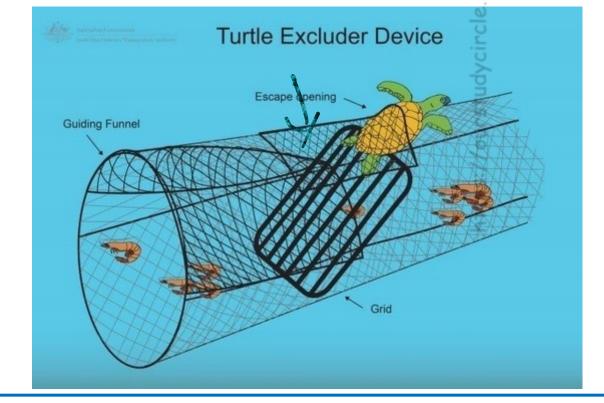
- Features →
  - The Olive ridley turtles are the <u>smallest</u> and <u>most abundant</u> of all sea turtles found in the world.
  - These turtles are <u>carnivores</u> and get their name from their <u>olive colored</u>
     <u>carapace</u>.

- They migrate thousands of kilometers between feeding and mating grounds in the course of a year.
- They are best known for their <u>unique mass nesting</u> called <u>Arribada</u>, where thousands of females come together on the same beach to lay eggs.
- Habitat →
  - They are found in <u>warm waters of the Pacific</u>, <u>Atlantic</u> and <u>Indian oceans</u>.
  - The Odisha's <u>Gahirmatha Marine Sanctuary</u> is known as the world's largest rookery of sea turtles.
- O Protection Status
  - IUCN Red List: Vulnerable
  - CITES: Appendix I
  - Wildlife (Protection) Act, 1972: <u>Schedule I</u>.

### **Other Initiatives**

To reduce accidental killing in India, the Odisha government has made it mandatory for trawls to use <u>Turtle Excluder Devices (TEDs)</u>, a net specially <u>designed with an exit cover</u> which allows the turtles to escape while

retaining the catch.



### Prelims 2015

- Q. Which one of the following is the national aquatic animal of India?
- a) Saltwater crocodile
- **b)** Olive ridley turtle
- c) Gangetic dolphin
- d) Gharial

https://ourstudycircle.in/upscpdf

# **Prelims 2015**

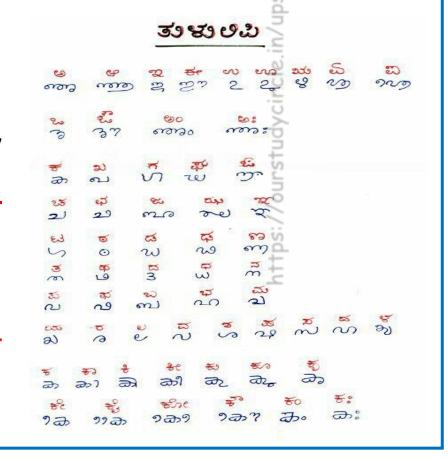
# Answer (c



The Tulu speakers, mainly in Karnataka and Kerala, have been requesting the governments to give it official language status and include it in the eighth schedule to the Constitution.

# **About Tulu Language**

- Tulu is a <u>Dravidian language</u>. It is mainly spoken in two coastal districts, <u>Dakshina Kannada and Udupi of Karnataka</u> and <u>Kasaragod district of Kerala</u>.
- © Kasaragod district is called the 'Sapta bhasha Samgama Bhumi (the confluence of seven languages)' and Tulu is one among the seven.





- Thus, the Tulu speakers mainly from Karnataka and Kerala are <u>requesting</u> an <u>official language status</u> for Tulu by its <u>inclusion in the Eighth Schedule</u> to the Constitution.
- Tulu Art and Culture:
  - Tulu has a <u>rich oral literature tradition</u> with folk-song forms like <u>paddana</u> and traditional folk theatre <u>yakshagana</u>.
  - Tulu also has an <u>active tradition of cinema</u>, with around 5 to 7 Tulu language movies produced a year.
  - Moreover, Tulu films are <u>screened every day</u> in Mangalore and Udupi in at least one theatre.
- Advantages of including Tulu in Eight Schedule
- Recognition from the Sahitya Akademi.

- Translation of Tulu literary works into other languages.
- Members of Parliament (MP) and Member of the Legislative Assembly (MLA) could speak Tulu in Parliament and State Assemblies, respectively.
- Option to take competitive exams in Tulu including fall-India competitive examinations like the Civil Services exam.

# **Eighth Schedule of the Constitution**

- The Constitutional provisions relating to the Eighth Schedule occur in Article 344 (1) and 351 of the Constitution.
- The languages listed under Eighth Schedule are:
  - (1) Assamese, (2) Bengali, (3) Gujarati, (4) Hindi, (5) Kannada, (6) Kashmiri, (7) Konkani, (8) Malayalam, (9) Manipuri, (10) Marathi, (11) Nepali, (12) Oriya, (13) Punjabi, (14) Sanskrit, (15) Sindhi, (16) Tamil, (17) Telugu, (18) Urdu (19) Bodo, (20) Santhali, (21) Maithili and (22) Dogri.
- Languages are added through Constitutional Amendments.

### Prelims 2015

Q. Which one of the following was given classical language status recently?

- a) Odia
- b) Konkani
- c) Bhojpuri
- d) Assamese

https://ourstudycircle.in/upscpdf

### Prelims 2015

### Answer (a)

Odia language on March 11, 2014 became the sixth language of the country to get "classical language" status after the Union Cabinet conceded a long-pending demand for putting it in the same league as Sanskrit, Tamil, Telugu, Kannada and Malayalam.

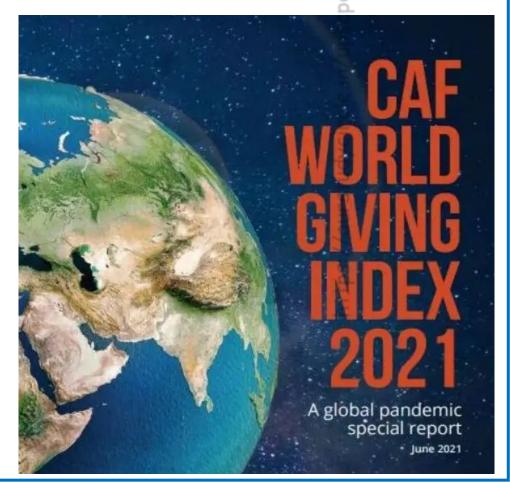
# **World Giving Index**



India is now ranked as the 14th most charitable country in the world as per a report released by the World Giving Index 2021 (WGI).

### **About**

- The World Giving Index (WGI) is an annual report published by the Charities Aid Foundation and ranks over 140 countries in the world according to how charitable they are.
- The <u>first edition</u> was released in <u>September 2010</u>.



# **World Giving Index**

- The WGI is a global survey, which <u>asks people three questions</u>: In the last month have you...
  - Helped a stranger, or someone you didn't know who needed help?
  - Donated money to a charity?
  - Volunteered your time to an organisation?
- The index measures countries by proportion of population giving rather than how much they give.

#### Charities Aid Foundation

- The Charities Aid Foundation (CAF) is a <u>leading international charity</u> registered in the <u>United Kingdom</u>.
- It was founded in <u>1974</u>.

# **World Giving Index**

# THE WORLD'S MOST GENEROUS COUNTRIES



Ranking	COUNTRY	Index Score
1	Indonesia	69%
2	<b>Kenya</b>	58%
3	Nigeria	52%
4	Myanmar	51%
5	Australia	49%
6	<b>Ghana</b>	47%
7	New Zealand	47%
8	Uganda	46%

Ranking	cing COUNTRY		Index Score
9	•	Kosovo	46%
10		Thailand	46%
11	¥	Tajikistan	45%
12		Bahrain	45%
13		United Arab Emirates	44%
14		India	44%
15	-	Ethiopia	44%

Source: CAF world giving index report

# ttps://ourstudycircle.in/upscpdf/

#### Prelims 2018

#### Q. "Rule of Law Index" is released by which of the following?

- (a) Amnesty International
- (b) International Court of Justice
- (c) The office of UN Commissioner for Human Rights
- (d) World Justice Project

# Answer (d

# Rosewood (शीशम)



Recently, steep demand in the international market for musical instruments and furniture fashioned out of rosewood has increased its widespread illegal felling.

#### **About**

- Scientific Name Dalbergia latifolia.
- Habitat and Distribution
  - It occurs in <u>evergreen or deciduous tropical</u> or <u>subtropical forests</u> with deep, well-drained and moist soils, within an elevational range of 300 to 1,000 m above sea level.
  - It is native to <u>India</u>, <u>Nepal</u>, <u>Bangladesh</u>,
     <u>Myanmar</u>, <u>Java</u> and <u>Indonesia</u>.



#### Rosewood

- Features
  - It is a <u>large hardwood tree</u> that can grow up to <u>40 meter tall</u>.
  - It is highly utilised as a timber species and is <u>renowned for the colour</u> and <u>fragrance</u> of its wood.
  - It is particularly prized for making <u>musical instruments</u> (e.g. guitars), furniture, flooring, plywood, carvings, and moulding.
- Conservation Efforts →
  - or sawn (काटना) timber being banned.
  - The <u>Kerala Restriction on Cutting and Destruction of Valuable Trees</u>
     <u>Rules, 1974</u>, does not allow cutting of rosewood that has not attained a girth at breast height (GBH) of 2.5 metres.

#### Rosewood

- Protection Status >
  - IUCN Red List: <u>Vulnerable</u>
  - CITES: <u>Appendix II</u>
- Threats →
  - Timber is of <u>high commercial value</u> and <u>wild subpopulations</u> are widely overexploited.
  - <u>Continued deforestation</u> across its range due to human settlement and agriculture.

#### **NATO Summit**



NATO Summit was held recently in Brussels. It brought together the leaders of all 30 Allied nations.

## **About NATO**

- Origin → The alliance is based on the North Atlantic Treaty that was signed in 1949. It was formed as an alliance of European and North American countries after World War II as a bulwark against Russian aggression.



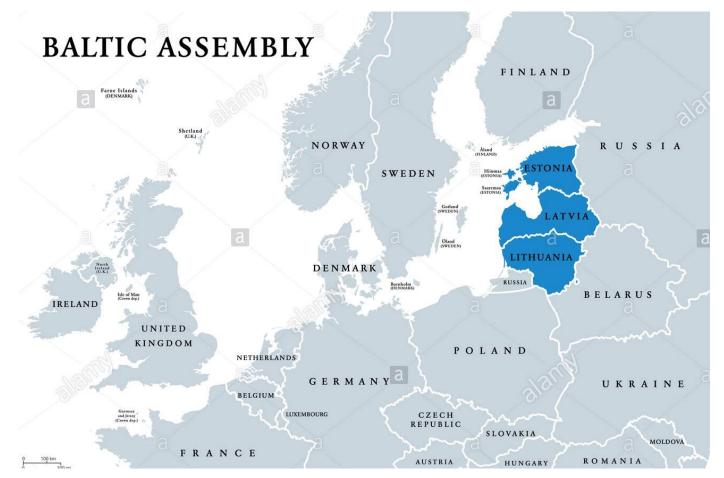


#### **NATO Summit**

- Objective → It is an <u>intergovernmental military alliance</u> between North American and European countries. It constitutes a <u>system of collective</u> <u>defence</u> whereby its independent member states agree to mutual defence in response to an attack by any external party.
- Member Countries ->
  - It consists of <u>30 members</u>. <u>Montenegro joined it in 201</u>7 and North Macedonia in 2020.
  - Of the 30 member countries, <u>two are located in North America</u> (Canada and the United States), <u>28 are in Europe</u>, one of which (Turkey) is in both Europe and Asia.

# **NATO Summit**

Three former Soviet states (<u>Estonia</u>, <u>Latvia</u> and <u>Lithuania</u>) <u>are members</u> of NATO.



nttps://ourstudycircle.in/upscpdt

# Quick revision (True/False)

	Question	True / False
1.	Operation Olivia -> launched by the Indian Coast Guard aims to protect Olive Ridley turtles.	/upscpdf
2.	Tulu Language -> listed under Eighth Schedule.	circle.in
3.	World Giving Index -> released by Amnesty International.	ourstudy
4.	Rosewood -> IUCN Red List: Vulnerable.	nttps://
5.	NATO -> HQ: Washington, D.C	

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1.	Operation Olivia -> launched by the Indian Coast Guard aims to protect Olive Ridley turtles.	True Jpdosdn/
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4.	Rosewood -> IUCN Red List: Vulnerable.	True
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# **New Shephard Rocket System**

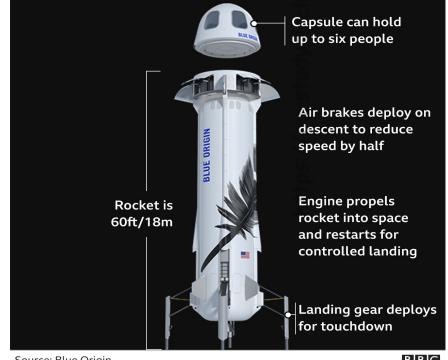


Amazon founder and billionaire Jeff Bezos's space company called Blue Origin recently concluded the online auction for the first seat on New Shephard, a rocket system meant to take tourists to space.

#### **About**

- New Shephard is a reusable rocket system that has been designed to take astronauts and research payloads past the Karman line - the internationally recognized boundary of space.
- Built by 
   The rocket system has been built by **Blue Origin**, space company of Amazon founder Jeff Bezos.

New Shepard: Reusable rocket designed to take passengers into space



Source: Blue Origin

BBC

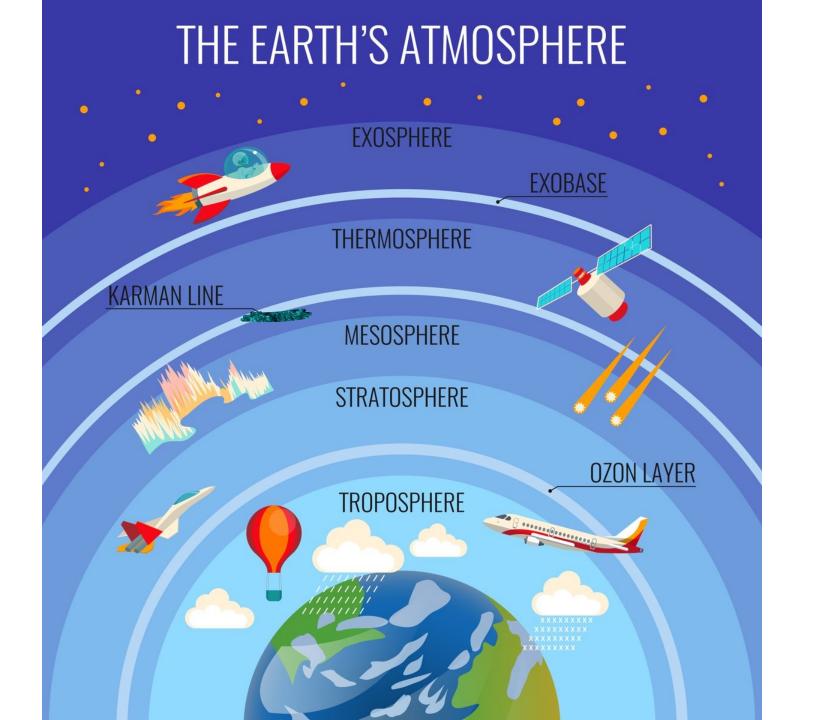
# **New Shephard Rocket System**

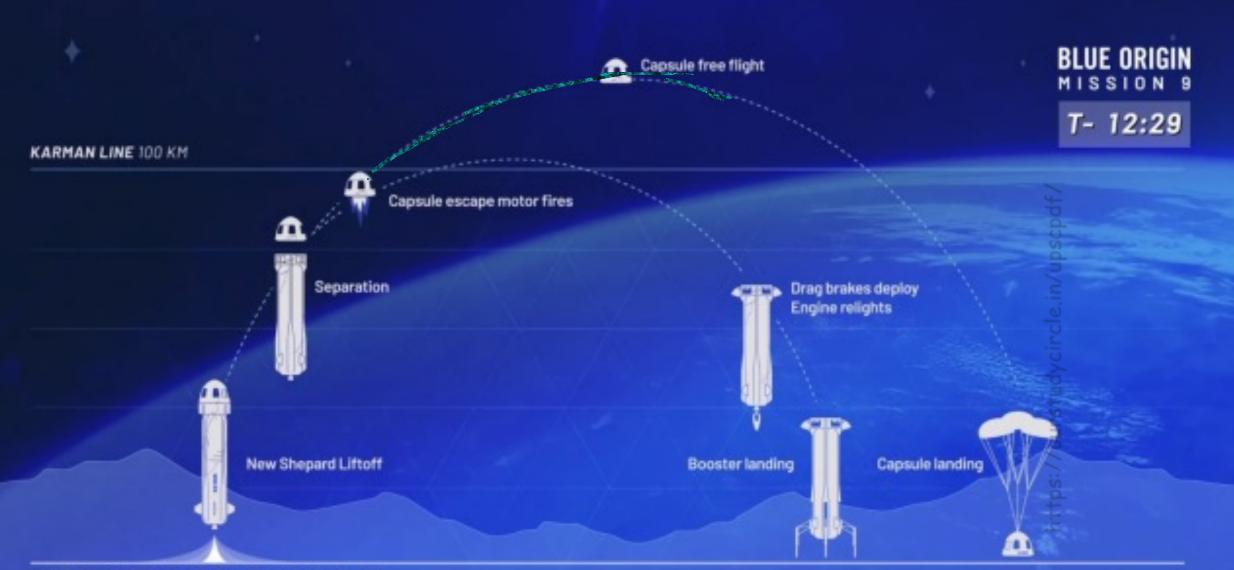
- Named after 
   The rocket system has been named after <u>astronaut Alan</u>
   <u>Shephard</u> the first American to go to space.
- Significance → The idea is to <u>provide easier and more cost-effective</u> access to space meant for purposes such as academic research, corporate technology development and entrepreneurial ventures among others.
- Moreover, apart from academic and research-oriented goals, the rocket will also <u>allow space tourists to experience microgravity</u> by taking them 100 km above the Earth.
  - Microgravity is the condition in which people or objects <u>appear to be</u> weightless. The effects of microgravity can be seen when <u>astronauts</u> and objects float in space.

# **New Shephard Rocket System**

#### **Karman Line**

- The Karman line is the <u>internationally recognized boundary of space</u>.
- The line is named after <u>Theodore von Kármán</u>, a Hungarian American engineer and physicist.
- Me was the first person to <u>determine the altitude</u> at which the <u>atmosphere</u> <u>becomes too thin</u>.
- The Fédération Aéronautique Internationale(FAI) defines the Kármán line as the altitude of 100 kilometres (62 miles) above Earth's mean sea level.
  - FAI is an <u>international standard-setting</u> and <u>record-keeping body</u> for aeronautics and astronautics.





WEST TEXAS LAUNCH SITE 3,700 FT ABOVE MSL

# MISSION 9 FLIGHT PROFILE

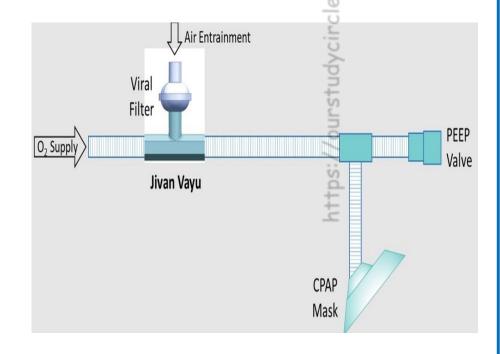
# Jivan Vayu



IIT Ropar has developed nation's first power-free CPAP device 'Jivan Vayu'. This substitute of CPAP machine can function even without electricity.

## About

- It is India's first such device which <u>functions</u> <u>even without electricity</u>.
- It is adapted to both kinds of oxygen generation units like <u>O2 cylinders</u> and <u>oxygen pipelines</u> in hospitals.
- O It is a <u>leak-proof</u>, <u>low-cost CPAP delivery</u> <u>system</u>. It can <u>deliver high flow oxygen</u> (20–60 LPM).



# Jivan Vayu

#### **What is CPAP?**

- The Continuous Positive Airway Pressure (CPAP) is a <u>treatment method</u> for patients <u>having breathing problems</u> <u>during sleep</u> called sleep apnea.
- The machine <u>uses mild air pressure</u> to keep the airways open for easy breathing.
- It is also <u>used to treat infants</u> whose lungs have not fully developed.
- The treatment is all the <u>more necessary</u> during <u>early stages of the Covid-19</u> infection.
- It <u>reduces lung damage</u> and allows patients to recover from the inflammatory effects.

## UN High-Level Dialogue on Desertification, Land Degradation and Drought



The Prime Minister of India has delivered a keynote address at the United Nations (UN) High-Level Dialogue on Desertification, Land Degradation, and Drought.

#### **About**

- The dialogue has been organized by the <u>President of the United Nations(UN) General</u> <u>Assembly.</u>
- Aim → It aims to focus the international community's attention on land issues. So that it can generate political will for implementing land solutions within COVID-19 adaptation and recovery strategies.



# UN High-Level Dialogue on Desertification, Land Degradation and Drought

- The dialogue encourages all Member States to <u>adopt and implement Land</u> <u>Degradation Neutrality targets</u> and <u>National Drought Plans</u>.
  - Indian Prime Minister(PM) <u>presided over the 14th Session</u> of the Conference of Parties to the United Nations Convention to Combat Desertification (<u>UNCCD</u>) in <u>September 2019</u>. Thus, he spoke at the opening segment of the dialogue, which is part of UNCCD.
- UNCCD (United Nations Convention to Combat Desertification)
- Established in <u>1994</u>.
- It is the sole <u>legally binding international agreement</u> linking environment and <u>development to sustainable land management</u>.
- Old It is the only convention stemming from a direct recommendation of the Rio Conference's Agenda 21 (comprehensive plan of action).

## UN High-Level Dialogue on Desertification, Land Degradation and Drought

#### **14th Session of COP-14 of UNCCD:**

- India had for the <u>first time</u> hosted the 14th session of the Conference of Parties (COP-14) of the UNCCD <u>at Greater Noida in 2019</u>.
- The theme of the Conference was 'Restore land, Sustain future'.
- Ouring the conference, the <u>Delhi Declaration</u> was issued. The declaration called for <u>better access over land</u> and <u>emphasised gender-sensitive</u> <u>transformative projects</u>.



BEFORE COVID-19

PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS



# SUSTAINABLE GCALS DEVELOPMENT GCALS

17 GOALS TO TRANSFORM OUR WORLD











9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

15 LIFE ON LAND











17 PARTNERSHIPS FOR THE GOALS









#### THE WORLD IS

FALLING SHORT ON 2020 TARGETS TO HALT BIODIVERSITY LOSS



**OVER 31,000 SPECIES** ARE THREATENED WITH WHICH IS EXTINCTION

27% OF OVER 116,000 ASSESSED SPECIES IN THE IUCN RED LIST

# 

**FOREST AREAS** CONTINUE TO DECLINE AT AN ALARMING RATE, DRIVEN MAINLY BY AGRICULTURAL EXPANSION

EACH YEAR, 10 MILLION HECTARES OF FOREST ARE DESTROYED [2015-2020]

#### COVID-19 IMPLICATIONS

WILDLIFE TRAFFICKING DISRUPTS **ECOSYSTEMS AND CONTRIBUTES TO** THE SPREAD OF INFECTIOUS DISEASES



**PANGOLINS ARE POSSIBLY THE** INTERMEDIARY ANIMAL THAT TRANSFERRED THE CORONAVIRUS

THE EQUIVALENT OF 370,000 PANGOLINS WERE SEIZED GLOBALLY (2014-2018)





TWO BILLION HECTARES OF LAND ON EARTH ARE

DEGRADED, AFFECTING SOME 3.2 BILLION PEOPLE.

DRIVING SPECIES TO EXTINCTION AND INTENSIFYING CLIMATE CHANGE



ONLY A THIRD OF 113 COUNTRIES WERE ON TRACK TO ACHIEVE THEIR NATIONAL TARGET TO INTEGRATE BIODIVERSITY INTO NATIONAL PLANNING

- What is/are the importance/importances of the 'United Nations Convention to Combat Desertification'?
  - 1. It aims to promote effective action through innovative actional programmes and supportive international partnerships.
  - 2. It has a special/particular focus on South Asia and North Africa regions, and its Secretariat facilitates the allocation of major portion of financial resources to these regions.
  - 3. It is committed to bottom-up approach, encouraging the participation of local people in combating the desertification.
- Select the correct answer using the code given below.
  - a) 1 only
  - **b)** 2 and 3 only
  - c) 1 and 3 only
  - d) 1, 2 and 3

- Answer: (c)
- 2nd is wrong as secretariat helps in compiling information and reports, not in allocating finances Further south Asia not in focus.

https://ourstudycircle.ir

- With reference to 'Agenda 21', sometimes seen in the news, consider the following statements:
- 1. It is a global action plan for sustainable development.
- 2. It originated in the World Summit on Sustainable Development held in Johannesburg in 2002.
- 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

nttps://ourstudycircle.in/upscpo

O Answer: (a)

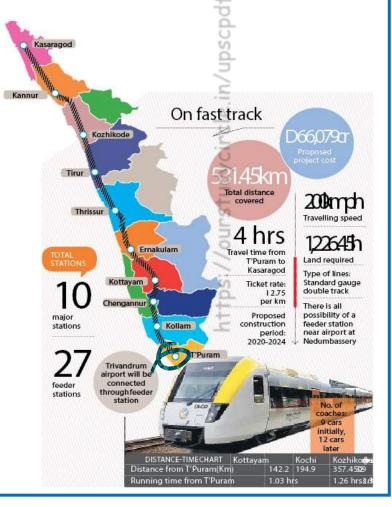
# SilverLine Project



Last week, the Kerala cabinet gave the green light to begin acquiring land for SilverLine, its flagship semi high-speed railway project.

## **About**

- SilverLine Project is <u>Kerala's semi high-speed</u> <u>railway project</u>.
- Distance → The railway line will be around <u>529</u> <u>kms long</u>, <u>covering 11 districts</u> through 11 stations.



# SilverLine Project

- O It will <u>link the southern end</u> and <u>state capital Thiruvananthapuram</u> with its northern end of Kasaragod.
- - KRDCL is a joint venture between the Kerala government and the Union Ministry of Railways.
- Significance of the Project → Once the project is completed, one can travel from Kasaragod to Thiruvananthapuram in less than four hours on trains traveling at 200 km/hr. The current travel time on the existing Indian Railways network is 12 hours.
- $\bigcirc$  Duration of the Project  $\rightarrow$  The deadline for the project is 2025.

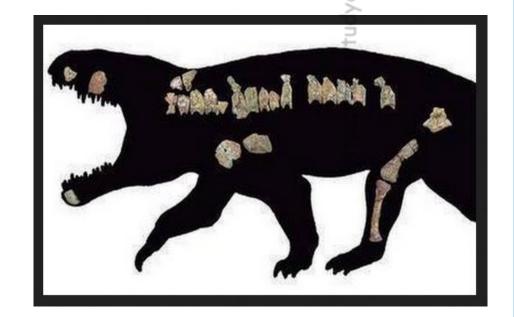
# Bharitalasuchus tapani



In the mid 20th century, researchers from the Indian Statistical Institute, Kolkata, carried out extensive studies on rocks of the Yerrapalli Formation in what is now Telangana, uncovering several fossils.

#### **About**

- By studying some of these specimens stored at the Institute, an international team has now thrown light on a carnivorous reptile (सरीस्प) that <u>lived 240</u> <u>million years ago</u>.
- They named it <u>Bharitalasuchus tapani</u>. reptile belonged to a family of extinct reptiles named Erythrosuchidae.



# Bharitalasuchus tapani

- O In the Telugu language, <u>Bhari means huge</u>, <u>Tala means head</u>, and Suchus is the name of the Egyptian crocodile-headed deity.
- Named after → The species is named after <u>paleontologist</u> (<u>who studies</u> <u>the history of life on Earth through the fossil record</u>) <u>Tapan Roy Chowdhury</u> in honour of his extensive work.
- Key Features
  - Bharitalasuchus tapani were robust animals with big heads and large teeth, and these probably predated other smaller reptiles.
  - They were approximately the <u>size of an adult male lion</u> and might have been the <u>largest predators</u> in their ecosystems.

# **Bharitalasuchus tapani**

# Yerrapalli Formation

Yerrapalli Formation is located primarily in the <u>Pranhita-Godavari Basin in Telangana</u>.

Olt is a Triassic (geologic period - 50.6 million years) rock formation

consisting primarily of red mudstones.



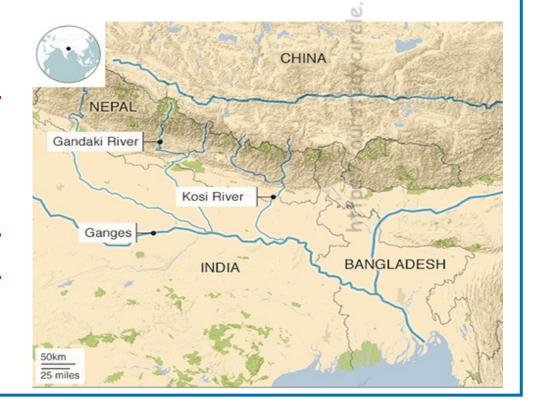
# **Dagmara Hydro-Electric Project**



A Memorandum of Understanding (MoU) has been signed between NHPC Limited and Bihar State Hydroelectric Power Corporation Limited (BSHPC) for Implementation of the Dagmara Hydro-Electric Project over the Kosi River in Supaul district.

#### **About**

- The project is located near <u>village</u>
  <u>Dagmara on Kosi river</u>.
- □ It is a <u>Run-of-the-River scheme</u>. Run-of-river hydro projects use the <u>natural downward flow of rivers</u> and <u>micro turbine generators</u> to capture the kinetic energy carried by water.





#### **Dagmara Hydro-Electric Project**

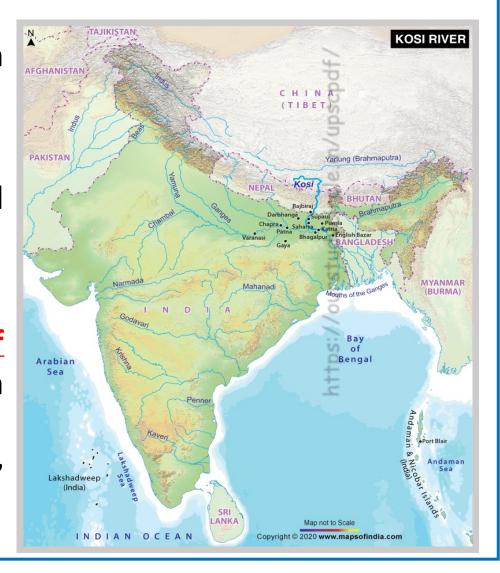
- Typically water is taken from the <u>river at a high point</u> and <u>diverted to a channel</u>, <u>pipeline</u>, or <u>pressurised pipeline</u>.
- The project will have the total capacity of generating 130 MW energy.
- The estimated cost of construction of this project is at Rs. 2478.24 crore.
- Significance
  - It will be a <u>landmark project in the power sector</u> scenario of Bihar as far as green power is concerned.
  - Apart from generating clean and green power, the execution will boost the socio-economic and infrastructure development in the area and shall also create employment opportunities.

https://ourstudycircle.in/upscpdf/

#### **Dagmara Hydro-Electric Project**

#### **Kosi River**

- The Kosi is a <u>trans-boundary river</u> which flows through <u>Tibet</u>, <u>Nepal</u> and <u>India</u>.
- It has its source in Tibet.
- Major tributaries Sun Kosi, Arun and Tamur.
- Olympia like in the second of the second
- The Kosi carries the maximum amount of silt and sand after the Brahmaputra in India.
- O It is also known as the "Sorrow of Bihar" due to the extreme flooding that it causes.



# Quick revision (True/False)

	Question	True / False
1.	New Shephard Rocket System -> is a reusable rocket system. built by SpaceX.	/upscpdf
2.	Karman Line -> determine the altitude at which the atmosphere becomes too thin.	circle.in
3.	<b>UNCCD</b> (United Nations Convention to Combat Desertification) -> is the sole non-legally binding international agreement.	ourstudy
4.	SilverLine Project -> The Indian Navy aims to procure new nuclear-powered attack submarines under this Project.	https://
5.	Bharitalasuchus tapani -> reptile belonged to a family of extinct reptiles named Erythrosuchidae.	

# Quick revision (True/False)

	Question	True / False
1.	New Shephard Rocket System -> is a reusable rocket system. built by SpaceX.	False Jpdosdn/
2.	Karman Line -> determine the altitude at which the atmosphere becomes too thin to support aeronautical flight.	True in Since
3.	<b>UNCCD</b> (United Nations Convention to Combat Desertification) -> is the sole non-legally binding international agreement.	False fundy
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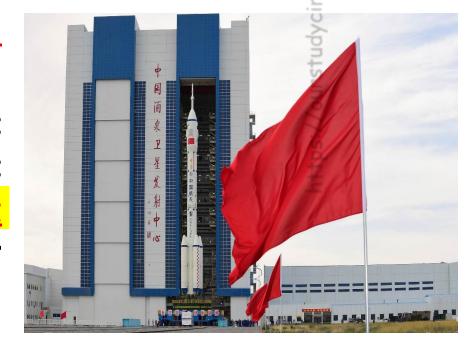
#### Shenzhou-12



China has launched the Long March 2F rocket transporting the Shenzhou-12 or Divine Vessel.

#### **About**

- What is it? → Shenzhou-12 is a manned mission.
- □ It is the <u>third of the 11 missions</u> that needed to complete China's first Permanent space station, named <u>Tiangong Space Station</u>. Among these missions, four will be manned missions.



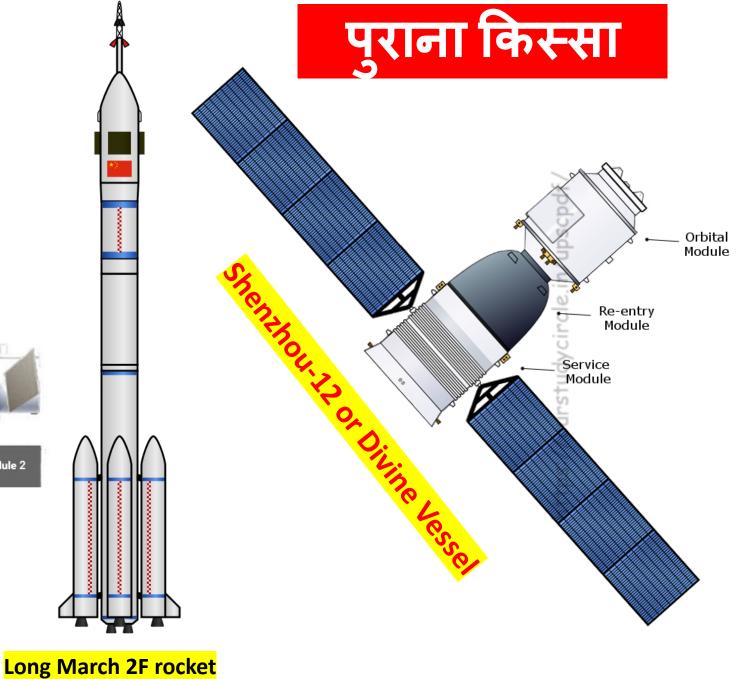
**Tiangong- 1**: 2011 to 2018

**Tiangong- 2**: 2016 to 2019



**Tiangong Space station** 

In low Earth orbit between 340 and 450 km



#### **Background: ISS**

- The International Space Station (ISS) is a space station, or a habitable artificial satellite, in low Earth orbit.
- O Its first component launched into orbit in 1998.
- Five different space agencies involved: NASA, Russia's Roscosmos State Corporation for Space Activities (Roscosmos), the European Space Agency, the Canadian Space Agency and the Japan Aerospace Exploration Agency.
- The ISS has been described as the most expensive single item ever constructed.
- South Korean and Indian in 2009: they wish to join the ISS program.



ISRO chairman K. Sivan announced in 2019 that India will not join the International Space Station programme and will instead build a 20 tonne space station on its own.

#### **ISS and China**

- China is not an ISS partner, and no Chinese nationals have been aboard.
- Shenzhou 5 was the first human spaceflight mission of the Chinese space program, launched in 2003.
- In 2007: China would like to participate in the ISS.
- In 2010, ESA stated his agency was ready But other 4 should also be ready.
- US concerns over the transfer of technology that could be used for military purposes.
- 2011 new American legislation: further strengthened legal barriers preventing NASA co-operation with China or Chinese owned companies.

#### Why:

- 1. 2007: Use of an anti-satellite weapon
- 2. The hacking of Jet Propulsion Laboratory intellectual property

#### Shenzhou-12

- Working
  - Shenzhou-12 is made up of three sections—<u>an orbiter module</u>, <u>a return</u> <u>module</u> and <u>a propelling module</u>.
  - It will carry three astronauts to the orbiting Tianhe core module (Part of Tiangong Space station). The astronauts will test the module's technologies, including its life-support system.
  - Moreover, the men will also be monitored for <u>how they fare in space</u>
     <u>physically and psychologically</u> for an extended period of time.
- Significance → Shenzhou-12 is China's seventh manned mission to space and the first during the construction of China's space station.
- O It is also the first in nearly five years after China's manned mission in 2016.

#### Shenzhou-12

## **Tiangong Space Station**

- Tiangong is a planned <u>Chinese Permanent space station</u> to be placed in <u>Low Earth orbit</u>.
- The operations of the station will be <u>controlled by the Beijing Aerospace</u>
  <u>Command and Control Center</u> in China.
- Significance → The Space Station roughly will be one-fifth the mass of the International Space Station.

#### Prelims 2016

# Q. What is 'Greased Lightning-10 (GL-10)', recently in the news?

- (a) Electric plane tested by NASA
- (b) Solar-powered two-seater aircraft designed by Japan
- (c) Space observatory launched by China
- (d) Reusable rocket designed by ISRO

#### **Prelims 2014**

Ocrrect option is (a)

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#### **Public Accounts Committee**



The Public Accounts Committee (PAC) of Parliament has decided its agenda for the following year.

#### **About PAC**

- Origin → Public Accounts Committee was introduced in 1921 after its first mention in the Government of India Act, 1919 also called Montford Reforms.
- The PAC is formed <u>every year</u> with a <u>strength of not more than 22 members</u> of which 15 are from Lok Sabha and 7 from Rajya Sabha.



#### **Public Accounts Committee**

- The term of office of the members is one year.
- Chairman → The Chairman is <u>appointed by the Speaker</u> of Lok Sabha. <u>Since 1967</u>, the chairman of the committee is <u>selected from the opposition</u>.
- Limitations of the Public Accounts Committee:
  - Broadly, it <u>cannot intervene</u> in the <u>questions of policy</u>.
  - It can keep a tab on the expenses only after they are incurred. It has no power to limit expenses.

#### **Public Accounts Committee**

- It <u>cannot intervene</u> in <u>matters of day-to-day administration</u>.
- Any recommendation that the committee makes is <u>only advisory</u>. They can be ignored by the ministries.
- It is <u>not</u> vested with the <u>power of disallowance of expenditures</u> by the departments.
- Being <u>only an executive body</u>; it cannot issue an order. Only the Parliament can take a final decision on its findings.

#### Prelims 2014

- Q. Which one of the following is the largest Committee of the Parliament?
- a) The Committee on Public Accounts
- b) The Committee on Estimates
- c) The Committee on Public Undertakings
- d) The Committee on Petitions

https://ourstudycircle.in/upscpdf

#### Prelims 2014

- Correct option is B
- Estimates Committee
- The Estimates Committee is the largest committee of the parliament. It consists of 30 members, all are appointed from the Lok Sabha. The function of this committee is to report on expenditures and economy and suggest measures to boost the economy and related policies. It works continuously throughout the year.

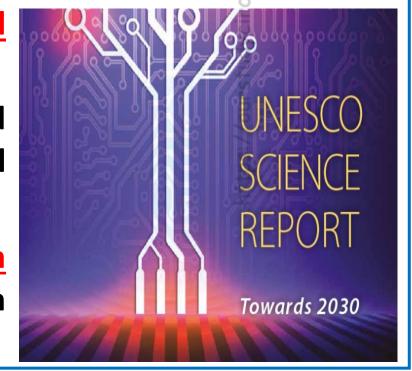
#### **UNESCO Science Report**



Latest edition of UNESCO Science Report (USR) was published on June 11, 2021 which is entitled as "race against time for smarter development".

#### **About**

- What is it? → UNESCO Science Report is a global monitoring report.
- O It is published <u>every five years</u> <u>by</u> the United Nations Educational, Scientific, and Cultural Organization (<u>UNESCO</u>).
- Objective → The report monitors trends in science governance worldwide to identify which development path countries are following.



#### **UNESCO Science Report**

○ Latest Report → The latest edition was published with the title '<u>The race</u> against time for smarter development'. The report has an <u>exclusive</u> chapter on India.

#### Key outcomes

- India's Investment in Research → The gross domestic expenditure on research(GERD) has been stagnant at 0.7% of the GDP for years. However, in absolute terms, the research expenditure has increased.
- Density of Scientists and Engineers → In 1990, the density of scientists/engineers engaged in R&D in India per 10,000 of the labour force stood at 10. This has now marginally increased to just 11 in 2018.

#### **UNESCO Science Report**

#### ASEAN Defence Ministers' Meeting Plus (ADMM-Plus)



Recently, the defence minister addressed the 8th ASEAN Defence Ministers Meeting (ADMM) Plus. It is being hosted by Brunei as it is the chair of the ASEAN grouping this year.

#### **About**

- Consistent with the ADMM guiding principles of open and outward looking, the <u>2nd ADMM in</u> <u>Singapore in 2007</u> adopted the Concept Paper to establish the <u>ADMM-Plus</u>.
- The ADMM-Plus is a <u>platform for ASEAN and its</u> <u>eight Dialogue Partners</u> to strengthen security and defence cooperation for peace, stability, and development in the region.



#### **ASEAN Defence Ministers' Meeting Plus (ADMM-Plus)**

- Membership → Eight Dialogue Partners are <u>Australia</u>, <u>China</u>, <u>India</u>, <u>Japan</u>, <u>New Zealand</u>, <u>Republic of Korea</u>, <u>Russia</u> and <u>the USA</u> (collectively referred to as the "Plus Countries").
- Aim → It aims to promote mutual trust and confidence between defence establishments through greater dialogue and transparency.
- Agreed five areas of practical cooperation under this mechanism are:
  - Maritime security, counter-terrorism, humanitarian assistance and disaster relief, peacekeeping operations and military medicine.
  - In 2013, a new priority area of humanitarian mine action was agreed.

#### **Corporatisation of OFB (Ordnance Factory Board)**



Addressing a long-pending reform, the Union Cabinet has approved a plan to corporatize the Ordnance Factory Board (OFB).

#### **About**

- Ordnance Factory Board(OFB) will be dissolved. It will be replaced by seven new Defense Public Sector Undertakings (DPSUs). Each undertaking will have a specific manufacturing role.
- The <u>41 factories</u> under the OFB will be <u>subsumed under one</u> or the other of the seven new companies.



#### **Corporatisation of OFB (Ordnance Factory Board)**

- These all will be <u>100% government-owned</u> public sector undertakings(<u>PSU</u>).
- There would be no change in the service conditions of the OFB employees.
- Significance of Corporatization of OFBs → The restructuring of OFBs is aimed at achieving the following objectives:
  - Making it a productive and profitable asset;
  - deepen specialisation in the product range;
  - enhance competitiveness;
  - improve quality and cost-efficiency

#### **Corporatisation of OFB (Ordnance Factory Board)**

### Ordnance Factory Board(OFB)

- Ordnance Factory Board(OFB) is an <u>umbrella body</u> of <u>41 Ordnance</u> <u>Factories</u>.
- Origin → In <u>1775</u>, British authorities accepted the establishment of the Board of Ordnance (तोपें) in <u>Fort William</u>, <u>Kolkata</u>. This marked the official beginning of the Army Ordnance in India.
- Nodal Ministry → It is currently a <u>subordinate office</u> of the <u>Ministry of Defence</u> (MoD).
- Mandate It provides a <u>major chunk of the weapon</u>, <u>ammunition</u>, and <u>supplies for Indian armed forces</u>, paramilitary forces, and police forces.
- Meadquarters 

  Kolkata, West Bengal

#### **Ekambaranathar Temple**



Recently, the Ekambaranathar temple in Kancheepuram (Tamil Nadu) has taken control of the Seetha Kingston School, located on the temple's property in Poonamallee High Road.

#### **About**

- O It is a <u>Hindu temple</u> dedicated to the deity Shiva, located in <u>Kanchipuram</u>, <u>Tamil Nadu</u>.
- It is significant to the <u>Hindu sect of Saivism</u> as one of the temples associated with the five elements, the <u>Pancha Bhoota Stalas</u>, and specifically the element of Earth, or Prithvi.



#### **Ekambaranathar Temple**

- Shiva is worshiped as <u>Ekambareswarar</u> or <u>Ekambaranathar</u>, and is represented by the lingam, with his idol referred to as <u>Prithvi lingam</u>.
- The present masonry structure was <u>built during the Chola dynasty</u> in the <u>9th century</u>, while later expansions are attributed to Vijayanagar rulers.
- It is <u>maintained</u> and <u>administered by the Hindu Religious and Charitable</u> <u>Endowments Department</u> of the Government of Tamil Nadu.

# Quick revision (True/False)

	Question	True / False
1.	Shenzhou-12 -> China's manned mission.	upscpdf
2.	Public Accounts Committee -> strength of not more than 30 members of which 22 are from Lok Sabha and 8 from Rajya Sabha.	circle.in/
3.	<b>ADMM-Plus -&gt; Platform for ASEAN and its eight Dialogue Partners to strengthen security and defence cooperation.</b>	/ourstudy
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#### **World Competitiveness Index 2021**



According to the World Competitiveness Yearbook (WCY), India maintained 43rd rank on the annual World Competitiveness Index.

#### **About**

- Published by → WCY was first published in 1989 and is compiled by the Institute for Management Development (IMD).
- The World Competitiveness Index is a comprehensive annual report and worldwide reference point on the competitiveness of countries.



#### **World Competitiveness Index 2021**

- Factors → It measures the prosperity and competitiveness of countries by examining four factors (334 competitiveness criteria):
  - Economic performance
  - Government efficiency
  - Business efficiency
  - Infrastructure.

# Key finding

- The European countries display regional strength in world competitiveness ranking with <u>Switzerland (1st)</u>, <u>Sweden (2nd)</u>, <u>Denmark (3rd)</u>, <u>the</u> <u>Netherlands (4th)</u>.
- The top-performing Asian economies are, in order, <u>Singapore (5th)</u>, <u>Hong Kong (7th)</u>, <u>Taiwan (8th)</u> and <u>China (16th)</u>.

#### **World Competitiveness Index 2021**

⑤ In Comparison to BRICS Nations → Among the BRICS nations, <u>India ranked second</u> (43rd) after China (16th), followed by Russia (45th), Brazil (57th) and South Africa (62nd).



#### Prelims 2012

# Q. The Multi-dimensional Poverty Index developed by Oxford Poverty and Human Development Initiative with UNDP support covers which of the following?

- 1. Deprivation of education, health, assets and services at household level
- 2. Purchasing power parity at national level
- 3. Extent of budget deficit and GDP growth rate at national level

#### Select the correct answer using the codes given below:

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

#### Prelims 2012

#### Answer (a) 1 only

- It was first developed in 2010 by Oxford Poverty and Human Development Initiative and United Nations Development Programme.
- It uses three dimensions and ten indicators which are-
  - Education- Years of schooling and child enrollment
  - Health Child Morality and Nutrition Standards
  - Standard of Living Electricity, flooring, drinking water, sanitation, cooking fuel and assets.
  - Hence only statement 1 is correct.

#### **Neutrinos**

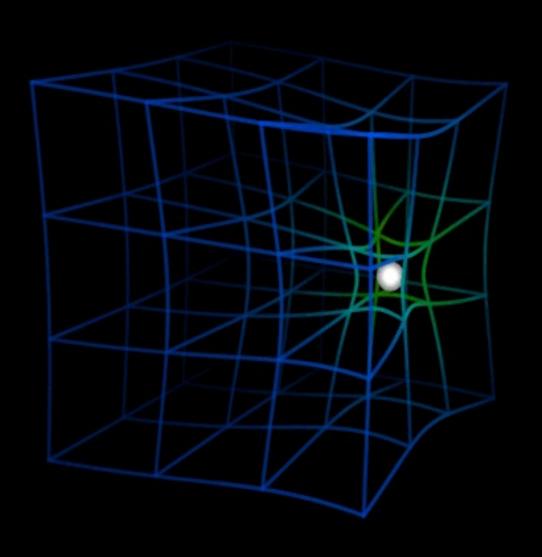


Scientists have shown that the geometry of space-time can cause neutrinos to oscillate.

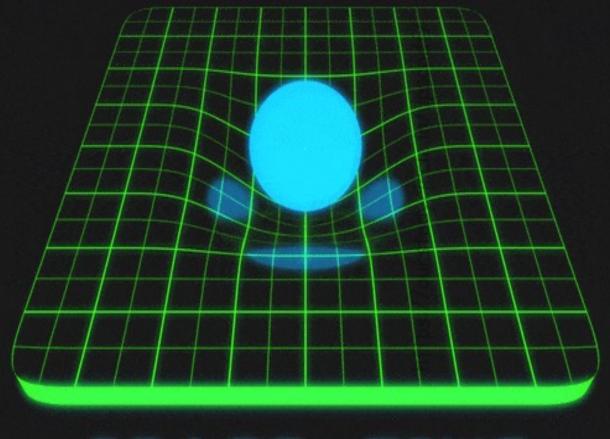
# **About**

- There are three types of neutrino, electronneutrino, muon-neutrino, and tau-neutrino.
- Detected for the first time in <u>1959</u>, neutrinos are the <u>second most abundant particles in the world</u>, <u>after photons</u>, or the light particle.
- Neutrinos are <u>mysterious particles</u>, produced copiously in nuclear reactions in the Sun, stars, and elsewhere.





# YOU BEND MY



SPACE-TIME

#### **Neutrinos**

- They also "oscillate" meaning that different types of neutrinos change into one another.
- O Probing of oscillations of neutrinos and their relations with mass are crucial in studying the origin of the universe.
- Sources → Neutrinos are created by <u>various radioactive decays</u>; <u>during a supernova</u>, by cosmic rays striking atoms etc.
- Features of neutrinos
  - Neutrinos <u>interact very weakly with everything else</u> trillions of them pass through every human being every second without anyone noticing.
  - It is now generally believed that the <u>phenomenon of neutrino</u> <u>oscillations</u> require neutrinos to have <u>tiny masses</u>.

#### Prelims 2017

# Q. What is the purpose of 'evolved Laser Interferometer Space Antenna' (eLISA) project?

- (a) To detect neutrinos
- (b) To detect gravitational waves
- (c) To detect the effectiveness of missile defence system
- (d) To study the effect of solar flares on our communication systems

# Prelims 2017

Answer (b) To detect gravitational waves

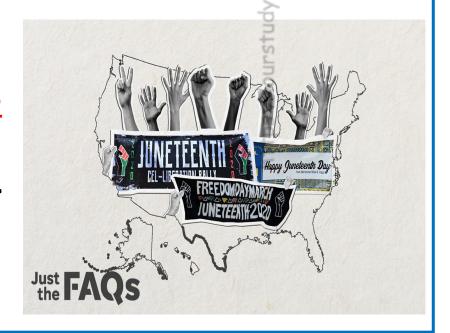
#### Juneteenth



US President Joe Biden is soon expected to sign a law making June 19, or "Juneteenth", a national holiday recognised by the federal government, commemorating the end of slavery after the American Civil War (1861-65).

## **About**

- The day is the oldest nationally celebrated commemoration of the ending of slavery in the US and is observed on June 19.
- O It is also known as <u>Emancipation Day</u> or <u>Juneteenth Independence Day</u>.



#### Juneteenth

⑤ Background → On June 19, 1865, Major General Gordon Granger arrived in Galveston, Texas and announced the end of both the Civil War and slavery. Since then, Juneteenth has become a largely symbolic date representing freedom for African Americans.



Recently, the Cabinet Committee on Economic Affairs has approved the proposal of the Ministry of Earth Sciences (MoES) on the Deep Ocean Mission (DOM).

## **About**

- Deep Ocean Mission aims to <u>explore the deep ocean for resources</u>. Also, for sustainable use of ocean resources, it aims to <u>develop deepsea technologies</u>.
- Nodal Ministry → Ministry of Earth
   Sciences (MoES) will be the nodal Ministry for implementing this mission.



- O Duration of the mission → The mission will be implemented over a period of 5 years in a phased manner. Its 1st phase will be of 3 years.
- Key Components of the mission
  - A <u>manned submersible</u> will be developed to <u>carry three people</u> to a depth of 6,000 metres in the ocean with a suite of <u>scientific sensors</u> and tools. An <u>Integrated Mining System</u> will be developed for mining polymetallic nodules at those depths in the central Indian Ocean.
  - Development of <u>Ocean Climate Change Advisory Services</u>.
  - Development of a <u>component for searching deep sea flora and fauna</u>, including microbes, and studying ways to sustainably utilise them.
  - It has a component for <u>studying and preparing detailed engineering</u> design for offshore Ocean Thermal Energy Conversion (<u>OTEC</u>) powered desalination plants.

 The final component is aimed at <u>grooming experts</u> in the <u>field of ocean</u> <u>biology and engineering</u>. This component aims to translate research into industrial applications and product development through on-site business incubator facilities.

#### ○ Significance →

- The mission will give a <u>boost to efforts</u> to <u>explore India's vast Exclusive</u>
   <u>Economic Zone</u> and Continental Shelf.
- The plan will enable India to develop capabilities to <u>exploit resources</u> in the Central Indian Ocean Basin (<u>CIOB</u>).

## **PMN**

- Polymetallic nodules (also known as manganese nodules) are <u>potato-shaped</u>, <u>largely porous nodules</u> found in abundance carpeting the sea floor of world oceans in deep sea.
- Composition → Besides manganese and iron, they contain nickel, copper, cobalt, lead, molybdenum, cadmium, vanadium, titanium, of which nickel, cobalt and copper are considered to be of economic and strategic importance.



# Also Remember

- The United Nations(UN) has declared the <u>decade 2021-2030</u> as the <u>Decade</u> of Ocean Science for Sustainable Development.
- The Government of India's Vision of New India by 2030 announced in 2019 highlighted the <u>Blue Economy</u> as <u>one of the ten core dimensions of growth</u>.

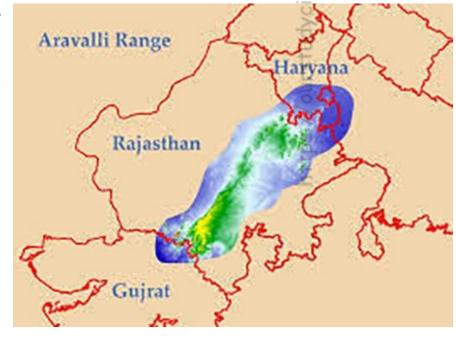
# **Aravalli Range**



The Supreme Court of India has refused to stop the demolition of over 10,000 settlements encroaching on forests in the Aravalli range in Haryana's Faridabad district.

# **About Aravalli Range**

- □ Location → They stretch for a distance of about 720 km from Himmatnagar in Gujarat to Delhi, spanning Haryana, Rajasthan, Gujarat, and Delhi.
- Formation → The Aravallis date back to millions of years when a <u>pre-Indian</u> <u>subcontinent collided with the mainland</u> Eurasian Plate.



https://ourstudycircle.in/upscpdf/

# **Aravalli Range**

- Aravalli Range is the <u>oldest mountain range</u> in India and one of the oldest mountain systems in the world.
- Age → Carbon dating has shown that <u>copper and other metals mined</u> in the ranges date back to at least the <u>5th century BC</u>.
- Rivers → The three major rivers and their tributaries flow from the Aravalli. Namely <u>Banas</u> and <u>Sahibi rivers</u> which are tributaries of Yamuna, as well as <u>Luni River</u> which flows into the Rann of Kutch.
- Highest Peak → Guru Shikhar Peak on Mount Abu is the highest peak in the Aravalli Range (1,722 m).

# Quick revision (True/False)

	Question	True / False
1.	World Competitiveness Index 2021 -> Published by World Economic Forum.	upscpdf
2.	Neutrinos -> second most abundant particles in the world, after photons, or the light particle.	lycircle.in/
3.	Polymetallic nodules -> found only in Indian Ocean.	ourstud
4.	<b>Deep Ocean Mission -&gt; Ministry of Science and Technology will be the nodal Ministry for implementing this mission.</b>	https://
5.	Aravalli Range -> Guru Shikhar Peak on Mount Abu is the highest peak .	

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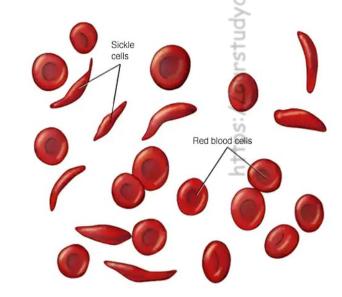
#### Sickle cell disease



Union Minister of Tribal Affairs flagged off mobile vans under the Unmukt project for strengthening screening and timely management of Sickle Cell Disease (SCD) in Khunti district of Jharkhand and Kanker in Chhattisgarh.

## 👉 About

- What is it? → It is an <u>inherited blood disease</u> which is most common among people of African, Arabian and Indian origin.
- O It is a group of disorders that affects hemoglobin, the protein molecule in red blood cells that delivers oxygen to cells throughout the body.



#### Sickle cell disease

- People with this disease have distorted red blood cells as a sickle, or crescent shape.
  - This <u>blocks blood flow</u> and <u>oxygen</u> from reaching all parts of the body.
- Symptoms
  - It can cause <u>severe pain</u>, referred to as <u>sickle cell crises</u>.
  - Over time, people with sickle cell disorders can experience <u>damage to</u>
     <u>organs</u> including the liver, kidney, lungs and heart. <u>Death can also result</u>
     from complications of the disorder.
- Treatment → <u>Medication</u>, <u>blood transfusions</u> and rarely a bone-marrow transplant.

#### Sickle cell disease

# **World Sickle Cell Day**

- It is recognised by the United Nations and celebrated every year on <u>June</u>
  <u>19</u>.
- The United Nations General Assembly adopted a resolution <u>recognising</u> sickle cell disease as a <u>public health problem</u> on <u>December 22, 2008</u>.
- AIM It aims to increase awareness of sickle cell disorders at the national and international level.



The Hayagriva Madhava Temple Committee in Assam has signed an MoU with Turtle Survival Alliance India, Help Earth, and Assam Forests Department to conserve the Black Softshell Turtle.

#### About Black Softshell Turtle

- Scientific Name Nilssonia nigricans.





- Habitat →
  - A <u>freshwater species</u> and there are 29 species of freshwater turtles and tortoises found in India.
  - They are found in <u>ponds of temples in northeastern India</u> and <u>Bangladesh</u>. Its distribution range also includes the <u>Brahmaputra River</u> and its tributaries.
- O Protection Status
  - IUCN Red List: <u>Critically Endangered</u>
  - CITES: <u>Appendix I</u>
  - Wildlife (Protection) Act, 1972: No legal protection.
- Threats → Consumption of turtle meat and eggs, silt mining, encroachment of wetlands and change in flooding pattern.

## Sea Turtles of Indian Waters:

- There are <u>five species</u> in Indian waters i.e. <u>Olive Ridley</u>, <u>Green turtle</u>, <u>Loggerhead</u>, <u>Hawksbill</u>, <u>Leatherback</u>.
  - The <u>Olive Ridley</u>, <u>Leatherback</u> and <u>Loggerhead</u> are listed as <u>'Vulnerable</u>' on the IUCN Red List of Threatened Species.
  - The <u>Hawksbill turtle</u> is listed as <u>'Critically Endangered</u>' and <u>Green Turtle</u> is listed as <u>'Endangered</u>' on the IUCN Red List of Threatened Species.
  - They are protected in Indian Wildlife Protection Act of 1972, under Schedule I.

# About Hayagriva Madhava temple

- The Hayagriva Madhava temple exists in a hilly place which is located at Hajo nearby Guwahati, Assam. The temple is dedicated to Lord Vishnu.
- Built by → The present temple structure was <u>constructed by King</u>
   Raghudeva Narayan in 1583.
  - According to Historians, the temple was built <u>during the Pala period of</u>
     10th-12th century A. D.
- Significance → The temple is <u>revered by Buddhists also</u>, as they believe that Hayagriva Madhava temple is the place <u>where Buddha attained</u> <u>Nirvana</u>. Thus, the temple becomes an <u>ancient pilgrimage center</u> for both Hindus and Buddhists.

#### **CSP 2019**

# **Consider the following pairs**

Wildlife Naturally found in

1. Blue-finned Mahseer Cauvery River

2. Irrawaddy Dolphin Chambal River

3. Rusty-spotted Cat Eastern Ghats

Which of the pairs given correctly matched?

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

# **Integrated Power Development Scheme**



A 50 kWp Solar roof top was recently inaugurated in Solan, Himachal Pradesh under the Integrated power development scheme of the Ministry of Power, Government of India.

#### About

- $\odot$  Launched in  $\rightarrow$  2014 by Ministry of Power.
- Nodal agency → Power Finance
   Corporation (PFC) is the Nodal agency for implementation of the scheme.
- Objectives of →
  - Strengthening of sub-transmission and distribution network in the urban areas.



# **Integrated Power Development Scheme**

- Metering of distribution transformers / feeders / consumers in the urban areas.
- IT enablement of distribution sector and strengthening of distribution network.
- Significance of the scheme → The scheme will help in reduction in (Aggregate Technical & Commercial) AT&C losses; establishment of IT enabled energy accounting / auditing system, improvement in billed energy based on metered consumption and improvement in collection efficiency.

# National Internet Exchange of India (NIXI)



Recently, the Na tional Internet Exchange of India (NIXI) had celebrated its 18th Foundation Day.

## About NXI

- It is a <u>not for profit Organization</u> under section
   8 of the Companies Act 2013.
- Purpose → It was set up for peering of ISPs
   among themselves for the purpose of routing the domestic traffic within the country.



# National Internet Exchange of India (NIXI)

- It is working <u>since 2003</u> for spreading the internet technology to the citizens of India .
- Objectives
  - To Promote Internet
  - To set up, when needed, in <u>select location(s)/parts/regions of India</u>
     Internet Exchanges/Peering Points
  - To enable <u>effective and efficient routing</u>, <u>peering</u>, <u>transit</u> and <u>exchange</u>
     of the Internet traffic within India.

An **Internet exchange** point (IX or IXP) is the physical infrastructure through which **Internet** service providers (ISPs) and content delivery networks (CDNs) **exchange Internet** traffic among their networks

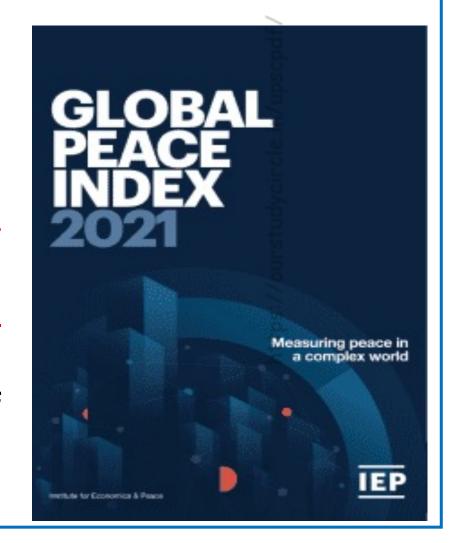
#### **Global Peace Index**



The 15th edition of Global Peace Index 2021 has been released.

# **About**

- O It ranks countries according to their levels of peacefulness and identifies potential determinants of peace.



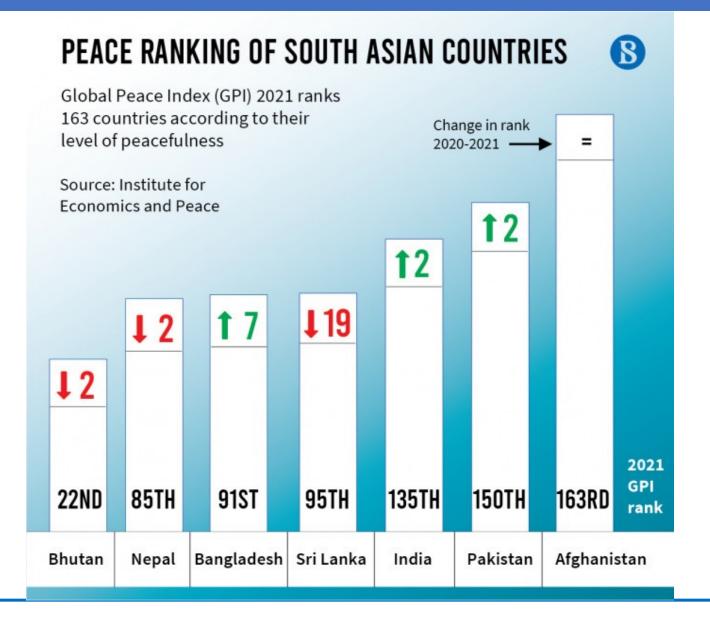
#### **Global Peace Index**

- Coverage → The index measures the peacefulness of <u>163 countries</u> and territories. It covers <u>99.7% of the world's population</u>.
- Parameters → The index is composed of 23 qualitative and quantitative indicators from highly respected sources. These indicators are grouped into three key domains:
  - ongoing conflict
  - safety and security and
  - Militarization.

# Key Highlights

- <u>Iceland</u> has <u>topped</u> the peace index. It was followed by <u>New Zealand</u>, <u>Denmark</u>, and <u>Portugal</u>.
- India has been ranked 135th in the 2021 Global Peace Index.

#### **Global Peace Index**



https://ourstudycircle.in/upscpdf/

# Quick revision (True/False)

	Question	True / False
1.	Sickle cell disease -> is a group of disorders that affects hemoglobin, the molecule in white blood cells.	upscpdf
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The Wuhan Institute of Virology was said to have conducted gain-offunction research on coronaviruses which may possibly have caused the lab-leak origin of the SARS-CoV-2 (Covid-19 pandemic).

- © 'Gain of function' is a field of research <u>focused</u> on growing generations of microorganisms, under conditions that cause mutations in a virus.
- These experiments are termed 'gain of function' because they involve manipulating pathogens in a way that they gain an advantage in or through a function, such as increased transmissibility.



- Such experiments allow scientists to <u>better predict emerging infectious</u> <u>diseases</u>, and <u>to develop vaccines</u> and therapeutics.
- How is it carried out? →
  - It involves <u>deliberately altering an organism</u> in the lab, altering a gene, or <u>introducing a mutation</u> in a pathogen to study its transmissibility and immunogenicity.
  - This is done by genetically engineering the virus and by allowing them to grow in different growth mediums, a technique called serial passage.
- Issues related to the research
  - Gain-of-function research <u>involves manipulations</u> that make certain pathogenic microbes more <u>deadly</u> or <u>more transmissible</u>.

- Gain-of-function research reportedly <u>carries inherent biosafety</u> and <u>biosecurity risks</u> and is thus referred to as '<u>dual-use research of concern</u>' (DURC).
- Serial passaging involves <u>allowing the pathogen to grow</u> under <u>different</u> <u>circumstances</u> and then observing the changes.

#### Situation in India

- All activities related to genetically engineered organisms or cells and hazardous microorganisms and products are <u>regulated</u> as per the "<u>Manufacture</u>, <u>Use</u>, <u>Import</u>, <u>Export and Storage of Hazardous</u> <u>Microorganisms/Genetically Engineered Organisms or Cells Rules</u>, <u>1989</u>".
- On 2020, the Department of Biotechnology <u>issued guidelines</u> for the establishment of containment facilities, called '<u>Biosafety labs</u>'.
  - The notification provides <u>operational guidance</u> on the containment of biohazards and levels of biosafety that all institutions involved in research, development and handling of these microorganisms must comply with.

# Krivak or Talwar stealth frigates



The keel (जहाज) of the second frigate, of additional Krivak class stealth ships, being built with technology transfer from Russia by the Goa Shipyard Limited (GSL) was laid.

- Krivak or Talwar stealth frigates are a <u>series of frigates and guard ships</u> (patrol boats) built in the Soviet Union, primarily for the Soviet Navy since 1970.
- □ Purpose → They are primarily used to accomplish a wide variety of naval missions. Such as <u>finding and eliminating enemy submarines</u> and <u>large surface ships</u>.



# Krivak or Talwar stealth frigates

- Indian Navy currently operates six Krivak class frigates weighing around
   4,000 tonnes in two different batches. Such as
  - The Talwar class
  - The upgraded Teg class.
- New Procurement of Krivak class stealth Frigates:
- O In 2016, India and Russia had signed an <u>Inter-Governmental</u> <u>Agreement(IGA)</u> for <u>four Krivak</u> or <u>Talwar stealth ships</u>.
- Among four, two are to be procured directly from Russia and the other two
   will be built by the Goa Shipyard Ltd(GSL).
- Features → The four ships to be built will weigh 300 tonnes more than the earlier ones. Apart from that, it will also be armed with BrahMos supersonic cruise missiles.

# Krivak or Talwar stealth frigates

- Russia's Military Equipment Deployed by India:
- Navy → The Navy's only active aircraft carrier INS Vikramaditya is from Russia. A nuclear attack submarine Chakra II is also in service.
- Army
  - Army's T-90 and T-72 main battle tanks.
  - S-400 Triumf missile system.
- Air Force → IAF's Su30 MKI fighter.

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# Nipah virus

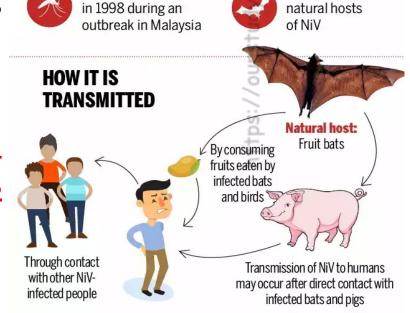


A recent survey has found the presence of antibodies against the Nipah virus (NiV) in some bat species from a cave in Mahabaleshwar, a popular hill station in Maharashtra.



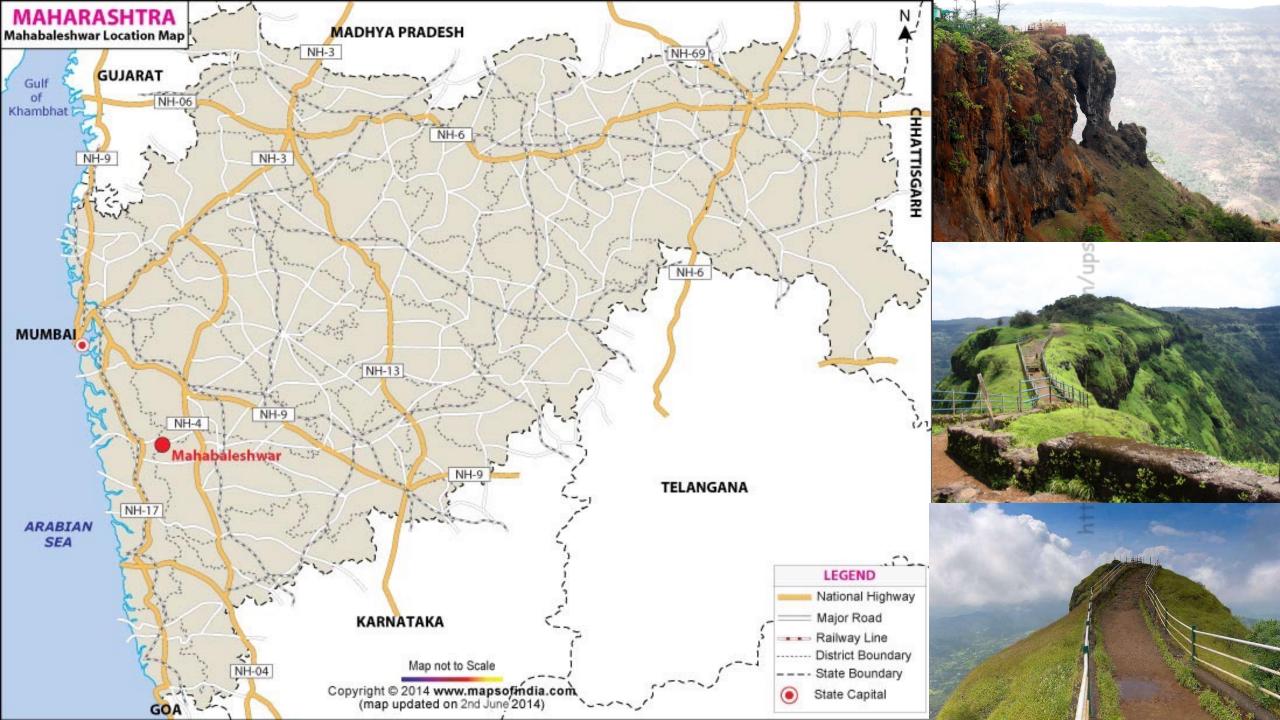


- What is it? → It is a zoonotic virus (it is transmitted from animals to humans).
- © Caused by → The organism which causes Nipah Virus encephalitis is an RNA or Ribonucleic acid virus of the family Paramyxoviridae, genus Henipavirus, and is closely related to Hendra virus.



Fruit bats are

NiV first identified



# Nipah virus

- Hendra virus (HeV) infection is a <u>rare emerging zoonosis</u> that causes severe and often fatal disease in both infected horses and humans.
- It <u>first broke out</u> in <u>Malaysia and Singapore</u> in 1998 and 1999.
- O It <u>first appeared in domestic pigs</u> and has been found among several species of domestic animals including dogs, cats, goats, horses and sheep.
- Transmission
  - The disease spreads <u>through fruit bats</u> or '<u>flying foxes</u>,' who are natural reservoir hosts of the Nipah and Hendra viruses.
  - The virus is <u>present in bat urine</u> and potentially, <u>bat faeces</u>, <u>saliva</u>, and <u>birthing fluids</u>.



# Nipah virus

- Symptoms The human infection presents as an encephalitic syndrome marked by fever, headache, drowsiness, mental confusion, coma, and potentially death.
- Prevention → Currently, there are no vaccines for both humans and animals. Intensive supportive care is given to humans infected by Nipah virus.

# **World Investment Report 2021**



As per UN report, India received USD 64 billion in foreign direct investments (FDI) in 2020.

- Released by United Nations Conference on Trade and Development (<u>UNCTAD</u>).
- Focus → The World Investment Report <u>focuses</u>
   on trends in Foreign <u>Direct Investment</u> (FDI)
   worldwide, at the regional and country levels and emerging <u>measures</u> to <u>improve</u> its <u>contribution to development</u>.



# **World Investment Report 2021**

# **Key Points**

- India →
  - The report says that India is the <u>fifth largest recipient</u> of Foreign Direct Investment (<u>FDI</u>) <u>in the world</u>.
  - In India, the FDI increased 27% to USD 64 billion (2020) from USD 51 billion (2019).
- Global →
  - The global FDI flows have been <u>severely hit by the pandemic</u> and they <u>plunged by 35%</u> in 2020 to USD 1 trillion.
  - COVID-19 led lockdowns around the world <u>slowed down existing</u> <u>investment projects</u> and prospects of a recession led multinational enterprises (MNEs) to reassess new projects.

#### **CSP 2015**

# Q. Which one of the following issues the 'Global Economic Prospects' report periodically?

- (a) The Asian Development Bank
- (b) The European Bank for Reconstruction and Development
- (c) The US Federal Reserve Bank
- (d) The World Bank

https://ourstudycircle.in/upscpd1

# https://ourstudycircle.in/upscpdf/

#### **CSP 2016**

#### Q. 'Global Financial Stability Report' is prepared by the

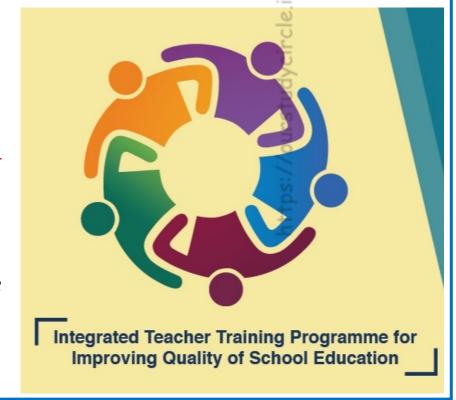
- (a) European Central Bank
- (b) International Monetary Fund
- (c) International Bank for Reconstruction and Development
- (d) Organization for Economic Cooperation and Development

# **NISHTHA Programme**



Ministry of Tribal Affairs and NCERT come together on a joint mission for NISHTHA Capacity Building Programme for Eklavya Model Residential Schools (EMRSs) Teachers and Principals.

- What is it? → National Initiative for School Heads and Teachers Holistic Advancement (NISHTHA) is a national mission to improve learning outcomes at the elementary level.
- This is done through integrated teacher training.
- O It is the <u>largest</u> teachers' training programme of its kind in the world.



#### **NISHTHA Programme**

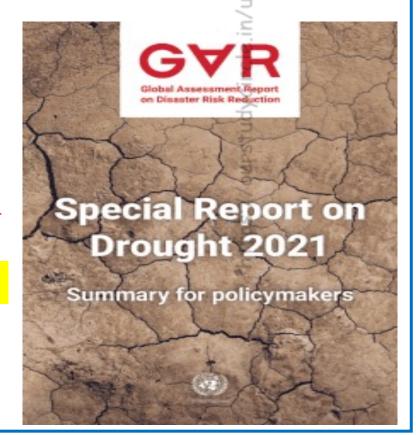
- It has been launched under the <u>Centrally Sponsored Scheme</u> of <u>Samagra</u> <u>Shiksha</u> in 2019-20.
- Objective To motivate and equip teachers to encourage and foster critical thinking in students and also teachers will get awareness and develop their skills on various aspects.
- Implementation → Training will be <u>conducted directly by 33120 Key Resource Persons</u> (KRPs) and <u>State Resource Persons</u> (SRP) identified by the State and UTs, who will in turn be <u>trained by 120 National Resource Persons</u> identified from National Council of Educational Research and Training (NCERT), National Institute of Educational Planning and Administration (NIEPA).

# Global Assessment Report (GAR) on Drought 2021



The UN Office for Disaster Risk Reduction(UNDRR) has released a report titled "Global Assessment Report (GAR) on Drought 2021".

- Objective → The report explores the systemic nature of drought and its impacts on the achievement of the Sendai Framework for Disaster Risk Reduction (2015), the SDGs, and human and ecosystem, health and wellbeing.



# Global Assessment Report (GAR) on Drought 2021

# **Key Findings**

- Globally
  - Around <u>700 million people</u> are <u>at risk</u> of being displaced as a result of drought by 2030.
  - Two-third of the world will be under water-stressed conditions by 2025.
- - The effect of severe droughts on India's gross domestic product (GDP) is estimated at 2-5%.
  - The <u>Deccan region</u> sees the <u>highest frequency</u> of <u>severe droughts</u> in all of India

# Global Assessment Report (GAR) on Drought 2021

# United Nations Office for Disaster Risk Reduction (UNISDR)

- The UNISDR was established in <u>1999</u> as a dedicated secretariat to <u>facilitate</u> the <u>implementation of</u> the <u>International Strategy for Disaster Reduction</u> (<u>ISDR</u>).
- Meadquartered Geneva, Switzerland.
- Mandate → It is mandated to <u>serve as the focal point</u> in the <u>United Nations system</u> for the coordination of disaster reduction and to ensure synergies among the disaster reduction activities.
- O It is an organisational unit of the UN Secretariat and is led by the UN Special Representative of the Secretary General for Disaster Risk Reduction (SRSG).

#### **Land for Life Award**



Recently, Shyam Sundar Jyani, a Rajasthan-based climate activist, has won the prestigious United Nations' Land for Life Award for his environment conservation concept, Familial Forestry.

#### About award

- Organizes by → Every two years, the United Nations Convention to Combat Desertification (UNCCD) organizes the Land for Life Award.



# Quick revision (True/False)

	Question	True / False
1.	Krivak or Talwar stealth frigates -> series of frigates and guard ships (patrol boats) built in the Soviet Union.	/upscpdf
2.	Nipah virus -> caused by the variola virus.	ircle.in
3.	Land for Life Award -> launched in 2011 at the UNCCD COP10 in the Republic of Korea.	/ourstudyc
4.	World Investment Report -> released by World Economic Forum.	https:/
5.	United Nations Office for Disaster Risk Reduction -> established in 1999. HQ: Paris, France.	

# Quick revision (True/False)

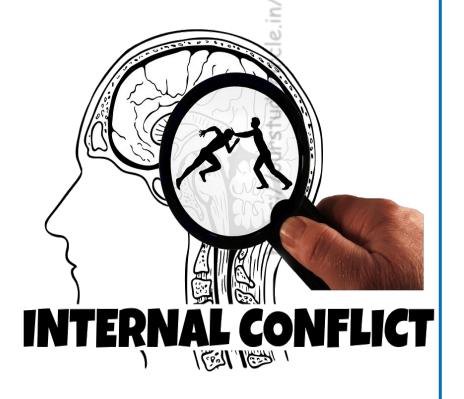
	Question	True / False
1.	Krivak or Talwar stealth frigates -> series of frigates and guard ships (patrol boats) built in the Soviet Union.	True /nbschq/
2.	Nipah virus -> caused by the variola virus.	False July
3.	Land for Life Award -> launched in 2011 at the UNCCD COP10 in the Republic of Korea as part of the Changwon Initiative.	True /ourstudyc
4.	World Investment Report -> released by World Economic Forum.	False is
5.	United Nations Office for Disaster Risk Reduction -> established in 1999. HQ: Paris, France.	False





Recently, two Supreme Court judges have recused themselves from hearing cases relating to West Bengal.

- When there is a <u>conflict of interest</u>, a judge can <u>withdraw from hearing</u> a case to prevent creating a perception that s/he carried a bias while deciding the case.
- The practice stems from the <u>cardinal principle</u> of <u>due process of law</u> that nobody can be a judge in his/her own case.



- Another instance for recusal is when an <u>appeal is filed in the Supreme</u> <u>Court</u> against a judgement of a High Court that may have been delivered by the SC judge when she was in the HC.
- O Process for recusal
  - The decision to recuse generally comes <u>from the judge herself</u> as it <u>rests on the conscience and discretion</u> of the judge to disclose any potential conflict of interest.
  - In some circumstances, lawyers or parties in the case bring it up before the judge. If a judge recuses, the case is <u>listed before the Chief Justice</u> for allotment to a fresh Bench.
- Rules →
  - There are <u>no formal rules</u> governing recusals, although <u>several</u>
     <u>Supreme Court judgments</u> have dealt with the issue.

- In Ranjit Thakur v Union of India (1987), the Supreme Court held that the tests of the likelihood of bias are the reasonableness of the apprehension in the mind of the party.
- The <u>1999</u> charter '<u>Restatement of Values in Judicial Life</u>' is a code of ethics adopted by the Supreme Court.
- It states, "A <u>Judge shall not hear</u> and <u>decide a matter</u> in a company in which he <u>holds shares</u>, unless he has <u>disclosed his interest</u> and <u>no objection to his hearing</u> and deciding the matter is raised."
- Decision Once a request is made for recusal, the decision to recuse or not rests with the judge.
  - The judges can recuse <u>even if</u> they do <u>not see a conflict</u> but only because such an apprehension was cast. They can <u>refuse to withdraw</u> from a case.

- Record → Since there are <u>no formal rules</u> governing the process, it is <u>often</u> <u>left to individual judges</u> to <u>record reasons</u> for recusal.
  - Some judges disclose the reasons in open court; in some cases, the reasons are apparent.

#### **CSE 2012**

- Q. What is the provision to safeguard the autonomy of the Supreme Court of India?
- 1. While appointing the Supreme Court Judges, the President of India has to consult the Chief Justice of India.
- 2. The Supreme Court Judges can be removed by the Chief Justice of India only.
- 3. The salaries of the Judges are charged on the Consolidated Fund of India to which the legislature does not have to vote.
- 4. All appointments of officers and staffs of the Supreme Court of India are made by the Government only after consulting the Chief Justice of India.
- Which of the statements given above is/are correct?
- a) 1 and 3 only
- **b)** 3 and 4 only
- c) 4 only
- d) 1, 2, 3 and 4

# **CSE 2012**

# Answer (a

# **Pygmy Hog**



Release of captive-bred pygmy hogs into Manas National Park of western Assam.

- Scientific Name Porcula Salvania.
- It is one of the very few mammals that <u>build</u> <u>its own home</u>, or <u>nest</u>, complete with a 'roof'.
- It is also an <u>indicator species</u>. Its presence <u>reflects the health</u> of its primary habitat, the tall, wet grasslands of the region.



# **Pygmy Hog**

- Habitat →
  - It thrives in wet grassland.
  - Once found along a <u>narrow strip of tall and wet grassland plains</u> on the Himalayan foothills – from Uttar Pradesh to Assam, through <u>Nepal's</u> <u>terai areas</u> and <u>Bengal's duars</u>. Today found mainly in a small population in Assam.
- Protection Status →
  - IUCN Red List: <u>Endangered</u>
  - CITES: <u>Appendix I</u>
  - Wildlife (Protection) Act, 1972: <u>Schedule I</u>.
- Threats Habitat (grassland) loss and degradation, and illegal hunting.

# nttps://ourstudycircle.in/upscpdf/

#### **CSE 2013**

#### Q. Consider the following:

- 1. Star tortoise
- 2. Monitor lizard
- 3. Pygmy hog
- 4. Spider monkey

#### Which of the above are naturally found in India?

- a) 1, 2 and 3 only
- **b)** 2 and 3 only
- c) 1 and 4 only
- d) 1, 2, 3 and 4

# Solution (a)

# Ramgarh Vishdhari wildlife sanctuary



Rajasthan is poised to get its fourth tiger reserve after Ramgarh Vishdhari wildlife sanctuary received a nod from the National Tiger Conservation Authority (NTCA)'s technical committee.

#### 👉 About

- Location → This Sanctuary is located at a distance of 45 Km from Bundi City, Rajasthan.
- © Established → It was notified in the Year 1982 and is spread over an area of 252.79 Sq. Km.





# Ramgarh Vishdhari wildlife sanctuary

- Biodiversity >
  - Its flora consists of <u>Dhok</u>, <u>Khair</u>, <u>Salar</u>, <u>Khirni trees</u> with <u>some Mango</u> and <u>Ber trees</u>.
  - The Fauna consists of birds and animals like <u>Leopard</u>, <u>Sambhar</u>, <u>Wild boar</u>, <u>Chinkara</u>, <u>Sloth bear</u>, <u>Indian Wolf</u>, <u>Hyena</u>, <u>Jackal</u>, <u>Fox</u>, <u>deer</u> and <u>Crocodile</u>.
- Other Three Tiger Reserves → Ranthambore Tiger Reserve (RTR) in Sawai Madhopur, Sariska Tiger Reserve (STR) in Alwar, and Mukundra Hills Tiger Reserve (MHTR) in Kota.

## **Other Protected Areas in Rajasthan:**

O Desert National Park, Jaisalmer

# Ramgarh Vishdhari wildlife sanctuary

- Keoladeo National Park, Bharatpur
- Sajjangarh wildlife sanctuary, Udaipur
- National Chambal Sanctuary (on tri-junction of Rajasthan, Madhya Pradesh and Uttar Pradesh).

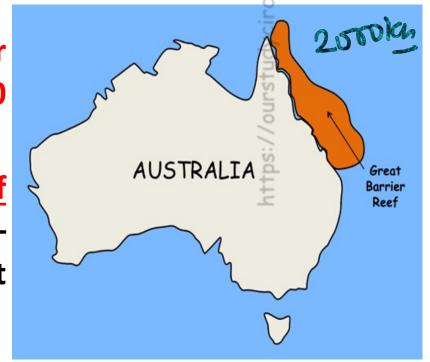
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Recently, the UNESCO World Heritage Committee has recommended that the Australia's Great Barrier Reef should be added to a list of "in danger" World Heritage Sites.

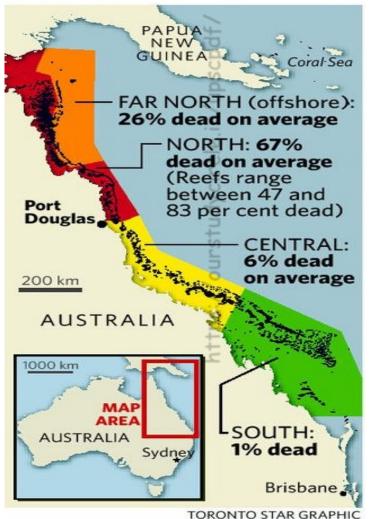
#### About Great Barrier Reef

- O It is the world's most extensive and spectacular coral reef ecosystem composed of over 2,900 individual reefs and 900 islands.
- Within this <u>vast expanse</u> are a <u>unique range of ecological communities</u>, <u>habitats</u> and <u>species</u> all of which make the Reef one of the most complex natural ecosystems in the world.



- The reef is located in the Coral Sea, off the coast of Queensland, Australia.
- O It was selected as a World Heritage Site in 1981.
- O It can be seen from outer space and is the world's biggest single structure made by living organisms.
- This reef structure is composed of and built by billions of tiny organisms, known as coral polyps.

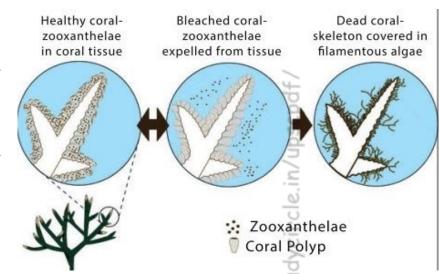
#### Coral death in Australia's Great Barrier Reef



#### **Coral Reefs**

- A coral reef is an <u>underwater ecosystem</u> characterized by reef-building corals.
- Reefs are formed of <u>colonies of coral polyps</u> <u>held together by calcium carbonate</u>.
- The coral polyps live in an <u>endosymbiotic relationship with algae</u>. Algae provides up to 90 percent of the coral's energy.
- Temperature >
  - The temperature of the water should not be below 20°C.
  - The most favourable temperature for the growth of the coral reefs is between 23°C to 25°C.
  - The temperature should <u>not exceed 35°C</u>.

- Salinity → Corals can survive only under saline conditions with an <u>average salinity between 27%</u> to 40%.
- Shallow Water → Coral reefs grow better in shallow water having a depth less than 50 m. The depth of the water should not exceed 200m.



Coral Reef Areas in India The India has four coral reef areas: Gulf of Mannar, Andaman and Nicobar Islands, Lakshadweep islands and the Gulf of Kutch.

More than one-third of the world's coral reefs are <u>located in the territories of Australia</u>, <u>Indonesia</u> and <u>Philippines</u>.

Benefits ->

**Protect humanity** from natural calamities.

Provide revenue and employment through tourism and recreation.

**Provide habitats** for fishes, starfish and sea anemones.

- Consider the following statements:
- Most of the world's coral reefs are in tropical waters.
- 2. More than one-third of the world's coral reefs are located in the territories of Australia, Indonesia and Philippines.
- 3. Coral reefs host far more number of animal phyla than those hosted by tropical rainforests.
- Which of the statements given above is/are correct?
- a) 1 and 2 only
- b) 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Answer (d

# World's First GM Rubber Sapling



Recently, the world's first Genetically Modified (GM) rubber sapling has been planted in Guwahati, Assam.

#### **About**

- O It has been <u>tailored</u> <u>for the climatic conditions</u> <u>in the Northeast</u>.
- O It was developed at the <u>Kerala-based Rubber</u> <u>Research Institute of India</u> (<u>RRII</u>).
- Natural rubber is a <u>native of warm humid</u> <u>Amazon forests</u> and is <u>not naturally suited</u> for the <u>colder conditions in the Northeast</u>, which is one of the largest producers of rubber in India.



# World's First GM Rubber Sapling

- © Growth of young rubber plants <u>remains suspended during the winter</u> months. This is the reason for the <u>long immaturity period</u> of this crop in the region.
- It has has additional copies of the gene MnSOD. The MnSOD gene has the ability to protect plants from the adverse effects of severe environmental stresses such as cold and drought. The plant is thus expected to establish well and grow fast in the region.
- The planting had been done at an <u>experimental level</u> following all mandatory biosafety measures applicable to field trials involving GM crops.
- There was no risk of genes flowing from the GM rubber into any other native species, a concern often raised by environmental groups against GM plants.

#### **Yellow Gold 48**



Recently, Bayer (German agrochemicals major) has launched the firstever yellow watermelon variety Yellow Gold 48 under Seminis brand in India.

### **About**

- It is best <u>suited for cultivation from</u> <u>October to February</u> and for harvest from April onwards and will be available in the market until mid-July.
- O It has been <u>commercially introduced in India</u> following two years of local trials.



#### Yellow Gold 48

- The company is also creating <u>market linkages for growers</u> by connecting them directly to large buyers and food retail stores.
- Significance →
  - It has <u>high yield</u> and <u>income potential</u> and <u>will empower watermelon</u> growers to diversify into new categories and meet the growing demand for exotic fruits.
  - Watermelon growers can benefit from <u>enhanced yield potential</u>, <u>better</u> <u>disease</u> and <u>pest tolerance</u>, and <u>higher returns</u>.

# Quick revision (True/False)

	Question	True / False
1.	Recusal of Judges -> There are formal rules governing recusals.	upscpdf
2.	Pygmy Hog -> an indicator species. IUCN Red List: Endangered.	ircle.in/
3.	Ramgarh Vishdhari wildlife sanctuary -> Chhattisgarh.	urstudy
4.	Coral Reefs -> survive only under Fresh water conditions.	ttps://c
5.	World's First GM Rubber Sapling -> developed at the Kerala-based Rubber Research Institute of India. has additional copies of the gene MnSOD.	<u>-</u>

# Quick revision (True/False)

	Question	True / False
1.	Recusal of Judges -> There are formal rules governing recusals.	False Jpdosdn
2.	Pygmy Hog -> an indicator species. IUCN Red List: Endangered.	True incle.in
3.	Ramgarh Vishdhari wildlife sanctuary -> Chhattisgarh.	False of the state
4.	Coral Reefs -> survive only under Fresh water conditions.	False %//:sdt1
5.	World's First GM Rubber Sapling -> developed at the Kerala-based Rubber Research Institute of India. has additional copies of the gene MnSOD.	True









# **Yraarambn-2**

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# **Peter Pan Syndrome**



A special court in Mumbai has granted bail to a 23-year-old accused of sexually assaulting a minor. The accused had told the court he suffered from "Peter Pan Syndrome".

#### **About**

- What is it? → PPS is a psychological condition that is used to describe an adult who is <u>socially immature</u>.
- People who develop similar behaviours of living life carefree, finding responsibilities challenging in adulthood, and basically never growing up suffer from PPS.



# **Peter Pan Syndrome**

- Term coined by → The term was coined by <u>psychologist Dan Kiley</u> to explain the behaviour of such men who '<u>refuse to grow</u>' and behave their age in 1983.
  - Dan Kiley got the idea of PPS <u>after noticing Peter Pan</u>, a fictional character created by Scottish novelist James Matthew Barrie.
  - Peter Pan was a <u>care-free young boy</u>, <u>who never grew up</u>.
- While the WHO (World Health Organization) does not recognise Peter Pan Syndrome as a health disorder, many experts believe it is a mental health condition that can affect one's quality of life.
- The symptoms and impact
  - As Peter Pan Syndrome <u>hasn't officially been diagnosed</u> as a health disorder, there <u>aren't clearly defined symptoms</u> or characteristics or even reasons which cause it.

# **Peter Pan Syndrome**

 But it could <u>affect one's daily routine</u>, <u>relationships</u>, <u>work ethic</u>, and <u>result</u> in attitudinal changes.

# **Wendy Syndrome**

- The Psychologist who defined PPS also used the term Wendy Syndrome (WS) to describe women who act like mothers with their partners or people close to them.
- People suffering from WS are <u>often seen making</u> <u>decisions</u>, <u>tidying up messes</u>, and offering one-sided emotional support.

#### THE SYNDROME

Peter Pan is a fictional character from a mythical place called Never-Never Land where children never grow up

➤ In recent decades, psychologists have noted a rise in Peter

Pan Syndrome in which adults exhibit emotionally immature behaviour and are unable to take on adult responsibilities or have relationships

American Psychiatric
Association's diagnostic scale
DSM doesn't recognise the
syndrome. Nor does World
Health Organisation's ICD scale
for diagnosing mental disorders

But ICD-10 refers to immature personality disorder that refers to behaving like a child.

When things don't go their way.

When things don't go their way they get upset; rely on others for financial responsibilities

#### **Suez Canal**



The Suez Canal Authority (SCA) had demanded \$916 million in compensation from the owners of the giant Ever Given vessel that had got stuck in the Suez Canal earlier this year. Now Suez Canal Authority have publicly lowered the compensation to \$550 million.

#### **About**

- The Suez Canal is an <u>artificial sea-level</u> <u>waterway</u> running north to south across the Isthmus of Suez in Egypt, <u>to connect the</u> <u>Mediterranean Sea and the Red Sea</u>.
- The canal <u>separates the African continent</u> from Asia.





#### **Suez Canal**

- Constructed by the <u>Suez Canal Company</u> <u>between 1859 and 1869</u>, it officially opened on 17 November 1869.
- The canal is owned and maintained by the <u>Suez Canal Authority (SCA) of Egypt</u>.
- O Under the <u>Convention of Constantinople</u>, it may be used "in time of war as in time of peace, by every vessel of commerce or of war, without distinction of flag".
- Significance →
  - It provides the <u>shortest maritime route</u> between Europe and the lands lying around the Indian and western Pacific oceans.
  - It is one of the <u>world's most heavily used shipping lanes</u>, carrying over <u>12%</u> of world trade by volume.

- Q. Turkey is located between
- a) Black Sea and Caspian Sea
- b) Black Sea and Mediterranean Sea
- c) Gulf of Suez and Mediterranean Sea
- d) Gulf of Aqaba and Dead Sea

# Answer (b

# **Tax Inspectors Without Borders**



Bhutan's Tax Inspectors Without Borders (TIWB) programme launched in partnership with India.

#### 🗲 About

- Objective → The objective of the TIWB Initiative is to enable sharing of tax audit knowledge and skills with tax administrations in developing countries through a targeted, real time "learning by doing" approach.



# **Tax Inspectors Without Borders**

- Focused on → TIWB is focused on <u>promoting hands-on assistance</u> by <u>sending Experts</u> to build audit and audit-related skills pertaining to specific international tax matters and the development of general audit skills within developing tax administrations.
- Expected Duration → 24 months.
- ⑤ Benefits of the programme → Through this India in collaboration with the UNDP and the TIWB Secretariat aims to aid Bhutan in strengthening its tax administration by transferring technical know-how and skills to its tax auditors, and through sharing of best audit practices.

- Q. 'Doctors Without Borders (Medecins Sans Frontieres)', often in the news, is
- (a) a division of World Health Organization
- (b) a non-governmental international organization
- (c) an inter-governmental agency sponsored by European Union
- (d) a specialized agency of the United Nations

https://ourstudycircle.in/upscpdf

# Answer (b

# **Information Fusion Centre for Indian Ocean Region**



The United Kingdom has appointed a liaison (संपर्क) officer to the Indian Navy's Information Fusion Centre for Indian Ocean Region (IFC-IOR), which is meant for maritime domain awareness.

### **About**

- $\odot$  Set up in  $\rightarrow$  2018.
- Purpose → To <u>coordinate with regional countries</u>
   on maritime issues and act as a <u>regional</u>
   <u>repository of maritime data</u>.
- □ Located in → Gurugram, India.



# **Information Fusion Centre for Indian Ocean Region**

### Working

- Through this Centre, <u>information on "white shipping</u>", or <u>commercial shipping</u>, will be <u>exchanged with countries</u> in the region to improve maritime domain awareness in the Indian Ocean.
- It will also <u>impart training in maritime information collection</u> and <u>sharing</u>.
- At present, data will be <u>shared by virtual means</u> <u>telephone calls</u>, <u>Faxes</u>, <u>emails</u> and <u>video conferencing</u>. The centre will in future host liaison officers from foreign countries for quicker analysis of information and timely inputs.
- Significance → The IFC-IOR will <u>strengthen maritime security</u> in the region and beyond by building a common coherent maritime situation picture.

# **Information Fusion Centre for Indian Ocean Region**

- Roles and functions of a liaison officer
  - The liaison officer will be based full-time at the centre, working directly with the Indian armed forces and fellow liaison officers from partner nations to enhance maritime domain awareness in the region.
  - International Liaison Officers (ILO) from 13 countries have been invited, and ILOs from countries had joined earlier- Australia, France, Japan and the U.S.. The U.K. is the 5th country to post an ILO.

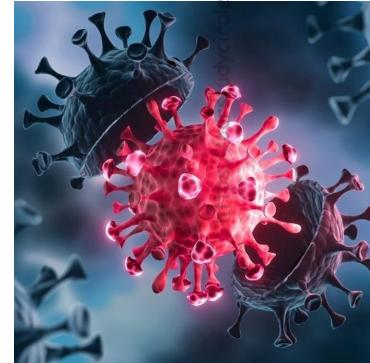
#### **Delta Plus variant**



The Health Ministry has categorised Delta Plus variant of coronavirus as a 'variant of concern'. It has been detected in many states.

#### **About**

- The Delta variant formerly known as <u>B.1.617.2</u> is believed to be the <u>most transmissible variant of Covid -19 yet</u>. It has been initially detected in India.
- The Delta plus variant (B.1.617.2.1 or AY.1) has been formed due to a <u>mutation in the Delta</u> <u>variant</u>.

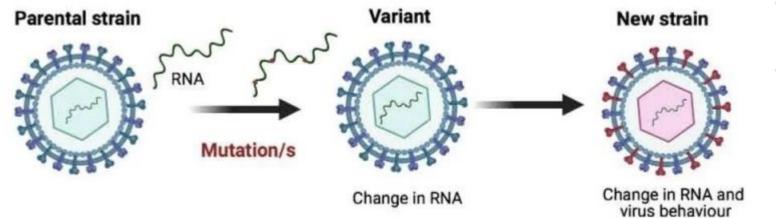


#### **Delta Plus variant**

# How do variants of a virus emerge and why?

- Variants of a virus have <u>one</u> or <u>more mutations</u> that differentiate it from the other variants that <u>are in circulation</u>.
- Essentially, the goal of the virus is to <u>reach a stage</u> where <u>it can cohabitate</u> with humans because it needs a host to survive.

© Errors in the viral RNA are called mutations, and viruses with these mutations are called variants. Variants could differ by a single or many mutations.



#### Delta Plus variant

### What is a Variant of Concern (VOC)?

- WHO (World Health Organisation) classifies a variant as a VOC when it is associated with:
  - An <u>increase in transmissibility</u> or detrimental change in <u>Covid-19</u>
     epidemiology
  - <u>Increase in virulence</u> (Ability to cause severe/life-threatening disease)
  - <u>Decrease</u> in the <u>effectiveness of public health measures</u> or available diagnostics, vaccines and therapeutics.

## **Full Ship Shock Trial (FSST)**



The US Navy Friday carried out a 'full ship shock trial' on its newest and most advanced nuclear-powered aircraft carrier to ensure its hardness was capable of withstanding battle conditions.

- During World War II, American warships suffered severe damage from enemy mines and torpedoes that had actually missed their target, but exploded underwater in close proximity.
- The US Navy has since worked to <u>improve the</u> <u>shockproofing of their ship systems</u> to minimize damage from such "near miss" explosions.



## **Full Ship Shock Trial (FSST)**

- In FSSTs, an underwater explosive charge is <u>set off near an operational</u> <u>ship</u>, and <u>system and component failures</u> are <u>documented</u>.
- The FSST <u>probes</u> <u>whether the components survive shock</u> in their environment on the ship; it <u>probes the possibilities of system failures</u>, and large components that could not be otherwise tested.

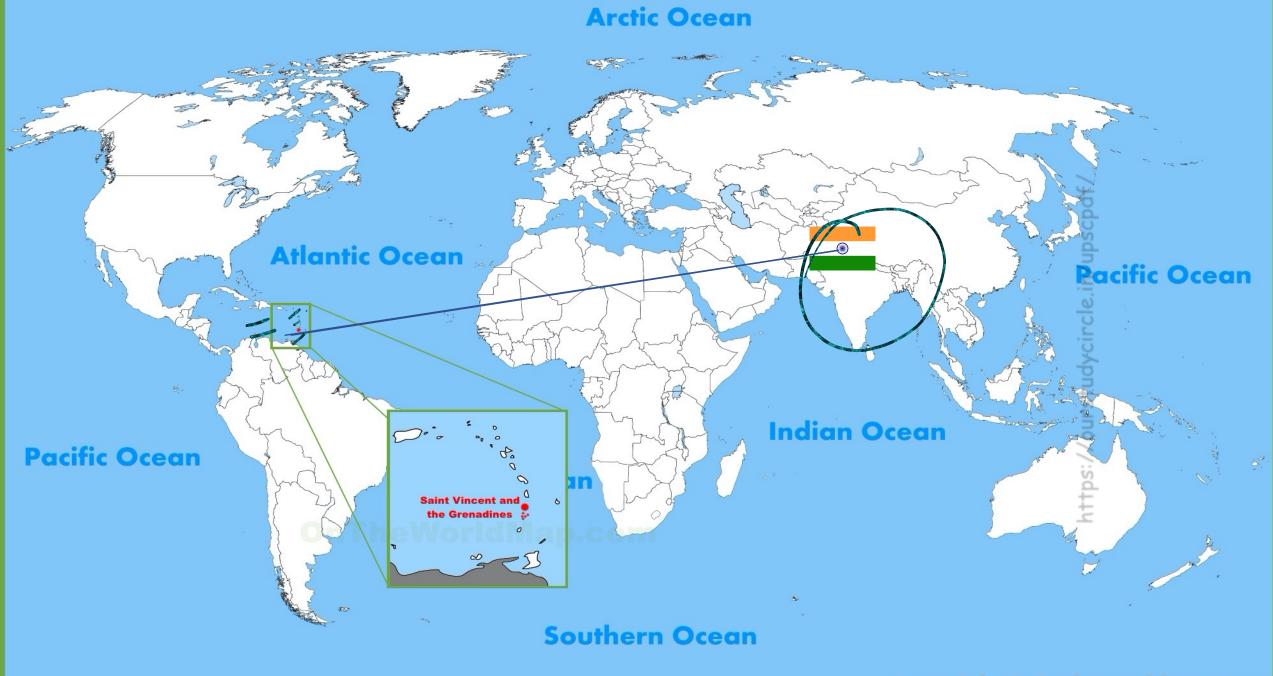
#### Saint Vincent and the Grenadines



Cabinet approved the agreement between India and Saint Vincent and The Grenadines for the Exchange of Information and Assistance in Collection with respect to Taxes.

- O It is an island country in the Caribbean.
- It lie in the West Indies at the southern end of the eastern border of the Caribbean Sea where the latter meets the Atlantic Ocean.





#### Saint Vincent and the Grenadines

## Details of the Agreement:

- O It mainly proposes to <u>facilitate exchange of information</u> between the two countries and to <u>provide assistance to each other</u> in <u>collection of tax claims</u>.
- Benefits → The Agreement will help in facilitating the exchange of information between the two countries including <u>sharing of information</u> <u>held by the banks and other financial institutions</u> encompassing the information regarding the <u>legal</u> and <u>beneficial ownership</u>.

# Quick revision (True/False)

	Question	True / False
1.	Peter Pan Syndrome -> is a psychological condition that is used to describe an adult who is socially immature.	/upscpdf
2.	Suez Canal -> connect the Arabian Sea and the Red Sea.	ircle.ir
3.	Tax Inspectors Without Borders -> is a joint initiative of UNDP and Asia-Pacific Economic Cooperation (APEC).	ourstudya
4.	Information Fusion Centre for Indian Ocean Region -> Located in Gurugram. To coordinate with regional countries on maritime issues.	https://
5.	Saint Vincent and the Grenadines -> an island country in the Indian Ocean.	

# Quick revision (True/False)

	Question	True / False
1.	Peter Pan Syndrome -> is a psychological condition that is used to describe an adult who is socially immature.	True /nbschqt
2.	Suez Canal -> connect the Arabian Sea and the Red Sea.	False in series
3.	Tax Inspectors Without Borders -> is a joint initiative of UNDP and Asia-Pacific Economic Cooperation (APEC).	False onrstudy
4.	Information Fusion Centre for Indian Ocean Region -> Located in Gurugram. To coordinate with regional countries on maritime issues.	True /:sdtt4
5.	Saint Vincent and the Grenadines -> an island country in the Indian Ocean.	False



#### **Black Sea**



In a recent event, Russia alleged that the British warship had breached its territorial waters in Black Sea which Britain and most of the world say belong to Ukraine.

- □ Location → Black Sea is an <u>inland sea</u> located <u>between far-southeastern Europe</u> and <u>the far-western edges of the continent of Asia</u> and the <u>country of Turkey</u>.





#### **Black Sea**

- It is surrounded by the <u>Pontic</u>, <u>Caucasus</u>, and <u>Crimean Mountains</u> in the south, east and north respectively.
- The Turkish straits system the Dardanelles, Bosporus and Marmara Sea forms a transitional zone between the Mediterranean and the Black Sea.
- The Black Sea is also connected to the Sea of Azov by the Strait of Kerch.
- There is a <u>significant absence of oxygen</u> in the water.
- The Black Sea happens to be the <u>largest water body</u> with a <u>meromictic</u> <u>basin</u>, which means the <u>movement of water</u> between the lower and upper layers of the sea is a <u>rare phenomenon</u> to find anywhere in the world.

- Jordan
- 2. Iraq
- Lebanon
- 4. Syria

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only
- (b) 2 and 3 only
- (c) 3 and 4 only
- (d) 1, 3 and 4 only

https://ourstudycircle.in/upscpd1

## Answer (c) 3 and 4 only

Which one of the following countries of South-West Asia does not open out to the Mediterranean Sea?

- (a) Syria
- (b) Jordan
- (c) Lebanon
- (d) Israel

https://ourstudycircle.in/upscp

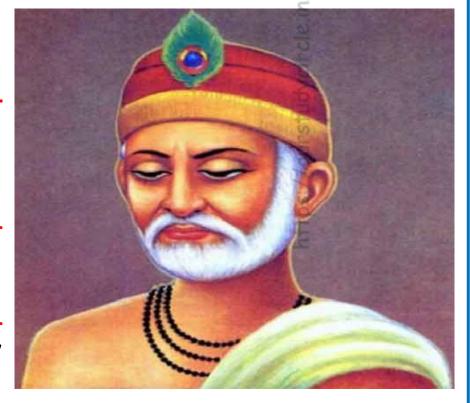
# Answer (b) Jordan

#### Sant Kabirdas



Recently, the Prime Minister has paid tribute to Sant Kabir Das ji on his Jayanti on 24th June.

- He was a <u>15th-century Indian mystic</u>, <u>social</u>
   reformer, <u>poet</u> and <u>saint</u> who had a significant role among the people in India.
  - He was one of the most influential saints.
- He was brought up in a <u>family of Muslim</u> <u>julahas orweavers</u> settled in or near the city of Benares (Varanasi).



#### **Sant Kabirdas**

- O He was best known for his two-line couplets, known as <u>'Kabir Ke Dohe</u>'.
- O He is a <u>widely revered poet</u> whose works had a <u>tremendous influence on</u> the <u>Bhakti movement</u>.
- Kabir's legacy is still going on through a sect known as <u>Panth of Kabir</u>, a religious community that <u>considers him as the founder</u>.
- O His Teaching
  - Kabir's teachings were based on a <u>complete rejection of the major</u> <u>religious traditions</u>.
  - His teachings <u>openly ridiculed all forms of external worship</u> of both Brahmanical Hinduism and Islam, the pre-eminence of the priestly classes and the caste system.
  - The language of his poetry was a <u>form of spoken Hindi</u> widely understood by ordinary people.

#### **Sant Kabirdas**

- Kabir believed in a <u>formless Supreme God</u> and <u>preached that the only</u>
   <u>path to salvation</u> was through <u>bhakti</u> or <u>devotion</u>. Kabir drew his
   followers from among both Hindus and Muslims
- According to him every life has a <u>relationship with two spiritual</u> <u>principles (Jivatma</u> and <u>Paramatma</u>). His view about the moksha is that it is the <u>process of uniting these two divine principles</u>.
- His popular verses and dohas continue to <u>inspire generations</u> even in the 21st century.
- Writings/Works →
  - <u>Kabir Granthawali</u>, <u>Anurag Sagar</u>, <u>Bijak</u>, and <u>Sakhi Granth</u>, <u>Panch Vani</u>.
  - The major part of his work was <u>collected by the fifth Sikh guru--Guru</u>
     <u>Arjan Dev</u>.
  - He <u>fought against social evils</u> and <u>taught the lesson of humanity</u> and love to the world.

#### Q. Consider the following Bhakti Saints:

- Dadu Dayal
- 2. Guru Nanak
- 3. Tyagaraja

Who among the above was/were preaching when the Lodi dynasty fell and Babur took over?

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

https://ourstudycird

## Answer (b) 2 only

### **Toycathon 2021**



Recently, the Prime Minister of India urged people to be "vocal for local toys", while interacting with the participants at the Toycathon 2021.

- □ Joint initiative of → the Ministry of Education, WCD
   (Women and Child Development) Ministry, Ministry of Micro, Small and Medium Enterprises, Textile Ministry, Ministry of Information and Broadcasting and All India Council for Technical Education.



## **Toycathon 2021**

- Focus on →
  - It was focused on <u>conceptualize innovative toys based on the Indian</u> <u>value system</u> which will inculcate positive behaviour and good value among the children.
  - To <u>promote India</u> as a <u>global toy manufacturing hub</u> (Atmanirbhar Bharat).
- Key Features →
  - Based on → Indian culture and ethos, local folklore and heroes, and Indian value systems.
  - Themes → Nine themes, including fitness and sport and rediscovering traditional Indian toys.
  - Participants → Students, teachers, start-ups and toy experts.
  - Prize → Participants can get prizes upto Rs. 50 lakhs.

## **Toycathon 2021**

- Significance >
  - Toys can <u>play a big role</u> in <u>highlighting India's capabilities</u>, <u>art</u> and <u>culture</u> and <u>society</u> to the world.
  - Toycathon can prove to be <u>effective</u> in <u>making India a Production Hub</u>
     <u>of Toys</u> and hence can be the creation of 'Toyoconomy'.

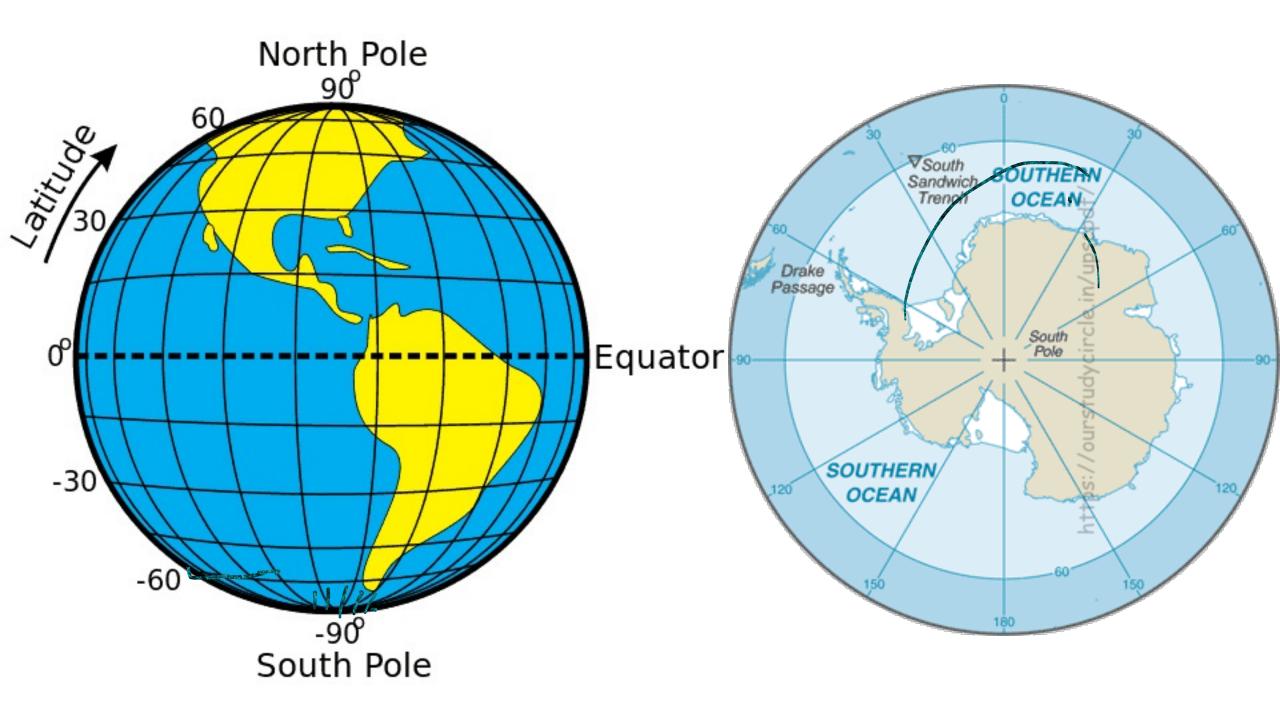


The 1959 Antarctic Treaty celebrates its 60th anniversary. This Treaty is the only example of a single treaty that governs a whole continent.

- The Antarctic Treaty was signed between 12 countries in Washington on 1st December 1959 for making the Antarctic Continent a demilitarized zone to be preserved for scientific research only.
- Headquartered in <u>Buenos Aires, Argentina</u>, it entered into <u>force in 1961</u> and has since been acceded (स्वीकार) by many other nations.

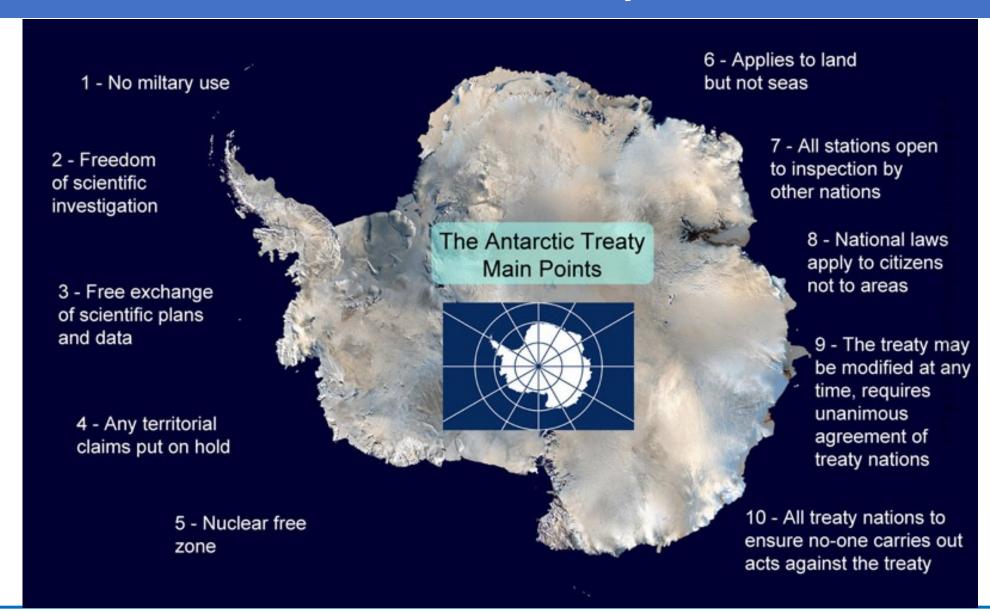


- Currently, the treaty has 54 parties. India became a member in 1983.
- Definition → Antarctica is defined as all of the <u>land and ice shelves south</u> of 60°S <u>latitude</u>.
- Some important provisions of the Treaty are >
  - Antarctica shall be <u>used for peaceful purposes only</u>
  - Freedom of scientific investigation in Antarctica and cooperation toward that end... shall continue
  - <u>Scientific observations</u> and <u>results</u> from Antarctica <u>shall be exchanged</u>
     and made freely available



- Prohibition of military activities, nuclear tests and the disposal of radioactive waste.
- <u>Neutralising territorial sovereignty</u>, this means a limit was placed on making any new claim or enlargement of an existing claim.
- It put a <u>freeze on any disputes</u> between claimants over their territories on the continent.
- Antarctic Treaty System:
- As <u>disputes have arisen over the years</u>, many have been address<u>ed</u> through the expansion of the treaty framework with these agreements. This framework is now referred to as the "<u>Antarctic Treaty System</u>".
- The Antarctic Treaty system is made up of <u>four major international</u> <u>agreements</u> →

- The 1959 Antarctic Treaty.
- The 1972 Convention for the Conservation of Antarctic Seals.
- The 1980 Convention on the Conservation of Antarctic Marine Living Resources.
- The 1991 Protocol on Environmental Protection to the Antarctic Treaty.





Recently, a three-member task force has been formed to help the government in bringing major bureaucratic reforms through its ambitious "Mission Karmayogi".

- Chairperson → Former Infosys CEO S D
   Shibu Lal has been appointed chairperson of a three-member task force.
- The task force has been constituted to draw a clear road map for the guidance and operationalisation of the 'Karmayogi Bharat' and the constitution of a Special Purpose Vehicle (SPV).



## Mission Karmayogi

- Aim and Objectives
  - It is aimed at <u>building a future-ready civil service</u> with the right attitude, skills and knowledge, aligned to the vision of New India.
  - It aims to <u>prepare Indian civil servants for the future</u> by making them <u>more creative</u>, <u>constructive</u>, <u>imaginative</u>, <u>proactive</u>, <u>innovative</u>, progressive, professional, energetic, transparent, and technologyenabled.
- The core guiding principles of the Programme will be →
  - To emphasize on 'on-site learning' to complement the 'off-site' learning,
  - To create an <u>ecosystem of shared training infrastructure</u> including that of learning materials, institutions and personnel,

- o To calibrate (ठीक करना) all Civil Service positions to a <u>Framework of Roles</u>, <u>Activities and Competencies (FRACs) approach</u> and to create and deliver learning content relevant to the identified FRACs in every Government entity.
- To make available to all civil servants, an <u>opportunity to continuously</u> <u>build and strengthen</u> their Behavioral, Functional and Domain Competencies in their <u>self-driven</u> and <u>mandated learning paths</u>.
- Institutional framework and implementation of the programme
  - PM led <u>Public Human Resources (HR) Council</u> to approve and monitor Civil Service Capacity Building Plans.
  - <u>Capacity Building Commission</u> to harmonize training standards, create shared faculty and resources, and have supervisory role over all Central Training Institutions.

 Wholly owned <u>Special Purpose Vehicle</u> to own and operate the online learning platform and facilitate world-class learning content marketplace.

Coordination Unit headed by the Cabinet Secretary.

#### **Delimitation**



Delimitation of constituencies is being carried out in union territory of Jammu and Kashmir. Recently, Prime Minister of India chaired a meeting with political parties of Jammu and Kashmir.

- Delimitation is the <u>act of fixing</u> or <u>redrawing the limits</u> or <u>boundaries of territorial constituencies</u> (Assembly or Lok Sabha seat) in a country or a province having a legislative body, <u>as per the Election Commission</u>.
- Conducted by → The Parliament enacts a <u>Delimitation</u> <u>Act</u> under Article 82 of the Constitution and an independent high-powered panel known as the <u>Delimitation Commission</u> is <u>constituted by the</u> <u>President of India to carry out the exercise.</u>



#### **Delimitation**

- Composition Retired Supreme Court judge, Chief Election
   Commissioner and Respective State Election Commissioners.
- Powers → The Delimitation Commission is a <u>high power body</u> whose orders have the force of law and <u>cannot</u> be called in <u>question before any court</u>.

#### **Delimitation in Jammu and Kashmir**

The delimitation exercise in J&K in the past has been <u>slightly different</u> from those in the rest of the country <u>because of the region's special status</u>.

#### **Delimitation**

- The delimitation of Lok Sabha seats was then governed by the Indian Constitution in J&K, but the delimitation of Assembly seats was governed separately by the <u>Jammu and Kashmir Constitution</u> and <u>Jammu and Kashmir Representation of the People Act, 1957</u>.
- Mowever, Jammu and Kashmir lost its special status and was divided into two Union Territories (J&K and Ladakh) after the abrogation of its special status under Article 370, on 5th August, 2019.
- Following this, a special delimitation commission was constituted on 6th March, 2020 to carve out Assembly and Parliament seats in the UT.

# Quick revision (True/False)

	Question	True / False
1.	Black Sea -> Bordering Countries: Romania, Bulgaria, Ukraine, Russia, Georgia, and Turkey.	/upscpdf
2.	Antarctic Treaty -> Headquartered in Washington, it entered into force in 2001.	circle.in
3.	Sant Kabirdas -> teachings openly ridiculed all forms of external worship of both Brahmanical Hinduism and Islam.	//ourstudy
4.	Mission Karmayogi -> is a program under Women and Child Development Ministry to eradicate malnutrition.	https:/
5.	<b>Delimitation Commission -&gt; whose orders have the force of law and can be called in question before any court.</b>	

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5.	<b>Delimitation Commission -&gt;</b> whose orders have the force of law and can be called in question before any court.	False









# **Yraarambn-2**

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## **Ambergris**



In the past few weeks, there have been two cases where the Mumbai Police has arrested five persons trying to sell Ambergris or whale vomit.

#### **About**

- Ambergris, French for grey amber, is generally referred to as whale vomit.
- It is a <u>solid waxy substance</u> that <u>floats</u> around the surface of the water body and at times settles on the coast.
- A <u>sperm whale eats</u> several thousand <u>squid</u>
   (एक प्रकार का घाँघा) beaks a day.



## **Ambergris**

- Occasionally, a beak makes it way to the whale's stomach and into its looping convoluted (घुमावदार) intestines where it becomes ambergris through a complex process, and may ultimately be excreted by the whale.
- Chemically, ambergris contains <u>alkaloids</u>, <u>acids</u>, and a specific compound called <u>ambreine</u>, which is <u>similar to cholesterol</u>.
- Is it Ambergris valuable? →
  - This excretion is so valuable it is referred to as <u>floating gold</u>.
  - As per the latest estimates given by Mumbai Police, 1 kg of ambergris is worth
     Rs 1 crore in the international market.
  - The reason for its high cost is its <u>use in the perfume market</u>, especially to create fragrances like musk (कस्त्री).
  - It is believed to be in high demand in countries like Dubai that have a large perfume market. <u>Ancient Egyptians used it as incense (sweet smell when</u> <u>burnt)</u>. It is also believed to be <u>used in some traditional medicines</u>.

## **Ambergris**

#### **Sperm Whale**

- Sperm whale also called <u>cachalot</u>, the <u>largest of the toothed whales</u>, easily recognized by its enormous square head and narrow lower jaw.
- The sperm whale is dark blue-gray or brownish, with white patches on the belly. It is thickset and has small paddle-like flippers.
- Habitat → They are found in temperate and tropical waters throughout the world.
- Protection Status
  - IUCN Red List: <u>Vulnerable</u>
  - CITES: <u>Appendix I</u>
  - Wildlife (Protection) Act, 1972: <u>schedule I</u>.



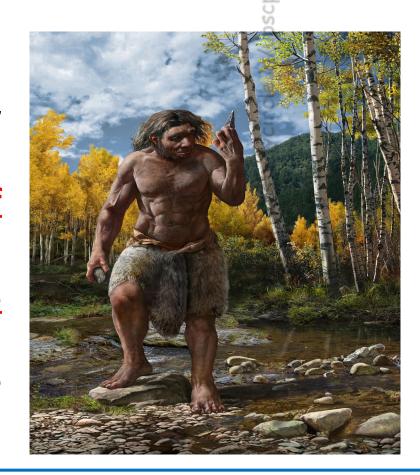
## Homo longi



Chinese researchers have unveiled an ancient skull that could belong to a completely new species of human.

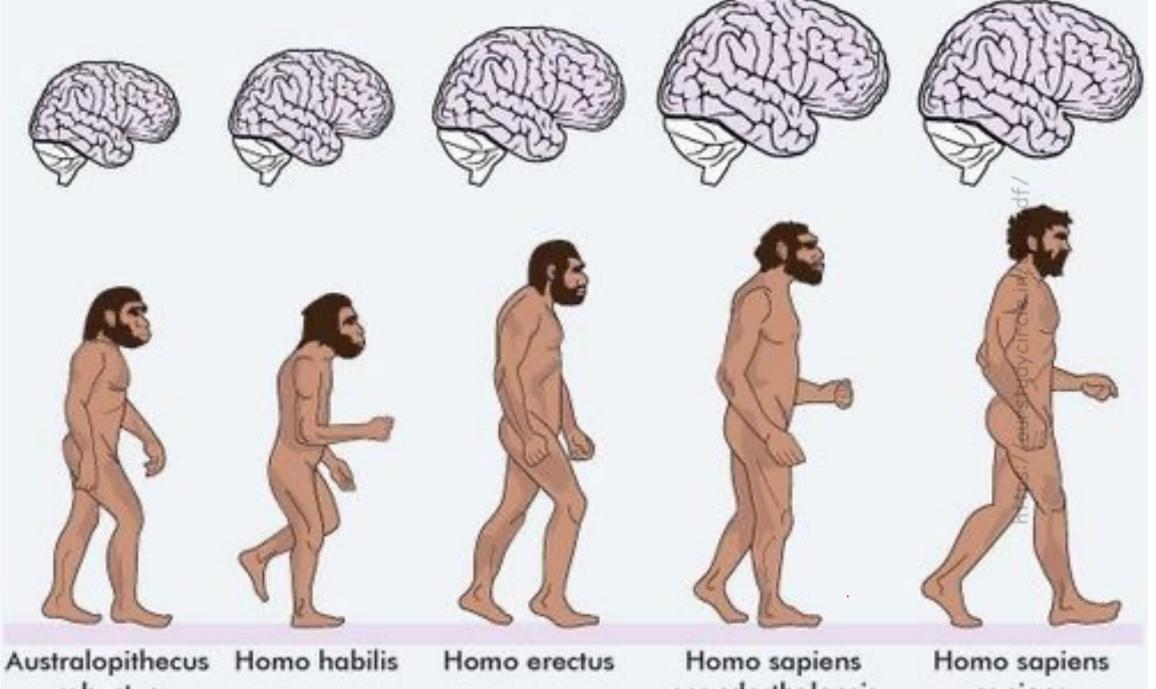
#### **About**

- Name → The researchers have named the new species Homo longi. It has been nicknamed "Dragon Man" for the Dragon River region of northeast China where the skull was found.
- History → The skull was <u>discovered in 1933</u>
   but only came to the attention recently after a labourer came across it at a construction site in China.



## Homo longi

- Characteristics
  - The Dragon man is <u>at least 140,000 years old</u> but no older than 309,000 years.
  - It belonged to a <u>mature male</u> who had a <u>huge brain</u>, <u>deep set eyes</u> and a <u>bulbous nose</u>.
  - The <u>skull is huge</u> compared with the average skulls belonging to other human species including our own. Its brain was comparable in size to those from our species.
- Importance of this discovery >>
  - The discovery of Dragon Man has the <u>potential to rewrite the history of</u> Human Evolution.
  - It is said that Homo longi could <u>replace Neanderthals</u> as the closest relative to our own species, <u>Homo sapiens</u>.



robustus

neanderthalensis

sapiens

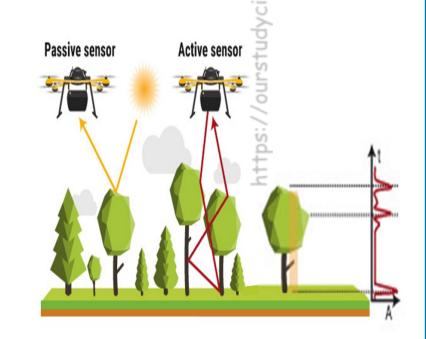
## **LiDAR Based Survey of Forest Areas**



Recently, the Union Environment Minister in a virtual event released the Detailed Project Reports (DPRs) of LiDAR (Light Detection and Ranging) based survey of forest areas in ten states.

## About Survey

- © Conducted by → The project was <u>awarded to WAPCOS</u> in July 2020 at a cost of over Rs. 18 crore for implementation in 26 states over 261897 hectares.
- WAPCOS is a <u>Mini Ratna Public Sector</u> <u>Undertaking</u> (PSU) under the Jal Shakti Ministry.



## **LiDAR Based Survey of Forest Areas**

- Coverage → The 10 mapped states are <u>Assam</u>, <u>Bihar</u>, <u>Chhattisgarh</u>, <u>Goa</u>, <u>Jharkhand</u>, <u>Madhya Pradesh</u>, <u>Maharashtra</u>, <u>Manipur</u>, <u>Nagaland</u>, and <u>Tripura</u>.
- Method → The survey has <u>used the LiDAR</u> (light detection and ranging) technology to <u>create 3-D images</u> of the forest areas to recommend soil and water conservation structures.
  - These structures will help in <u>catching the rain water</u> and <u>prevent</u> <u>stream run off</u> which will help in recharging of Groundwater.
- Implementation of Projects by States → The Government of India will provide <u>funds from Compensatory Afforestation Fund Management and Planning Authority(CAMPA)</u> to states so that they can <u>enhance water</u> <u>resources</u> within the forests to meet the needs of flora and fauna as well as fodder augmentation.

## **LiDAR Based Survey of Forest Areas**

#### **LIDAR**

- It is a <u>remote sensing method</u> that <u>uses light in the form of a pulsed laser</u> to measure ranges & variable distances.
- These light pulses—combined with other data recorded by the airborne system— generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.
- A LiDAR instrument principally <u>consists of a laser</u>, <u>a scanner</u>, and a <u>specialized Global Positioning System</u> (GPS) receiver.
  - Airplanes and helicopters are the most commonly used platforms for acquiring LiDAR data over broad areas.
- LiDAR follows a simple principle throw laser light at an object on the earth surface and calculate the time it takes to return to the LiDAR source.

#### **CSE 2018**

- Q. In which of the following areas can GPS technology be used?
- 1. Mobile phone operations
- 2. Banking operations
- 3. Controlling the power grids

Select the correct answer using the code given below:

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

## **CSE 2018**

## Answer (d

#### **Enforcement Directorate**



The Enforcement Directorate has transferred assets worth ₹8,441.50 crore to public sector banks that suffered losses to the tune of ₹22,585.83 crore due to frauds committed allegedly by Vijay Mallya, Nirav Modi and Mehul Choksi.

#### About

- History → The origin of this Directorate goes back to 1st May, 1956, when an 'Enforcement Unit' was formed, in the Department of Economic Affairs, for handling Exchange Control Laws violations under Foreign Exchange Regulation Act, 1947 (FERA '47).
- In the year 1957, this Unit was <u>renamed</u> as <u>'Enforcement Directorate</u>'.



#### **Enforcement Directorate**

- Presently, it is part of the <u>Department of Revenue</u>, <u>Ministry of Finance</u>.
- Mandate → The Organization is mandated with the task of <u>enforcing the</u> <u>provisions of two special fiscal laws</u> Foreign Exchange Management Act, 1999 (<u>FEMA</u>) and Prevention of Money Laundering Act, 2002 (<u>PMLA</u>).
- Composition → Besides directly recruiting personnel, the Directorate also draws officers from different Investigating Agencies, viz., Customs & Central Excise, Income Tax, Police, etc. on deputation.
- Other functions
  - Processing cases of fugitive/s from India under Fugitive Economic Offenders Act, 2018.

## **International Labour Organisation**



India's term as chair of the Governing Body of the International Labour Organisation (ILO) ended recently (October 2020- June 2021).

#### About ILO

- It is the <u>United Nations agency</u> for the world of work. It is also a <u>member of</u> the United Nations Development Group (<u>UNDP</u>).
- Mandate → It <u>sets international labour standards</u>, <u>promotes rights at work</u> and encourages decent employment opportunities, the enhancement of social protection and the strengthening of dialogue on work-related issues.



## **International Labour Organisation**

- Structure →
  - It is the <u>only tripartite U.N. agency</u>, that brings together governments, employers and workers' representatives of 187-member States.
  - The 187-member states of ILO <u>comprise 186 of the 193 UN member</u> <u>states</u> plus the <u>Cook Islands</u> are members of the ILO.
  - <u>India</u> is one of the <u>founding members of ILO</u>.
- HQ → Geneva, Switzerland.
- Parent organization 
   <u>Economic and Social Council of the United Nations.</u>
- O History
  - It was <u>created in 1919</u>, as part of the <u>Treaty of Versailles</u> that ended World War I, to reflect the belief that universal and lasting peace can be accomplished only if it is based on social justice.

## International Labour Organisation

- In 1946, the ILO <u>became a specialized agency</u> of the newly formed United Nations.
- The Organization won the <u>Nobel Peace Prize</u> on its <u>50th anniversary in</u> <u>1969</u>.
- ⊙ Governing Body → It is the <u>apex executive body of the ILO</u> which decides policies, programmes, agenda, budget and elects the Director-General. It meets in Geneva.
- Key reports
  - World Employment and Social Outlook.
  - Global Wage Report.

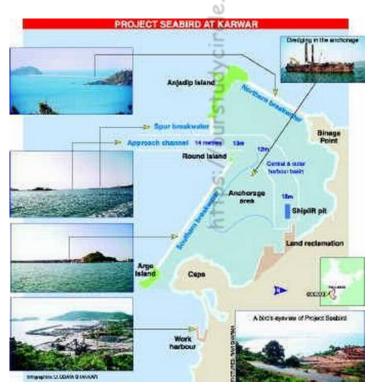
## **Project Seabird**



The Union Defence Minister has reviewed the status of the Indian Navy's Project Seabird at the Karwar Naval Base.

#### **About**

- Project Seabird is the <u>largest naval infrastructure</u> <u>project</u> at <u>Karwar, Karnataka</u>.
- The project involves creation of a <u>naval base at</u>
  <u>Karwar</u> on the west coast of India.
- O Upon completion, the project will provide the Indian Navy with its <u>largest naval base on the</u> west coast and also the <u>largest naval base east of</u> the Suez Canal.



## **Project Seabird**

○ Benefits → This would further <u>bolster the operational readiness of the Armed Forces</u> and help in <u>augmenting trade</u>, economy & humanitarian aid operations.

#### **Financial Action Task Force**



The Financial Action Task Force (FATF) has decided to keep Pakistan in its "grey list".

#### **About FATF**

- What is it? → It is an inter-governmental body established in 1989 during the G7 Summit in Paris.
- The FATF <u>assesses</u> the <u>strength</u> of a <u>country's anti-money laundering</u> and <u>anti-terror financing frameworks</u>, however it does not go by individual cases.



#### **Financial Action Task Force**

- Objectives → To <u>set standards and promote effective implementation</u> of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.
- Headquarters → Its Secretariat is located at the Organisation for Economic Cooperation and Development (OECD) <a href="https://example.com/headquarters">headquarters</a> in Paris.
- - India is a member of the FATF.
- Sessions → The <u>FATF Plenary</u> is the decision making body of the FATF. It meets three times per year.

#### **Financial Action Task Force**

## Listing by FATF

- - This inclusion serves as a <u>warning to the country</u> that it may enter the blacklist.
  - The greylisting carries <u>no legal sanctions</u>. But it attracts economic sanctions and restricts a country's access to international loans

# Quick revision (True/False)

	Question	True / False
1.	Ambergris -> referred to as floating gold. use in the perfume market.	/upscpdf
2.	Homo longi -> discovered in 1933. from north east region of Nigeria.	/circle.in
3.	<b>Enforcement Directorate -&gt; Under Ministry of Home Affairs.</b>	ourstud
4.	International Labour Organisation -> created in 1919, as part of the Treaty of Versailles.	https://
5.	Financial Action Task Force -> India is not a member of the FATF.	

# Quick revision (True/False)

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4.	International Labour Organisation -> created in 1919, as part of the Treaty of Versailles.	True //:sdtth
5.	Financial Action Task Force -> India is not a member of the FATF.	False



29-June-2021







# **Yraarambn-2**

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The Union ministry of housing and urban affairs has released the list of India smart cities awards (ISCA) 2020.

#### **About**

- Signature | Sig
- The awards were announced on the <u>occasion of the sixth anniversary</u> of <u>Smart Cities Mission</u>(SCM), Atal Mission for Urban Rejuvenation and Urban Transformation(<u>AMRUT</u>) and Pradhan Mantri Awas Yojana-Urban (PMAY-U).



- Parameters: The rankings were announced on the basis of several parameters such as <u>social aspects</u>, <u>governance</u>, <u>culture</u>, <u>urban</u> <u>environment</u>, <u>sanitation</u>, <u>economy</u>, <u>built environment</u>, <u>water and urban</u> <u>mobility</u>.
- For the year of the pandemic, additional parameters of <u>sustainable</u> <u>business model of Integrated Command and Control Centres</u> and innovation in Covid-19 management were <u>also counted</u>.

#### Performance of various States and cities:

Uttar Pradesh emerged on the top among all states, followed by Madhya Pradesh and Tamil Nadu.

- <u>Indore</u> (Madhya Pradesh) and <u>Surat</u> (Gujarat) won the <u>award jointly</u> for their overall development.
- Ahmedabad bagged the 'Smart Cities Leadership Award' and Chandigarh, the award for union territories, while Indore won the "Innovative Idea Award".

- Smart Cities mission
- Of Gol launched the smart cities mission in 2015.
- The objective is to integrate city functions, utilize scarce resources more efficiently, and improve the quality of life of citizens.
- It is a <u>Centrally Sponsored Scheme</u>.
- Smart city is envisaged to have four pillars:
  - Social Infrastructure.
  - Physical Infrastructure.
  - Institutional Infrastructure (including Governance).
  - Economic Infrastructure.

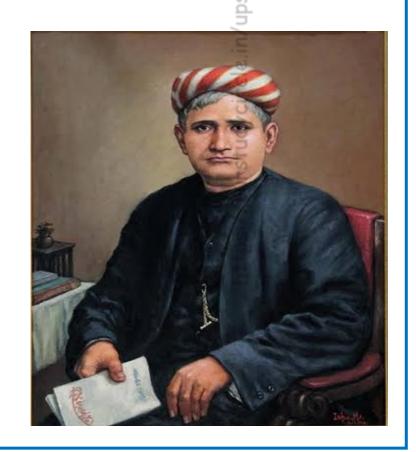
## **Bankim Chandra Chattopadhyay**



Indian Prime Minister paid homage to Rishi Bankim Chandra Chattopadhyay on his Jayanti on 27th June.

#### **About**

- He was one of the <u>greatest novelists</u> and <u>poets</u>
   of India.
- He composed the song <u>Vande Mataram in Sanskrit</u>, which was a source of inspiration to the people in their freedom struggle.
- He was in <u>Government service for thirty-two</u>
   years and retired in 1891.



## **Bankim Chandra Chattopadhyay**

- His epic Novel <u>Anandamath</u> set in the <u>background of the Sanyasi</u> <u>Rebellion (1770-1820)</u>, when Bengal was facing a famine too - made Bankim Chandra Chattopadhyay an influential figure on the Bengali renaissance.
- He also founded a monthly literary magazine, <u>Bangadarshan</u>, <u>in 1872</u>, through which Bankim is credited with influencing the emergence of a Bengali identity and nationalism.
- O He had <u>studied Sanskrit</u> and was very interested in the subject, but later took on the responsibility to <u>make Bengali the language of the masses</u>. However, his <u>first published work</u> - a novel - was <u>in English</u>.
- O His famous novels include <u>Kapalkundala</u> (1866), <u>Debi Choudhurani</u>, <u>Bishabriksha</u> (The Poison Tree), <u>Chandrasekhar</u> (1877), <u>Rajmohan's wife</u> and Krishnakanter Will.

## **Bankim Chandra Chattopadhyay**

## Sanyasi Rebellion

- The Sanyasi Uprisings took place in Bengal between the periods of 1770-1820s.
- The Sanyasis rose in rebellion <u>after the great famine of 1770</u> in Bengal which <u>caused acute chaos and misery</u>.
- O However, the immediate cause of the rebellion was the <u>restrictions</u> imposed by the <u>British upon pilgrims visiting</u> holy places among both Hindus and Muslims.

- Q. Which among the following events happened earliest?
- a) Swami Dayanand established Arya Samaj.
- b) Dinabandhu Mitra wrote Neel Darpan.
- c) Bankim Chandra Chattopadhyay wrote Anandmath.
- d) Satyendranath Tagore became the first Indian to succeed in the Indian Civil Services Examination.

nttps://ourstudyci<mark>n</mark>cle.in/upscpdf/

## Answer (d

## **Digital Millennium Copyright Act**



The union minister for Electronics and Information Technology was locked out of his Twitter account for an hour allegedly over a notice received for violation of the Digital Millennium Copyright Act (DMCA).

#### About DMCA

- O It is a <u>law passed in the US</u> and is among the world's <u>first laws</u> recognising Intellectual Property (IP) on the internet.
- The DMCA oversees the <u>implementation of two 1996 treaties</u> signed by World Intellectual Property Organisation (WIPO) member nations.



## **Digital Millennium Copyright Act**

- Which are those two treaties of WIPO?
  - In 1996, WIPO member countries agreed upon two treaties namely the <u>WIPO Copyright Treaty</u> and <u>the WIPO Performances and Phonograms</u>
     <u>Treaty</u>.
  - Both the treaties require member nations and signatories to provide in their respective jurisdictions, protection to intellectual property that may have been created by citizens of different nations who are also cosignatories to the treaty.
  - The said protection accorded by each member state <u>must not be any less</u> in any way than the one being given to a domestic copyright holder.
  - Further, the signatory countries should <u>ensure ways to prevent</u> <u>circumvention</u> of the technical measures used to protect copyrighted work.

## **Digital Millennium Copyright Act**

## World Intellectual Property Organization(WIPO)

- World Intellectual Property Organization(WIPO) is one of the 15 specialized agencies of the United Nations (UN).
- Purpose → It was created to <u>promote and protect intellectual property</u> (IP) across the world by cooperating with countries as well as international organizations.
- WIPO Convention → It's mandate of governing bodies and procedures are set out in the WIPO Convention which had established WIPO in 1967.
- Headquarters → Geneva, Switzerland.
- Members As of date, <u>193 nations</u> across the world, including <u>India</u>, <u>are</u> members of WIPO.

#### **INS Tabar**



INS Tabar deployed to participate in joint exercises with friendly navies in Africa and Europe.

#### **About INS Tabar**

- INS Tabar is a <u>Talwar-class stealth Frigate</u> built for Indian Navy in Russia.
- The ship is equipped with a <u>versatile range of</u> <u>weapons and sensors</u> and is among the earliest stealth frigates of the Indian Navy.
- The ship is <u>part of the Indian Navy's Western</u> <u>Fleet</u> which is based at Mumbai under Western Naval Command.



#### **INS Tabar**

#### What will INS Tabar do?

- INS Tabar will <u>transit across the Gulf of Aden</u>, <u>Red Sea</u>, <u>Suez Canal</u>, <u>Mediterranean Sea</u>, <u>North Sea</u> and <u>Baltic Sea</u>.
- During port visits, the ship is scheduled to participate in bilateral exercises like
  - Exercise Konkan with the UK Royal Navy
  - <u>Exercise Varuna</u> with French Navy and
  - Exercise Indra with Russian Federation Navy.
- These engagements are aimed to <u>further strengthen maritime security</u> in the region and to consolidate combined operations against maritime threats.

Q. Which one of the following is the best description of 'INS Astradharini', that was in the news recently?

- a) Amphibious warfare ship
- b) Nuclear-powered submarine
- c) Torpedo launch and recovery vessel
- d) Nuclear-powered aircraft carrier

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## Answer (c)

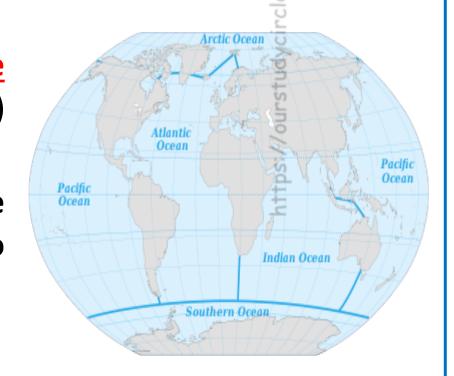
#### World's Fifth Ocean



The National Geographic magazine has recognised the 'Southern Ocean' as the world's fifth ocean hoping others will soon follow suit.

#### **About**

- Usually, the magazine has <u>followed the</u> International Hydrographic Organization (<u>IHO</u>) <u>on marine names</u>.
- The change in name is in <u>alignment with</u> the <u>National Geographic Society's initiative</u> to conserve the world's oceans.





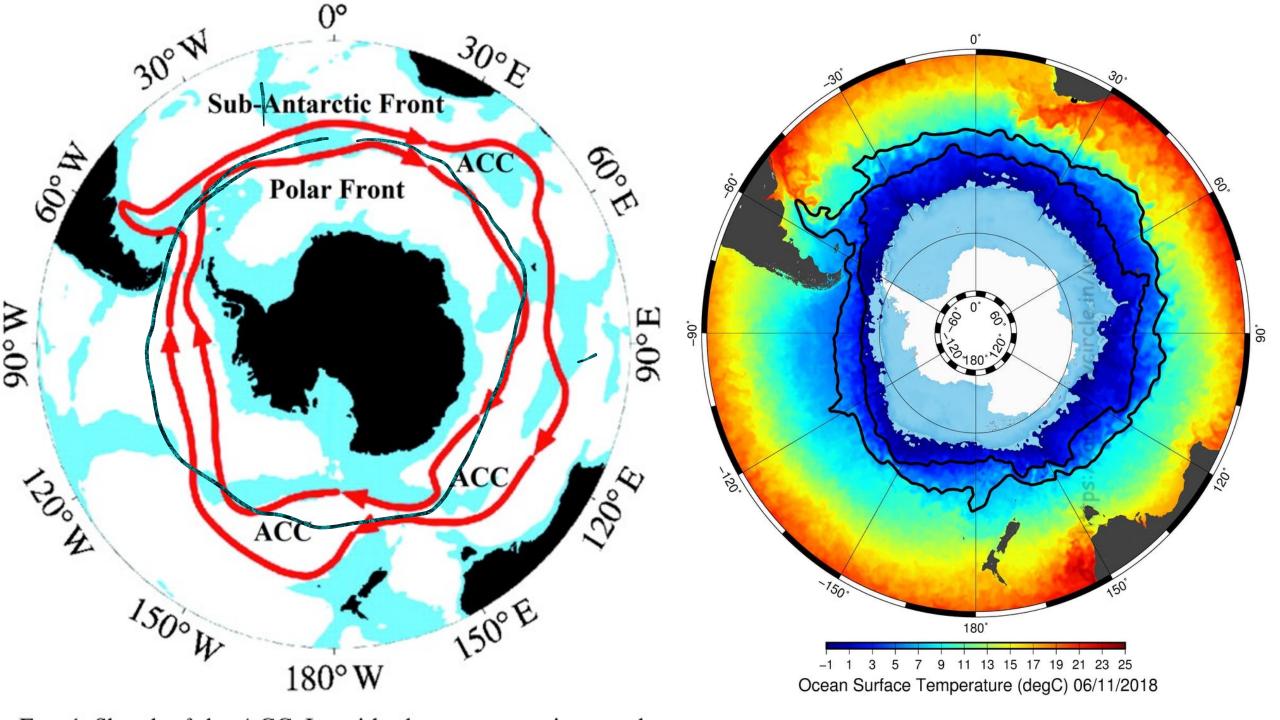
#### World's Fifth Ocean

- The Southern Ocean is the only ocean to touch three other oceans and to completely embrace a continent rather than being embraced by them.
- O Its northern limit is a <u>latitude of 60 degrees south</u>. It is also defined by its <u>Antarctic Circumpolar Current</u> that was formed 34 million years ago. The current flows from west to east around Antarctica.
- By officially changing the name of the waterbody, the National Geographic hoped to <u>draw attention to the following issues</u>,
  - Rapid warming of the Southern Ocean due to global warming,
  - Industrial fishing on species like krill and Patagonian toothfish.
- Recognition >
  - The IHO too had recognised 'Southern Ocean' as a distinct body of water surrounding Antarctica in 1937 but had repealed the same in 1953.



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#### World's Fifth Ocean

 However, the <u>US Board on Geographic Names</u> and the National Oceanic and Atmospheric Administration <u>recognize</u> the term 'Southern Ocean'.

## International Hydrographic Organization

- O It is an intergovernmental organization that works to ensure all the world's seas, oceans and navigable waters are surveyed and charted.
- Established in 1921, it coordinates the activities of national hydrographic offices and promotes uniformity in nautical charts and documents.
- O It issues <u>survey best practices</u>, <u>provides guidelines to maximize the use of hydrographic survey data</u> and develops hydrographic capabilities in Member States.
- India is also a member of IHO.

- Q. The acidification of oceans is increasing. Why is this phenomenon a cause of concern?
- 1. The growth and survival of calcareous phytoplankton will be adversely affected.
- 2. The growth and survival of coral reefs will be adversely affected.
- 3. The survival of some animals that have phytoplanktonic larvae will be adversely affected.
- 4. The cloud seeding and formation of clouds will be adversely affected.

Which of the statement(s) given above is/are correct?

- a) 1, 2 and 3 only
- b) 2 only
- c) 1 and 3 only
- d) 1, 2, 3 and 4

## Answer (d

#### **Bengal Monitor Lizard**



The forest department of Odisha has recently busted an organized trafficking racket and seized seven Bengal monitor lizards.

#### **About**

- The Bengal monitor or common Indian monitor (Varanus bengalensis) is a <u>large lizard</u> that is mainly terrestrial.
- The monitors are <u>carnivorous</u> and <u>non-poisonous</u>.
- The monitor lizard is protected under <u>Schedule I of WPA</u> but is regularly killed for its meat, blood and oil.



## **Bengal Monitor Lizard**

- The <u>species is listed</u> under the '<u>Least Concern</u>' category on the International Union for Conservation of Nature Red List.
- Threat Its population is dwindling due to <u>rampant poaching</u>.

https://ourstudycircle.in/upsa

# Quick revision (True/False)

	Question	True / False
1.	Smart Cities mission -> is a Central Sector Schemes.	upscpdf
2.	<b>Bankim Chandra Chattopadhyay -&gt; He composed the song Amar Sonar Bangla.</b>	/circle.in/
3.	<b>World Intellectual Property Organization -&gt; specialized agencies of the United Nations.</b>	/ourstud
4.	INS Tabar -> is a class of nuclear-powered ballistic missile submarines.	https:/
5.	<b>Southern Ocean -&gt;</b> only ocean to touch three other oceans and to completely embrace a continent rather than being embraced by them.	

# Quick revision (True/False)

	Question	True / False
1.	Smart Cities mission -> is a Central Sector Schemes.	False pdg
2.	Bankim Chandra Chattopadhyay -> He composed the song Amar Sonar Bangla.	False in the second sec
3.	<b>World Intellectual Property Organization -&gt; specialized agencies of the United Nations.</b>	True Jonestado
4.	INS Tabar -> is a class of nuclear-powered ballistic missile submarines.	False is
5.	Southern Ocean -> only ocean to touch three other oceans and to completely embrace a continent rather than being embraced by them.	True









# **Yraarambn-2**

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## Agni P Missile

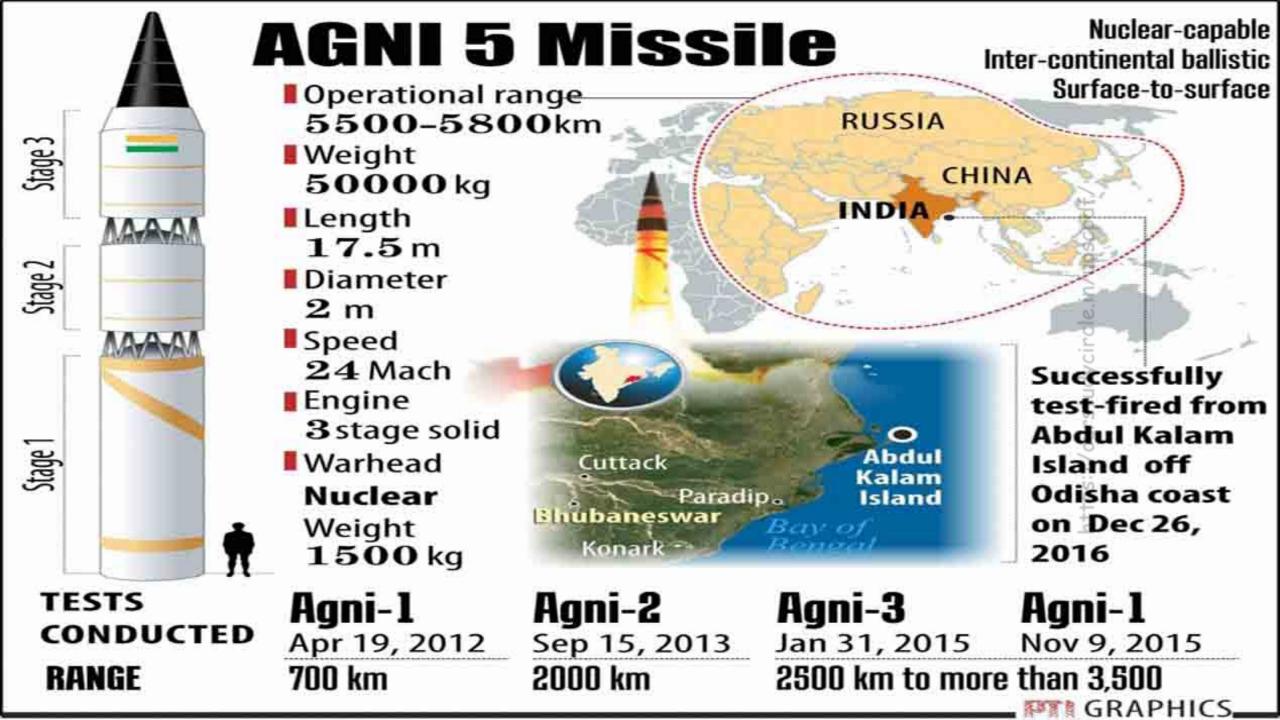


Recently, a new generation nuclear capable ballistic missile Agni-P (Prime) was successfully test-fired by DRDO from Dr. APJ Abdul Kalam island off the coast of Odisha, Balasore.

#### **About**

- Agni-P is a new generation <u>advanced variant of</u>
   <u>the Agni class</u> (under IGMDP Integrated Guided
   Missile Development Program).
- © Canister Based Missile → Agni P is a <u>canisters</u> <u>based missile</u>. Canisterisation of missiles <u>reduces the time required to launch</u> the missile while improving its storage and mobility,





## **Agni P Missile**

- This means that it can be <u>launched from rail</u> and <u>road</u> and <u>stored for a longer period</u>. It can also be transported across the length and breadth of the country.
- Weight → The missile weighs 50% less than Agni III and has new guidance and a new generation of propulsion.
- Replaced by → The Agni-P will replace the Prithvi, Agni-1 and Agni-2 missiles that were built two decades ago with technologies that are now considered outdated.

#### **Agni P Missile**

## **About Agni Missiles**

- O Agni Missiles trace <u>their origins</u> back to the <u>Integrated Guided Missile</u> <u>Development Programme</u>(IGMDP).
- O IGMDP was conceived by APJ. Abdul Kalam in the 1980s to enable India to attain self-sufficiency in the field of missile technology.
- The 5 missiles (P-A-T-N-A) developed under this program are:
  - Prithvi: Short range surface to surface ballistic missile.
  - Agni: Ballistic missiles with different ranges, i.e. Agni (1,2,3,4,5)
  - Trishul: Short range low level surface to air missile.
  - Nag: 3rd generation anti-tank missile.
  - Akash: Medium range surface to air missile...

- Q. With reference to Agni-IV Missile, which of the following statement(s) is/are correct?
- 1. It is surface-to-surface missile.
- 2. It is fuelled by liquid propellant only.
- 3. It can deliver one tonne nuclear warhead about 7500 km away. Select the correct answer using the codes given below.
- a) 1 only
- **b)** 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

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## Answer (a

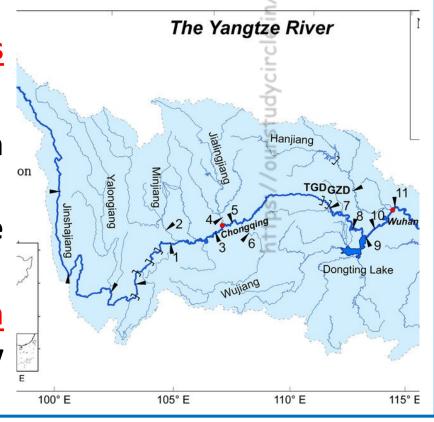
#### **Baihetan Dam**



China operationalises Baihetan hydro project. world's largest power station in terms of installed capacity of 22,500 MW or 22.5 GW.

#### **About**

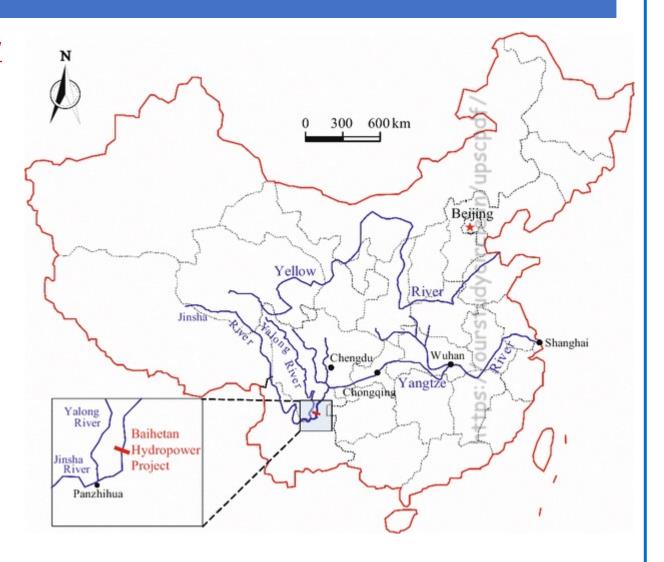
- Location Border of <u>southwestern provinces</u> of Yunnan and Sichuan.
- © Constructed on → <u>Jinsha</u>, the upstream section of the Yangtze river.
  - Yangtze is the <u>longest in Asia</u> and the third-longest river in the world.
  - It <u>rises in the northern part of the Tibetan</u>
     <u>Plateau</u> and flows in a generally easterly direction to the East China Sea.





#### **Baihetan Dam**

O It is also a <u>hydroelectric gravity</u> dam that <u>spans the Yangtze River</u>.



#### **Attorney General Of India**



The tenure of Attorney General K.K. Venugopal is extended by the the government for a period of one more year with effect from July 1.

#### **About**

- S/he is the top legal officer in the country & part of Union Executive.
- S/he is not considered as a government servant.
- Assisted by <u>2 Solicitor Generals</u> & <u>4 Additional</u>
   Solicitor Generals.
- O Under the Constitution of India, <u>Article 76 deals</u> with for Attorney General of India & <u>Article 165</u> for Advocate General of States.



## **Attorney General Of India**

- Eligibility → Qualified to be <u>appointed as Supreme Court judge</u>, <u>Citizen of India</u>, <u>Judge of High Court</u> (HC) for 5 years/advocate HC for 10 years/eminent jurist President's opinion.
- Tenure → Not fixed.
- Appointment By President on Government advice.
- Functions
  - Advise Government on legal matters.
  - <u>Perform legal duties</u> assigned by President.
  - Appear on behalf of Government in all cases in SC or HC.
  - <u>Represent Government</u> under Article 143 (Power of President to consult SC).
  - Discharge functions <u>conferred by Constitution</u> or <u>law</u>.

# **Attorney General Of India**

#### ○ Rights →

- Right to Speak & take part in proceedings of both Houses of Parliament/joint sitting/any committee of Parliament of which he/she may be named a member.
- Enjoys <u>privileges</u> & <u>immunities</u> of a member of Parliament.
- Not a Government servant & <u>not debarred</u> from <u>private legal practice</u>.

#### ○ Limitations →

- No Right to Vote in House proceedings/committees.
- Should <u>not advise against</u> or <u>hold a brief against Government</u>.
- Should not defend accused persons in criminal prosecutions without the permission of the Government of India.
- Should <u>not accept appointment</u> as a <u>director in any company</u> or corporation without the permission of the Government of India.

# **Attorney General Of India**

- Removal →
  - Holds office during <u>President's pleasure</u> & can be <u>removed by President</u> at any time.
  - No grounds for removal or procedure mentioned in Constitution.

# https://ourstudycircle.in/upscpdf/

#### **CSE 2013**

#### Q. Consider the following statements:

#### **Attorney General of India can**

- 1. Take part in the proceedings of the Lok Sabha
- 2. Be a member of a committee of the Lok Sabha
- 3. Speak in the Lok Sabha
- 4. Vote in the Lok Sabha

#### Which of the statements given above is/are correct?

- a) 1 only
- b) 2 and 4 only
- c) 1, 2 and 3 only
- d) 1 and 3 only

# **CSE 2014**

# Answer (c)

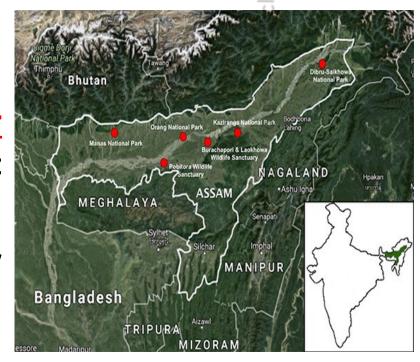
## **Barnadi Wildlife Sanctuary**



Recently, the World Wide Fund for Nature-India (WWF) found a few tigers inhabiting the Barnadi Wildlife Sanctuary in Assam.

#### **About**

- Location Northern Assam's Baksa and Udalguri districts bordering Bhutan.
- The Sanctuary is bordered by the <u>Barnadi river</u> and <u>Nalapara river</u> to the west and east respectively.
- Status → It was affirmed as the WS in 1980 by the Government of Assam.



## **Barnadi Wildlife Sanctuary**

- Barnadi was established specifically to <u>protect the Pygmy Hog</u> and <u>Hispid Hare</u>.
- Biodiversity >
  - This is important for threatened species such as the <u>Asian Elephant and</u> <u>Tiger</u>.
  - About 60% of the BWS is reported to be grassland, most of it is now grassy woodland.
  - The main Forest types are <u>Tropical Moist Deciduous</u> along the northern edge of the Sanctuary, and <u>mixed scrub</u> and <u>grassland</u> in the southern part with few trees.
- Vegetation →
  - The vegetation has been <u>drastically modified</u> by human activity. Most of the natural vegetation has been cleared and replaced by commercial plantations.

# **Barnadi Wildlife Sanctuary**

#### Other Protected Areas in Assam -

- Dibru-Saikhowa National Park,
- Manas National Park,
- Nameri National Park,
- Rajiv Gandhi Orang National Park.
- Kaziranga National Park.

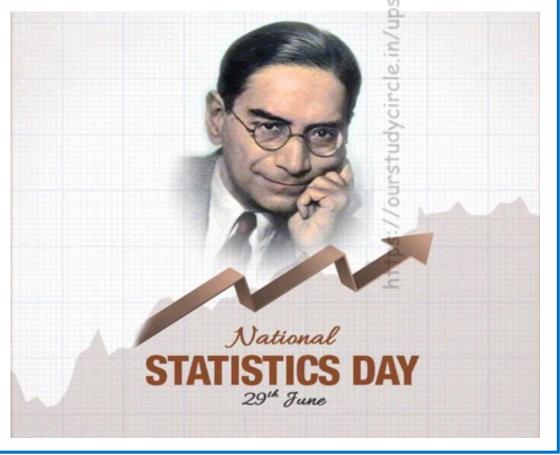
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# **National Statistics Day**



Every year, the Statistics Day is celebrated on 29th June, the birth anniversary of Prof. Prasanta Chandra Mahalanobis, to recognise his invaluable contribution in establishing the National Statistical System.

## **About**



# **National Statistics Day**

#### **PC Mahalanonobis**

- He is referred to as the <u>chief architect of Indian statistical system</u> as well as father of statistical science in India.
- O He established the <u>Indian Statistical Institute</u> (<u>ISI</u>) in <u>1931 in Kolkata</u>. The institute founded the <u>journal Sankhya</u>, along the lines of Karl Pearson's Biometrika. In 1959 it was made an autonomous body of Ministry of Statistics & Programme Implementation.
- O He also helped in the establishment of <u>Central Statistical Organisation</u> (CSO), <u>the National Sample Survey</u> (NSS) and <u>the Annual Survey of Industries</u> (ASI).

# **National Statistics Day**

- O He introduced three key concepts to the theory and practice of sample surveys which are: Pilot surveys, Optimum survey design and Inter Penetrating Network of sub-samples technique (IPNS).
- The Mahalanobis model, was <u>employed in the Second Five Year Plan</u>, which worked towards the <u>rapid industrialisation</u> of India.

# Quick revision (True/False)

	Question	True / False
1.	Agni P Missile -> range between 4000km to 5000km.	upscpdf
2.	Baihetan Dam -> Constructed on Jinsha, the upstream section of the Yangtze river.	/circle.in/
3.	Attorney General Of India -> is the top legal officer in the country & not a part of Union Executive.	/ourstud
4.	Barnadi Wildlife Sanctuary -> Madhya Pradesh.	https:/
5.	PC Mahalanonobis -> established the Indian Statistical Institute (ISI) in 1931 in Kolkata.	

# Quick revision (True/False)

	Question	True / False
1.	Agni P Missile -> range between 4000km to 5000km.	False pdsdn
2.	Baihetan Dam -> Constructed on Jinsha, the upstream section of the Yangtze river.	True vircle.in
3.	Attorney General Of India -> is the top legal officer in the country & not a part of Union Excecutive.	False pnts.mo//
4.	Barnadi Wildlife Sanctuary -> Madhya Pradesh.	False sdtt
5.	PC Mahalanonobis -> established the Indian Statistical Institute (ISI) in 1931 in Kolkata.	True