

news of the day from Hindu & Indian Express.

JUNE 2021

Q.1) With reference to the Eight Core Industries, consider the following statements:

- 1. The Eight Core Industries comprise 40.27 percent of the weight of items included in the Index of Industrial Production (IIP).
- 2. Monthly Index of Eight Core Industries (ICI) is released by NITI Aayog.

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

Solution: The Office of Economic Adviser, Department for Promotion of Industry and Internal Trade released the Index of Eight Core Industries (ICI) for the Month of April, 2021.

ICI measures combined and individual performance of production in selected eight core industries viz. Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity.

The Eight Core Industries comprise 40.27 percent of the weight of items included in the Index of Industrial Production (IIP).

The combined ICI stood at 126.7 in April 2021, which increased by 56.1 per cent (provisional) as compared to the Index of April 2020. This high growth rate in April 2021 is largely due to low Index base in April 2020 consequent to the low industrial production across all sectors caused by nationwide lockdown imposed to contain spread of Covid-19 last year.

The growth rate of ICI during April-March 2020-21was (-)6.5% (P) as compared to the corresponding period of last FY.

Hence only statement 1 is correct.

Q.2) Which of the following comprises of 'Second Positive Indigenisation List' recently notified by Union Ministry of Defence (MoD)?

- 1. Next Generation Corvettes
- 2. Air Borne Early Warning and Control (AEW&C) systems
- 3. Tank Engines

Select the correct answer using the code given below:

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

d) 1, 2 and 3

Solution: Ministry of Defence (MoD) has notified 'Second Positive Indigenisation List' of 108 items to promote indigenisation in the Defence sector and defence exports.

This will give further boost to indigenisation with active participation of public and private sector for fulfilling the twin objectives of achieving self-reliance and promoting defence exports.

All the 108 items will now be procured from indigenous sources as per provisions given in Defence Acquisition Procedure (DAP) 2020.

The second list (enclosed) lays special focus on weapons/systems which are currently under development/trials and are likely to translate into firm orders in the future.

The 'Second Positive Indigenisation List' comprises complex systems, sensors, simulator, weapons and ammunitions like Helicopters, Next Generation Corvettes, Air Borne Early Warning and Control (AEW&C) systems, Tank Engines, Medium Power Radar for Mountains, MRSAM Weapon Systems etc.

This second list is planned to be implemented progressively with effect from December 2021 to December 2025.

In August 2020, the 'First Positive Indigenisation' List comprising 101 items was notified.

At that time, it was also highlighted that more such equipment would be identified progressively to facilitate and encourage defence manufacturing in the country.

Hence, option (d) is the correct answer.

Q.3) Which one of the following is the best description of 'AmbiTAG', that was in the news recently?

- a) Stealth destroyer
- b) India's first indigenous temperature data logger for the cold chain management
- c) Super Computer developed by IIT Delhi
- d) None of the above

Solution: Indian Institute of Technology, Ropar (IIT Ropar) in Punjab has developed "AmbiTAG"- India's first indigenous temperature data logger for the cold chain management.

AmbiTag is a first-of-its-kind IoT device that records real-time ambient temperature during the transportation of perishable products, vaccines and even body organs and blood.

That recorded temperature further helps to know whether that particular item transported from anywhere in the world is still usable or perished because of temperature variation.

This information is particularly critical for vaccines including Covid-19 vaccine, organs and blood transportation.

Shaped as USB device, AmbiTag continuously records the temperature of its immediate surroundings "from -40 to +80 degrees in any time zone for a full 90 days on a single charge.

The device has been developed under Technology Innovation Hub – AWaDH

(Agriculture and Water Technology Development Hub) and its Startup ScratchNest. AWaDH is a Govt of India project.

Hence, option (b) is the correct answer.

Q.4) With reference to the Gross Domestic Product (GDP) growth, consider the following statements:

- 1. India's Gross Domestic Product (GDP) contracted by 7.3% in 2020-21, as per provisional National Income estimates released by the National Statistical Office.
- 2. Only two sectors bucked the trend of negative GVA growth are agriculture, forestry and fishing, which rose 3.6%, and electricity, gas, water supply and other utility services (up 1.9%).

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

Solution: India's Gross Domestic Product (GDP) contracted by 7.3% in 2020-21, as per provisional National Income estimates released by the National Statistical Office. GDP growth in 2019-20, prior to the COVID-19 pandemic, was 4%.

The Gross Value Added (GVA) in the economy shrank 6.2% in 2020-21, compared to a 4.1% rise in the previous year.

Only two sectors bucked the trend of negative GVA growth — agriculture, forestry and fishing, which rose 3.6%, and electricity, gas, water supply and other utility services (up 1.9%).

GVA for trade, hotels, transport, communication and broadcasting-related

services saw the sharpest decline of 18.2%, followed by construction (-8.6%), mining and quarrying (-8.5%) and manufacturing (-7.2%).

Though this is the bleakest performance on record for the economy, the fourth quarter (Q4) of 2020-21 helped moderate the damage, with a higher-than-expected growth of 1.6% in GDP.

This marked the second quarter of positive growth after the country entered a technical recession in the first half of the year.

GDP had contracted 24.4% in April-June 2020, followed by a 7.4% shrinkage in the second quarter. It had returned to positive territory in the September to December quarter with a marginal 0.5% growth.

Hence both statements are correct.

Q.5) With reference to the Maratha reservation, consider the following statements:

- 1. Maratha community recently brought under Economically Weaker Section (EWS) quota in Maharashtra.
- 2. 92nd Constitutional amendment Act 2019 introduced 10% reservation for Economically Weaker Sections (EWS) of society.

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

Solution: Maratha community brought under Economically Weaker Section (EWS) quota in Maharashtra.

In a bid to extend relief to the Maratha community in the State, the tripartite Maha Vikas Aghadi (MVA) government in Maharashtra extended the benefits of reservation for the Economically Weaker Section (EWS) to the Socially and Economically Backward Class (SEBC).

Previously, the government had decided that the Maratha community could not take advantage of the 10% EWS category as Maratha reservation was in force in the State.

The Supreme Court, however, scrapped the SEBC reservation in jobs and education, making it possible for the State government to extend the benefit of the EWS quota to the Marathas.

As per the government resolution, a person fulfilling the criterion for EWS would be eligible for 10% reservation in educational institutes, barring minority institutes.

This would also be applied for State government recruitment. The resolution said the reservation would be above the existing reservation.

It also stated that the benefit would be available from September 9, 2020, when the apex court brought an interim stay on the reservation, to May 5, 2021, when the final verdict was announced.

103rd Constitution amendment Act 2019 introduced 10% reservation for Economically Weaker Sections (EWS) of society.

Hence only statement 1 is correct.

Q.6) Baghdad pact was also known as

- a) CENTO
- b) SEATO
- c) NATO
- d) None of the above

Solution: The Central Treaty Organisation (CENTO), originally known as the Baghdad Pact or the Middle East Treaty Organisation (METO) (disambiguation), was a military

alliance of the Cold War. It was formed in 1955 by Iran, Iraq, Pakistan, Turkey and the United Kingdom and dissolved in 1979.

Similar to the North Atlantic Treaty
Organization and the Southeast Asia Treaty
Organization, the main purpose of the
Baghdad Pact was to prevent communist
incursions and foster peace in the Middle
East.

Q.7) All countries try and maximise their room for manoeuvre within the constraints that they find themselves in.

Which of the following terms best describes the above sentence?

- a) Strategic Autonomy
- b) Alliances
- c) Geopolitics
- d) Geostrategy

Solution: Strategic autonomy:

All countries try and maximise their room for manoeuvre within the constraints that they find themselves in. It is widely assumed that the pursuit of "strategic autonomy" is a unique attribute of Indian foreign policy.

Autonomy and alliances:

Autonomy is about the basic impulse for enhancing the degree of one's freedom.

Alliances are about coping with real or perceived threats to one's security.

Both are natural trends in international politics.

How a nation finds the balance between the two imperatives depends on the circumstances.

Joining an alliance does not mean ceding one's sovereignty.

Within every alliance, there is a perennial tension between seeking more commitments from the partner in return for limiting one's own.

Q.8) Consider the following statements about Rohingyas:

- Rohingya is ethnic minority group, largely comprising Muslims living primarily in Myanmar's western Rakhine state.
- 2. They speak Urdu dialect, as opposed to commonly spoken Burmese language in Myanmar.

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: They speak Bengali Dialect

Q.9) Consider the following statements regarding Employee's Provident Fund (EPF) Scheme:

- 1. It is the main scheme under the Employees' State Insurance Act, 1948.
- 2. Under this scheme, both the employee and employer contribute 12% of the employee's basic salary and dearness allowance towards EPF.
- 3. A person mandatorily becomes a member of EPF if his monthly salary does not exceed Rs.15,000.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 only

c) 2 and 3 only

d) 1, 2 and 3

Solution: Employees' Provident Funds (EPF) Scheme is the main scheme under the Employees' Provident Funds and Miscellaneous Act, 1952. Hence, statement 1 is not correct.

It offers the institution of provident funds for factory employees and other establishments.

The employee and employer each contribute 12% of the employee's basic salary and dearness allowance towards EPF. Hence, statement 2 is correct.

The Economic Survey 2016-17 had suggested that employees be allowed to choose whether or not to save 12% of their salary into EPF or keep it as take home pay.

As per current laws, a person mandatorily becomes a member of EPF if his monthly salary does not exceed Rs. 15,000. Hence, statement 3 is correct.

Q.10) Consider the following statements regarding Horticulture Cluster Development Programme (HCDP):

- 1. It is a Centrally Sponsored Scheme.
- 2. HCDP will promote the export of horticultural produce.
- 3. India is the largest producer of horticulture crops globally.

Which of the statements given above is/are correct?

a) 1 and 3 only

b) 2 only

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

Solution: Horticulture Cluster Development Programme (HCDP) is a central sector

programme aimed at growing and developing identified horticulture clusters to make them globally competitive. Hence, statement 1 is not correct.

Horticulture cluster is a regional/geographical concentration of targeted horticulture crops.

The Ministry of Agriculture and Farmers
Welfare has launched the Horticulture Cluster
Development Programme (CDP) in order to
promote the export of horticultural produce.
Hence, statement 2 is correct.

India is the second-largest producer of horticulture crops globally, accounting for approximately 12% of the world's production of fruits and vegetables. Hence, statement 3 is not correct.

India is a leader in producing fruits like Mango, Banana, Pomegranate, Sapota, Acid Lime and Aonla.

Q.11) What is Litoria mira, recently seen in news?

a) A species of frog which lives in the rainforests of New Guinea

- b) A technology that's home to digital money, global payments, and applications.
- c) A dwarf galaxy
- d) None of the above

Solution: A species of frog lives in the rainforests of New Guinea that appears to be made from chocolate.

The cocoa-coloured frogs have turned out to be a new species.

It is called Litoria mira, inspired by the Latin adjective mirum, which means surprised or strange, stemming from the scientist's surprise in discovering an undescribed member of the predominately Australian Litoria genus of tree frogs.

The Litoria mira has a well-known relative — the common green tree frog of Australia called Litoria cerulean. Except for the colour of their skins, the two seem alike — until you study them closely.

Litoria mira can be distinguished from all other Litoria by its unique combination of moderately large size, webbing on hand, relatively short and robust limbs, and small violet patch of skin on the edge of its eyes.

The reason that the chocolate frog from New Guinea and the Australian green tree frog are similar is that Australia and New Guinea used to be linked by land for much of the late Tertiary period (2.6 million years ago), and share many biotic elements.

Today, the island of New Guinea is separated from the 'horn' of Queensland by the Torres Strait. New Guinea is dominated by rainforest, and northern Australia by the savannah.

Hence, option (a) is the correct answer.

Q.12) Dr. K.P. Krishnan expert committee, recently seen in news, is related to:

- a) feasibility of Variable Capital Companies in the International Financial Services Centres in India.
- b) financing Infrastructure through PPP model.
- c) analyse the financial condition of the small Banks in India.
- d) None of the above.

Solution: Dr. K.P. Krishnan headed expert committee on Variable Capital Company has submitted its report on the feasibility of Variable Capital Companies in the International Financial Services Centres in India to the Chairperson of the International Financial Services Centres Authority (IFSCA), Shri. Injeti Srinivas.

The IFSCA set up this Committee to explore the potential for allowing another legal structure – popularly known as a variable capital company (VCC) – as an additional option through which asset managers could pool the investors' funds.

The VCC structure dispenses with some of the key limitations of companies and LLPs and provides for higher regulatory standards than those applicable to trusts.

The Committee assessed the features of a VCC or its equivalent, in other jurisdictions such as the UK, Singapore, Ireland and Luxembourg. The Committee recommended the adoption of a VCC-like legal structure for the purpose of conducting fund management activity in IFSCs

The Committee recognized that the legal framework governing entities that undertake fund management should provide for certainty and clarity to investors.

Hence, option (a) is the correct answer.

Q.13) Sustainable Development Goal Target 8.7 is directly related to

- a) Child Labour
- b) Poverty
- c) Health
- d) Nuclear arms

Solution: Sustainable Dvelopment Goal Target 8.7 - Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.

Q.14) Mount Nyiragongo is in the news. It is located in

a) North America

- b) South America
- c) Africa
- d) Australia

Solution: About Mount Nyiragongo

It is an active volcano in the Virunga Mountains of east-central Africa.

The Virunga Mountains are associated with the Albertine Rift.

It lies in the volcano region of Virunga National Park, Congo (Kinshasa), near the border with Rwanda, 12 miles (19 km) north of Goma.

Mount Nyiragongo is part of the Virunga volcanic chain and owes its existence to the activity of the African Great Rift.

The rift is constantly extending and opening.

Q.15) Consider the following statements:

- 1. The Defence Acquisition Procedure (DAP) 2020 allows the ban on weapons import.
- 2. DAP 2020 focuses on Foreign Direct Investment (FDI) in defence manufacturing.
- 3. SRIJAN Portal is an initiative taken to boost domestic production of defence equipment.

Which of the statements given above is/are correct?

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

d) 1, 2 and 3

Solution: The Defence Acquisition Procedure (DAP) 2020 enables the notification of a List of Weapons or Platforms that will be banned for import. Hence. Statement 1 is correct.

It focuses on Foreign Direct Investment (FDI) in defence manufacturing and indigenization

of the manufacturing prices. Hence, statement 2 is correct.

It also introduces several new ideas such as the need to incorporate artificial intelligence in platforms and systems, use of indigenous software in defence equipment and 'innovation' by Start-ups and MSMEs as a new category of defence acquisition.

Other Initiatives Taken to Boost Domestic Production of Defence Equipment:

Defence India Startup Challenge: DISC aims at supporting Startups/MSMEs/Innovators to create prototypes and/or commercialize products/solutions in the area of National Defence and Security.

SRIJAN Portal: It is a one stop shop online portal that provides access to the vendors to take up items for indigenization. Hence, statement 3 is correct.

Q.16) Consider the following statements:

- 1. The Bal Swaraj Portal is created by the National Commission for Protection of Child Rights (NCPCR).
- 2. The NCPCR is a statutory body under the administrative control of the Ministry of Women & Child Development.

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

Solution: 9+The National Commission for Protection of Child Rights (NCPCR) has devised an online tracking portal "Bal Swaraj (COVID-Care)" for children in need of care and protection. Hence, statement 1 is correct.

This has been created with a purpose for online tracking and digital real time monitoring mechanism of children who are in need of care and protection.

NCPCR is a statutory body set up in March 2007 under the Commissions for Protection of Child Rights (CPCR) Act, 2005.

It is under the administrative control of the Ministry of Women & Child Development. Hence, statement 2 is correct.

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.

It inquires into complaints relating to a child's right to free and compulsory education under the Right to Education Act, 2009.

It monitors the implementation of Protection of Children from Sexual Offences (POCSO) Act, 2012.

Q.17) With reference to 'One Nation One Standard Mission', consider the following statements:

- 1. It was conceived in order to ensure quality products in the country.
- 2. The mission was collectively launched by the NITI Ayog and the Ministry of science and technology.

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

Solution: The idea of One Nation One Standard Mission was first conceived in 2019,

it was envisioned on the line of one nation, one ration card scheme in order to ensure quality products in the country. Hence, statement 1 is correct.

Recently, the Research Design & Standards Organization (RDSO) of Indian Railways has become the first Institution to be declared a Standard Developing Organization (SDO) under One Nation One Standard mission of Bureau of Indian Standards (BIS)

To attain the One Nation One Standard vision of the Government of India, Bureau of Indian Standards (BIS) launched a scheme which provides for Recognition of SDO.

The recognition is valid for 3 years and will require renewal after completion of the validity period.

Hence, statement 2 is not correct.

Q.18) World Health Organisation (WHO) inherited specific tasks relating to

- 1. Epidemic control
- 2. Quarantine measures
- 3. Drug standardisation

Select the correct answer code:

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

Solution: The World Health Organisation (WHO) came into being in 1948. It inherited specific tasks relating to epidemic control, quarantine measures and drug standardisation.

Q.19) Purchasing Managers' Index or PMI is an economic indicator, which is derived after monthly surveys of different companies. For manufacturing PMI, the questionnaire is sent to manufacturing companies. The questions are related to 5 key variables:

- 1. New orders
- 2. Output
- 3. Employment
- 4. Suppliers' delivery times
- 5. Stock of items purchased

Which one of the following reflects the correct increasing order according to their weights?

- a) 5-4-3-2-1
- b) 1-2-3-4-5
- c) 1-3-4-2-5
- d) 5-4-2-3-1

Solution: Purchasing Managers' Index or PMI is an economic indicator, which is derived after monthly surveys of different companies. For manufacturing PMI, the questionnaire is sent to manufacturing companies. The questions are related to the following 5 key variables in increasing order of their weights:

Stock of items purchased (10%)

Suppliers' delivery times (15%)

Employment (20%)

Output (25%)

New orders (30%)

PMI values and their components play a major role in providing useful insight into the economic activity of a business to decision-makers, market analysts, and investors.

The headline PMI is a number that ranges from 0 to 100.

If a PMI is above 50, it represents an expansion when compared with the previous month.

If the PMI value falls below 50, it indicates a contraction while a PMI value of 50 indicates no change.

Q.20) SATAT (Sustainable Alternative Towards Affordable Transportation) scheme, often mentioned in news, is an initiative of:

- a) Ministry of Environment, Forest and Climate Change
- b) Ministry of Petroleum and Natural Gas
- c) Ministry of Power
- d) Ministry of New and Renewable Energy

Solution: Union Minister of Petroleum & Natural Gas presided over a virtual ceremony in which a number of initiatives were launched to provide major fillip to the SATAT initiative.

This included signing of a Cooperation Agreement by Oil and Gas majors including IndianOil, HPCL, BPCL, GAIL and IGL, for the promotion and development of the SATAT (Sustainable Alternative Towards Affordable Transportation) scheme.

The SATAT scheme aims to set up Compressed Bio-Gas production plants and make CBG available in the market for use as a green fuel.

'SATAT', launched on 1.10.2018, envisages to target production of 15 MMT of CBG from 5000 plants by 2023.

Besides the potential to boost availability of more affordable transport fuels, better use of agricultural residue, cattle dung and municipal solid waste, the 5000 CBG plants will provide an investment of 1.75 lakh crore, an additional revenue source to farmers, and 75,000 direct job opportunities and lakhs of indirect jobs.

The minister also laid the foundation stones of 5 upcoming CBG Plants.

He also inaugurated the first injection of CBG into the CGD pipeline network at

Govardhannathji Energies into Gujarat Gas CGD network at NadiadKhedaDistt., Gujarat.

Hence, option (b) is the correct answer.

Q.21) With reference to the National Human Rights Commission (NHRC), consider the following statements:

- 1. It was established in 1993.
- 2. It is in conformity with the Paris Principles, adopted at the first international workshop on national institutions for the protection of human rights held in Paris in 1991.
- 3. It is a constitutional body.

Which of the statements given above is/are correct?

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

Solution: President Ram Nath Kovind formally appointed Justice Arun Kumar Mishra as the Chairman of the National Human Rights Commission (NHRC). Justice Mishra's name was recommended by a high-powered selection panel consisting Prime Minister Modi; Union Home Minister; Deputy Chairman of the Rajya Sabha; Lok Sabha Speaker; and the Leader of the Opposition in the Rajya Sabha.

NHRC was established in 1993. It is in conformity with the Paris Principles, adopted at the first international workshop on national institutions for the protection of human rights held in Paris in 1991.

Status: It is a statutory organization established under the Protection of Human Rights Act (PHRA), 1993 as amended by the Protection of Human Rights (Amendment) Act, 2006.

It is headquartered in New Delhi.

Functions:

The purpose of the NHRC is, suo moto or through the petition of a person, to investigate the violation of human rights or the failures of the state or other to prevent a human rights violation.

The commissions may also take on research about human rights, create awareness campaigns through various mediums, and encourage the work of NGOs.

Composition: The Commission consists of a Chairperson, four full-time Members and four deemed Members. A Chairperson, should be retired Chief Justice of India or a Judge of the Supreme Court.

Appointment: The Chairperson and members of the NHRC are appointed by the President of India, on the recommendation of a committee consisting of:

The Prime Minister (Chairperson)

The Home Minister

The Leader of the Opposition in the Lok Sabha (Lower House)

The Leader of the Opposition in the Rajya Sabha (Upper House)

The Speaker of the Lok Sabha (Lower House)

The Deputy Chairman of the Rajya Sabha (Upper House)

Justice Ranganath Misra was the first chairperson of NHRC from 1993 till 1996.

Hence, option (a) is the correct answer.

Q.22) With reference to the Long Period Average (monsoon), consider the following statements:

1. It is the averages of rainfall received over a 50-year period between 1951 and 2001.

2. It is a benchmark while forecasting the quantitative rainfall for the monsoon season every year.

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

Solution: The India Meteorological Department (IMD) said that monsoon rains in the month of June-September would be 101% of the Long Period Average (LPA) of 88 cm. Earlier, on April 16, it said the rain would be 98% of the LPA. In the agency's parlance, this still constitutes 'normal' rainfall, which is anywhere from 96-104% of the LPA.

Long Period Average (LPA) is the averages of rainfall received over a 50-year period between 1951 and 2001. This average comes to 89 cm of rainfall.

This is the average rainfall recorded during the months from June to September, calculated during the 50-year period, and is kept as a benchmark while forecasting the quantitative rainfall for the monsoon season every year.

Categories: IMD maintains five rainfall distribution categories on an all-India scale which are –

Excess: If the rainfall is more than 110 % of this LPA.

Above Normal: If the rainfall is between 104 and 110 % of this LPA.

Normal: If the rainfall is between 96 and 104 % of this LPA.

Below Normal: If the rainfall is between 90 and 96 % of this LPA.

Deficient: If the rainfall is less than 90 % of this LPA.

Hence both statements are correct.

Q.23) With reference to the Model Tenancy Act, consider the following statements:

- 1. In case of dispute between landlord and tenant, a rent authority, or a rent court would be available for speedy resolution.
- 2. A tenant will have to submit a security deposit of two months for residential premises. For commercial property, a tenant will have to pay six-month rent.

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

Solution: 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.

Salient features of the act:

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

Besides, The Act is expected to give a fillip to private participation in rental housing as a business model for addressing the huge housing shortage.

The Model Tenancy Act will provide a model for urban and rural properties, as well as a template for residential and commercial properties.

In case of dispute between landlord and tenant, a rent authority, or a rent court would be available for speedy resolution.

A tenant will have to submit a security deposit of two months for residential premises. For commercial property, a tenant will have to pay six-month rent.

The tenant cannot sublet a part of or the whole property to someone else.

If the tenant fails to vacate the premises on the expiration of the period of tenancy or termination of tenancy, the landlord is entitled to double the monthly rent for two months and four times after that.

the landowner would give a notice in writing three months before revising rent. The landlord cannot hike the rent in the middle of the tenure.

Hence both statements are correct.

Q.24) With reference to the Shanghai Cooperation Organisation, consider the following statements:

- 1. The SCO is a permanent intergovernmental international organisation.
- 2. The SCO Secretariat based in Shanghai.

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

Solution: 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.

The SCO is a permanent intergovernmental international organisation. It is a Eurasian political, economic, and security alliance and has been the primary security pillar of the region.

It was established in 2001. It was preceded by the Shanghai Five mechanism.

The Heads of State Council (HSC) is the supreme decision-making body in the SCO. It meets once a year and adopts decisions and guidelines on all important matters of the organisation.

The organisation has two permanent bodies:

the SCO Secretariat based in Beijing.

the Executive Committee of the Regional Anti-Terrorist Structure (RATS) based in Tashkent.

Membership:

Eight member states: India, Kazakhstan, China, Kyrgyzstan, Pakistan, Russia, Tajikistan, and Uzbekistan.

Four observer states: Afghanistan, Belarus, Iran and Mongolia.

Hence only statement 1 is correct.

Q.25) Recently seen in news, India Cycles4Change challenge was launched under:

a) Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

b) Smart Cities Mission

- c) National Electric Mobility Mission Plan (NEMMP) 2020
- d) None of the above

Solution: The India Cycles4Change challenge is beginning to gain momentum in Indian cities.

The challenge was launched under the Smart Cities Mission by the Ministry of Housing and Urban Affairs on 25th June, 2020, as a response to the COVID-19 pandemic.

As the COVID-19 pandemic was making inroads across the country, cycling saw a huge rise in demand.

The lockdown restrictions had significantly affected the commuters of public transport, who saw cycling as a personal and COVID-safe alternative for short and medium distance commute.

Moreover, cycling was also seen as a means of staying healthy- physically and mentally by the people who were confined to their homes.

In this backdrop, with the launch of India Cycle4Change challenge, 107 cities registered to be a part of the cycling revolution and 41 cities undertook initiatives vis. surveys, discussions, pop-up cycle lanes, safer neighbourhoods, open street events, cycle rallies, or online campaigns that were aimed at creating a cycle friendly city.

The Smart Cities Mission, in association with Institute for Transport and Development Policy (ITDP) conducted training modules and other capacity building initiatives to guide 107 cities on various cycling initiatives.

Hence, option (b) is the correct answer.

Q.26) With reference to the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme, consider the following statements:

- 1. Government of India has decided to provide separate budget heads for SC and ST categories under MGNREGS from the financial year 2021-22 for wage payment.
- 2. The existing system for wages under the scheme is for only one type that is there is no category wise provision of wage payment.

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

Solution: The Centre has asked the States to split wage payments under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme into separate categories for the Scheduled Castes, the Scheduled Tribes and others from this financial year.

Government of India has decided to provide separate budget heads for SC and ST categories under MGNREGS from the financial year 2021-22 for wage payment.

The existing system for wages under the scheme is for only one type that is there is no category wise provision of wage payment.

Workers' rights advocates said this will complicate the payment system, and expressed fears that it may lead to a reduction in scheme funding.

Hence both statements are correct.

Q.27) An online tracking portal "Bal Swaraj (COVID-Care)" is an initiative of:

- a) Chetna NGO
- b) National Commission for Protection of Child Rights (NCPCR)
- c) Delhi council for child welfare
- d) None of the above

Solution: According to Bal Swaraj Portal, as of May 29, 2021, nearly 10,000 children in the country are in immediate need of care and protection. They include children aged between zero and 17 orphaned or abandoned during the COVID-19 pandemic since March 2020.

The National Commission for Protection of Child Rights (NCPCR) has created an online tracking portal "Bal Swaraj (COVID-Care)"

NCPCR has developed it in furtherance to its function as a monitoring authority under section 109 of the Juvenile Justice Act, 2015 and in view of the growing problem related to children affected by COVID-19

Objective: This portal will do online tracking and real-time monitoring of Childrens who have lost both its parents or either of the parent during COVID-19 and are in need of care and protection under Section 2(14) of the Juvenile Justice Act, 2015.

Working: It will track children affected by COVID-19 right from the production of children before the Child Welfare Committee (CWC) to the restoration of the children to their parent/guardian/relative and its subsequent follow-up. The data will be filled in the portal by the District officers and State officers for each child.

Hence, option (b) is the correct answer.

Q.28) Which of the following statements are correct about Scorpene Class submarine?

1.It is a French submarine inducted in India under project-75.

2.In India it is known as Kalavari class submarine, developed by Mazagaon Dock Limited(MDL)

- 3. These are diesel-electric submarines.
- 4. INS Vela and INS Vagsheer are too Kalavari class submarines

Select the correct answer using the code given below:

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

d) All of the above

Solution: Mumbai, under Project 75, is just 18-24 months from completion. French shipbuilder Naval Group (formerly DCNS), which has supplied the technology under a \$3.25-billion order, is seeking a bigger role in India

Kalavari Class submarine: India's first modern conventional submarine in almost two decades after INS Sindhushastra.

It is based on the Scorpène-class submarine being built for the Indian Navy.

Under Project-75, French company DCNS provides design & technology to PSU Mazagon Docks(Mumbai).

to make six Scorpene submarines(dieselelectric),

the first of which, INS Kalavari was put out for sea trials earlier this year.

The hulls of the other five submarines have been cast, and they are scheduled to be commissioned by 2020.

Other 5 submarines: INS Khanderi, INS Karanj, INS Vela, INS Vagir & INS Vagsheer too are kalavari class submarines.

Q.29) Protected Planet Report 2020, was released by

- a) United Nations Environment Programme (UNEP)
- b) Bombay Natural history Society (BNHS)
- c) World Wide Fund for Nature
- d) United Nations Food and Agriculture Organization (FAO).

Solution: As many as 82 per cent of countries and territories increased their share of protected area and coverage of other effective area-based conservation measures (OECM) since 2010.

This was reported by United Nations Environment Programme (UNEP) and the International Union for the Conservation of Nature (IUCN) May 19, 2021.

The report, titled Protected Planet Report 2020, underlined the progress the world has made toward the ambitious goals agreed by countries in 2010 at the United Nations Convention on Biological Diversity — to conserve 17 per cent of land and inland water ecosystems and 10 per cent of its coastal waters and oceans by 2020, known as Aichi Biodiversity Target 11, a set of 20 targets of the Convention on Biological Diversity.

Q.30) Consider the following statements regarding Growth in Gross Domestic product(GDP) in Agriculture sector in India.

- 1. Agriculture sector showed the highest growth in Financial year 2020-21
- 2. It was the only sector with a positive growth in India.

Which of the above is/are correct statement?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None of the above

Solution: India's Gross Domestic Product (GDP) contracted by 7.3% in 2020-21 worst-ever contraction since Independence, Only two sectors bucked the trend of negative GVA growth —

Agriculture, forestry and fishing, which rose 3.6%, and

Electricity, gas, water supply and other utility services (up 1.9%).

Q.31) Kharg or Khark Island, often mentioned in news, belongs to which of the following country?

- a) Iran
- b) Italy
- c) Saudi Arabia
- d) Thailand

Solution: Kharg, Iran's largest warship caught fire and later sank in the Gulf of Oman near the Strait of Hormuz, a strait between the Persian Gulf and the Gulf of Oman.

The warship Kharg is named after the island that serves as the main oil terminal for Iran.

Kharg or Khark Island is a island in the Persian Gulf belonging to Iran.

Hence, option (a) is the correct answer.

Q.32) NASA's new two missions DAVINCI+ and VERITAS will study which of the planet?

- a) Mars
- b) Mercury
- c) Jupiter
- d) Venus

Solution: NASA has selected two missions to the planet Venus, Earth's nearest neighbour.

The missions are called DAVINCI+ and VERITAS and will be launched between 2028-2030.

DAVINCI+ is short for 'Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging' and is the first US-led mission to the planet's atmosphere since 1978.

It will try to understand Venus' composition to see how the planet formed and evolved.

This mission also consists of a descent sphere that will pass through the planet's thick

atmosphere and make observations and take measurements of noble gases and other elements.

Significantly, this mission will also try to return the first high resolution photographs of a geological feature that is unique to Venus. This feature, which is called "tesserae" may be comparable to Earth's continents. The presence of tesseraes may suggest that Venus has tectonic plates like Earth.

The second mission called VERITAS is short for 'Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy' and will map the planet's surface to determine its geologic history and understand the reasons why it developed so differently from Earth.

Hence, option (d) is the correct answer.

Q.33) With reference to the H10N3 avian influenza, consider the following statements:

- 1. China has reported the world's first case of a human infected with H10N3 avian influenza in its eastern province of Jiangsu.
- 2. It is mostly present in wild avian species.

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

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

Influenza A virus subtype H10N3 is a subtype of viruses that causes influenza (flu). It is mostly present in wild avian species. The first human case was reported in 2021.

H10N3 has been isolated across a wide geographic distribution, including in species

such as domestic poultry (chickens), ducks, other waterfowl, and terrestrial birds.

In animals, the viruses display a complex pathology, with complex reassortments and mutations contributing to pathobiology patterns in chickens, ducks and mice indicative of a possible threat to humans, although H10N3 is usually a less severe strain and is unlikely to cause a significant outbreak.

Hence both statements are correct.

Q.34) With reference to the President of the United Nations General Assembly (UNGA), consider the following statements:

- 1. The President is a position voted for by representatives in the United Nations General Assembly (UNGA) on a yearly basis.
- 2. It is customary that no permanent member of the United Nations Security Council ever serves as UNGA president.
- 3. Vijaya Lakshmi Pandit of India served as the first woman president of UNGA.

Which of the statements given above is/are correct?

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

d) 1, 2 and 3

Solution: India will vote in support of Maldives' Foreign Minister Abdulla Shahid in the election of the President of the UNGA on June 7, a decision which will disappoint Afghanistan, which has former Foreign Minister Zalmai Rassoul in the running.

The President is the chair and presiding officer of the General Assembly.

The President is a position voted for by representatives in the United Nations General Assembly (UNGA) on a yearly basis.

The presidency rotates annually between the five geographic groups: African, Asia-Pacific, Eastern European, Latin American and Caribbean, and Western European and other States.

It is customary that no permanent member of the United Nations Security Council ever serves as UNGA president.

The only countries that had a national elected as President of UNGA twice are Argentina, Chile, Ecuador and Nigeria; all the other member states had been represented only once by their nationals holding this office.

Vijaya Lakshmi Pandit (1900 – 1990) of India served as 8th President of the UNGA in 1953. she was also First woman president of UNGA.

Hence, option (d) is the correct answer.

Q.35) The Trirashmi or Pandav Leni caves are a group of 25 caves that were carved out of Trirashmi Hill between the 2nd century BC and 6th century AD. It is located in:

- a) Srinagar
- b) Surat
- c) Cuttack

d) Nashik

Solution: The Archaeological Survey of India (ASI) has found three more caves in Trirashmi hill in Nashik where the Trirashmi Buddhist caves — also known as Pandav Leni — are located.

The antiquity of the caves is yet to be established; archaeologists studying them, however, believe they could be older than the Trirashmi caves.

These caves may have been dwellings of Buddhist monks.

All the caves have verandahs and the characteristic square stone platform for monks. There are special arrangements for

monks to meditate, similar to the Kanheri and Wai caves.

Trirashmi caves

The Trirashmi or Pandav Leni caves are a group of 25 caves that were carved out of Trirashmi Hill between the 2nd century BC and 6th century AD.

The caves complex was documented in 1823.

It is now an ASI protected site and a tourist destination.

The Buddhist sculptures and caves (in Nashik) are a early example of Indian rock-cut architecture representing the Hinayana tradition of Buddhism.

Hence, option (d) is the correct answer.

Q.36) Which of the following provisions are correct regarding proposed Model Tenancy act.

- 1. Provision of compulsory agreement.
- 2. Time bound resolution on disputes.
- 3. It disallows subletting.
- 4. A digital platform in vernacular language for submitting tenancy agreements.

Select the correct answer using the code given below:

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

d) 1, 2 and 4 only

Solution: Provisions of the bill:

Compulsory Agreement: Where there is no agreement, an agreement has to be reached within a stipulated period and must be informed to the rental authority.

Rental Authority: To keep the record of all existing or new agreements.

Constitution of rent court & Tribunal.

Quick disposal of cases: The rent authority, rent court and rent tribunal would fast-track resolution of disputes within 60 days.

Limit the security Deposit: It will limit security deposits for residential premises to a maximum of two months' rent and to a maximum of six months for non-residential purposes. This has to be refunded within a month of vacation.

Signed Original agreement possession: To be given to the tenant within 15 days of agreement.

Subletting restricted: Only after a written permission from the owner this can be done.

Intimation of renewal: By the owner two months before the renewal of agreement.

Renewal Provisions: The agreement shall be deemed renewed if no new agreement is registered.

Regulatory Provisions: Regulation for Notice for entry of the owner, maintenance and repair of property, role and responsibility of manager, essential supplies like electricity.

A digital platform will be set up in the local vernacular language or the language of the State/Union Territory for submitting tenancy agreement and other documents. Rent Authority will keep a tab on these agreements.

Q.37) Consider the following statements:

- 1. The replacement level of fertility is the number of children needed to replace the parents, after accounting for fatalities.
- 2. In the states of Delhi, Sikkim and Andhra Pradesh, the total fertility rate is below the replacement level.

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

Solution: The replacement level is the number of children needed to replace the parents, after accounting for fatalities, skewed sex ratio, infant mortality, etc. Population starts falling below this level. Hence, statement 1 is correct.

India has done very well with its family planning measures and now it is at replacement level fertility of 2.1, which is desirable.

However, it needs to sustain population stabilisation because in some States like Sikkim, Andhra Pradesh, Delhi, Kerala and Karnataka, the total fertility rate is way below replacement level, which means it can experience in 30-40 years what China is experiencing now. Hence, statement 2 is correct.

Q.38) Which of the following is not the function of the National Commission for Protection of Child Rights (NCPCR)?

- a) Present to the central government an annual report on the safeguards available to the children
- b) Inquire into violation of child rights and recommend initiation of proceedings in such cases
- c) Undertake and promote research in the field of child rights
- d) Deciding the quantum of reservation of seats for children belonging to economically weaker sections in all private unaided schools.

Solution: The National Commission for Protection of Child Rights (NCPCR) is a statutory body established in 2007 under an

act of Parliament, the Commissions for Protection of Child Rights (CPCR) Act, 2005. It functions under the Ministry of Women & Child Development of the central government.

Deciding the quantum of reservation of seats for children belonging to economically weaker sections in all private unaided schools is not its mandate.

The Act that constituted the NCPCR laid down its functions and mandates:

Assess and review the safeguards that are provided for child rights protection in India under existing laws and also suggest measures for implementing them effectively.

Present reports on the workings of the laws in this domain to the central government as and when necessary.

Inquire cases of child rights violations and initiate proceedings.

Study the factors that prevent the enjoyment of rights of children impacted by terrorism, riots, natural calamities, communal violence, trafficking, HIV/AIDS, torture and exploitation, maltreatment, prostitution and pornography, and suggest remedial measures for them.

Enquire into the needs of children requiring special care and protection such as disadvantaged and marginalised children, children in conflict with the law, children of prisoners and children without families, and also recommend remedial measures thereof.

Review current policies with respect to children's rights and protection by studying treaties and international instruments and suggest changes as needed.

Conduct research in the field of child rights.

Advocate child rights and promote/disseminate the idea through mass campaigns, seminars, etc.

Undertake investigation into specific complaints received from children or anyone else on their behalf.

Encourage the incorporation of child rights in school curriculums and train teachers in that respect.

The Commission is also mandated with responsibilities under two other acts, namely:

Protection of Children from Sexual Offences (POCSO) Act, 2012

Right to Education Act, 2009

Q.39) Consider the following statements regarding Organisation for Economic Cooperation and Development (OECD):

- Most OECD members are high-income economies with a very high Human Development Index (HDI)
- 2. It has official UN Observer status
- 3. Financial Action Task Force (FATF) works under administrative control of OECD

Which of the above statements is/are correct?

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

Solution: Statement 1 is correct: Most OECD members are high-income economies with a very high Human Development Index (HDI) and are regarded as developed countries. As of 2017, the OECD member states collectively comprised 62.2% of global nominal GDP (US\$49.6 trillion) and 42.8% of global GDP (Int\$54.2 trillion) at purchasing power parity

Statement 2 is correct: The OECD is an official United Nations observer.

Statement 3 is incorrect: FATF & OECD are two separate organizations. They are not related to each other.

The OECD's Committee on Fiscal Affairs (CFA) has been working with the FATF since 1998 to improve international and domestic cooperation between tax and anti-money laundering authorities as a way of enhancing governments' ability to combat these activities.

Q.40) Consider the following statements regarding Nano Liquid Urea

- Indian Farmers Fertiliser Cooperative
 Limited (IFFCO) has launched the world's first
 Nano Urea Liquid
- 2. It can curtail the requirement of normal urea by at least 50%

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Recently, IFFCO has launched the world's first Nano Urea Liquid.

Nano Urea Liquid is a nutrient to provide nitrogen to plants as an alternative to conventional urea.

Developed by: Nano Urea Liquid has been developed indigenously through proprietary technology at IFFCO"s Nano Biotechnology Research Centre(NBRC) in Gujarat.

Nano Liquid Urea can curtail the requirement of urea by at least 50%. This will in turn reduce India's dependence on urea imports.

The conventional urea is 30-40% effective in delivering nitrogen to plants while the

effectiveness of the Nano Urea Liquid is over 80%.

Q.41) What is SPAG9, which was currently in news?

- a) Protein used for fighting against delta variant of COVID-19.
- b) New gene used in BT cotton
- *c) India's First Indigenous Tumour Antigen.
- d) New asteroid in Kuiper belt.

Solution: India's first indigenous tumour antigen SPAG9 was discovered by Dr Anil Suri in 1998 who is heading the Cancer Research Program at NII.

In a recent development, the SPAG9 antigen has received the trademark ASPAGNIITM. Currently, ASPAGNIITM is being used in dendritic cell (DC) based immunotherapy in cervical, ovarian cancer and will also be used in breast cancer.

Q.42) Consider following statements about INS SANDHYAK, which was recently decommissioned.

- 1. It was Destroyer of the Talwar class.
- 2. It was purchased from USSR in 1666 by Indian Government.
- 3. The ship has also been an active participant in many significant operations such as Op Pawan, Op Sarong etc.

Correct statements is/are:

- a) 1 and 2
- b) 2 and 3
- c) 3 only
- d) All of the above

Solution: Hydrographic survey ship INS Sandhayak, the first of its class indigenously

designed and built, was decommissioned after 40 years of service.

The ship was conceptualised by the then Chief Hydrographer to the Government of India, Rear Adm FL Fraser, who had a strong desire for indigenously designed and built hydrographic survey vessels in India, the Navy said.

The ship has also been an active participant in many significant operations such as Op Pawan (assisting the Indian Peace Keeping Force in Sri Lanka in 1987), Op Sarong, and Op Rainbow (rendering humanitarian assistance post 2004 Tsunami) and participated in the maiden joint Indo-US HADR Exercise 'Tiger-Triumph'.

Q.43) Consider following statements about cryptocurrency.

- 1. Cryptocurrencies work using a technology called blockchain.
- 2. Cryptocurrency mining is the process in which transactions between users are verified and added to the blockchain public ledger.
- 3. RBI is sceptical of such instrument and have 'major concerns' on the volatile instruments.

Correct statements is/are

- a) All of the above
- b) 1 and 2
- c) 1 and 3
- d) 2 and 3

Solution: All the statements are correct.

Q.44) Identify the correct purpose behind issuing the government securities?

a) To finance the government expenditure and managing cash mismatch of the government

- b) To decrease the fiscal deficit of government
- c) To improve cash flow in market
- d) None of the Above

Solution: To finance the government expenditure and managing cash mismatch of the government. Government securities are usually issued to raise funds for government expenditures.

Q.45) The Kedarnath Singh case, 1962 is in the news. It is related to:

- a) Section 124A of the IPC
- b) Section 377 of the IPC
- c) Article 14
- d) Article 370

Solution: The Supreme Court quashed case of sedition filed against a journalist for allegedly making remarks against the Prime Minister. The court also reiterated the principles in the landmark case on sedition — Kedar Nath Singh v Union of India (1962).

Section 124A of the IPC defines sedition. It makes some kinds of speech or expression a criminal offence punishable with a maximum sentence of life imprisonment.

The Kedar Nath Singh guidelines

In the landmark 1962 Kedar Nath Singh case, the Supreme Court upheld the constitutional validity of the sedition law.

The court held that unless accompanied by an incitement or call for violence, criticism of the government cannot be labelled sedition.

Seven principles in the Kedar Nath Singh ruling specify situations in which the charge of sedition cannot be applied.

The expression "the Government established by law' has to be distinguished from the persons for the time being engaged in carrying on the administration. 'Government established by law' is the visible symbol of the State.

The very existence of the State will be in jeopardy if the Government established by law is subverted."

"Any acts within the meaning of Section 124-A which have the effect of subverting the Government by bringing that Government into contempt or hatred, or creating disaffection against it, would be within the penal statute because the feeling of disloyalty to the Government established by law or enmity to it imports the idea of tendency to public disorder by the use of actual violence or incitement to violence."

Genuine criticism and excitement of violence: "A citizen has a right to say or write whatever he likes about the Government.

Condition: But he should not incite people to violence against the Government established by law or with the intention of creating public disorder."

Creating disorder/ disturbing public peace: If the words, written or spoken can create public disorder or disturbance of law and order then the sedition law will be applicable.

Limiting the use of law: Only activities involving incitement to violence or intention or tendency to create public disorder or cause disturbance of public peace comes under the ambit of Sedition law."

Q.46) With reference to the SDG India Index and Dashboard 2020–21, consider the following statements:

- 1. India saw significant improvement in the SDGs related to clean energy, urban development, Health, eradication of poverty and hunger in 2020.
- 2. Among states, Sikkim retained its position at the top of the rankings in the third edition of the index.

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

Solution: The third edition of the SDG India Index and Dashboard 2020–21 was released by NITI Aayog. NITI Aayog Vice Chairperson Dr Rajiv Kumar launched the report titled, SDG India Index and Dashboard 2020–21: Partnerships in the Decade of Action.

The country's overall SDG score improved by 6 points—from 60 in 2019 to 66 in 2020–21.

This improvement is largely driven by exemplary country-wide performance in Goal 6 (Clean Water and Sanitation) and Goal 7 (Affordable and Clean Energy), where the composite Goal scores are 83 and 92, respectively.

India saw significant improvement in the SDGs related to clean energy, urban development, Health, eradication of poverty and hunger in 2020.

However, there has been a major decline in the areas of industry, innovation and infrastructure as well as decent work and economic growth. The country's score on the SDG related to industry and infrastructure dropped 10 points to 55, while the scores on decent work dropped three points to 61.

The Clean Water and Sanitation SDG also saw a five-point drop.

States rankings

Currently, there are no states in the aspirant and achiever category; 15 states/UTs are in the performer category and 22 states/UTs in the front runner category.

Among states, Kerala retained its position at the top of the rankings in the third edition of the index, with a score of 75, followed by Tamil Nadu and Himachal Pradesh, both scoring 72. At the other end of the scale, Bihar, Jharkhand and Assam were the worst performing States.

Chandigarh maintained its top spot among the UTs with a score of 79, followed by Delhi (68).

Mizoram, Haryana, and Uttarakhand are the top gainers in 2020–21 in terms of improvement in score from 2019, with an increase of 12, 10 and 8 points, respectively.

Hence only statement 1 is correct.

Q.47) With reference to the operation Sagar Aaraksha-II, consider the following statements:

- 1. Sagar Aaraksha-II was a coordinated joint operation between India and Sri Lanka to rescue fisherman from the fury of Cyclone Tauktae
- 2. The Indian Coast Guard is an active member of South Asia Co-operative Environment Programme (SACEP).

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

Solution: Indian Coast Guard (ICG), in coordination with Sri Lankan authorities, has been tirelessly engaged in fighting a major fire onboard the Chemical laden container vessel MV X-Press Pearl anchored off Colombo since 25 May 2021.

The coordinated joint operation between India and Sri Lanka undertaken to respond to potential environmental danger has been christened as Sagar Aaraksha-II.

Indian Coast Guard ships, including the specialised pollution response vessel Samudra Prahari and offshore patrol vessel Vajra are standby in vicinity to respond to the developing situation.

The ICG being an active member of South Asia Co-operative Environment Programme (SACEP) remains committed to its responsibility of safeguarding of the ocean environment in the region.

International Maritime Dangerous Goods (IMDG)

The vessel when caught with fire was carrying 1486 containers containing chemical cargo classified as International Maritime Dangerous Goods (IMDG).

Among other chemicals, the IMDG cargo consisted of highly inflammable Nitric Acid, Methanol, Methyl Acetate, Sodium Hydroxide and Polystyrene beads.

Hence only statement 2 is correct.

Q.48) SAGE (Seniorcare Aging Growth Engine) initiative and SAGE portal to support India's elderly persons, recently seen in news, is an initiative of:

- a) NITI Aayog
- b) Union Ministry of social Justice and Empowerment
- c) HelpAge India
- d) None of the above

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

The SAGE portal will be a "one-stop access" of elderly care products and services by credible start-ups.

The SAGE portal will be opened for applications from 5th June, 2021 onwards.

The start-ups selected under SAGE will be those which will provide new innovative products and services to elderly persons in various areas like health, travel, finance, legal, housing, food among others.

The SAGE portal has been prepared and finalised in record time by Mr. Chandrasekhar Buddha, CEO, NEAT, M/o Education along with Dr. Elengovan, Assistant Innovation Director, M/o Education.

The Ministry of Social Justice & Empowerment will act as a facilitator for this scheme.

A fund of uptoRs.1 crore as one-time equity will be granted to each selected start-up.

An amount of Rs 100 crore has been assigned for the promotion of the silver economy.

An allocation of Rs 25 crores has been made for the SAGE project in the current financial year i.e 2021-22.

Statistics

India's elderly population is on the rise, and as per surveys, the share of elders, as a percentage of the total population in the country, is expected to increase from around 7.5% in 2001 to almost 12.5% by 2026, and surpass 19.5% by 2050.

Accordingly, there is an urgent need to create a more robust elder care ecosystem in India

Earlier a Senior Citizen Welfare Fund was started in 2016.

Hence, option (b) is the correct answer.

Q.49) Anoop Satpathy committee, recently seen in news, is related to:

- a) Privatization of Banks
- b) Minimum Wages and National Floor Minimum Wages

- c) Data Privacy
- d) None of the above

Solution: The Ministry of Labour & Employment has constituted the Expert Group to provide recommendations to the government on fixation of Minimum Wages and National Floor Minimum Wages.

The Group has been constituted for a period of three years from the date of notification.

The Expert Group is chaired by Prof Ajit Mishra, Director, Institute of Economic Growth.

Present status

The current floor wage, which was fixed in 2017, is at Rs 176 a day, but some states have minimum wages lower than it.

Under the Code on Wages, which is yet to be enforced, a National Floor Level Minimum Wage will be set by the Centre to be revised every five years, while states will fix minimum wages for their regions, which cannot be lower than the floor wage.

Anoop Satpathy committee

This is the second expert committee on minimum wages formed by the government within the last two years.

The earlier panel, headed by Anoop Satpathy, Fellow, VV Giri National Labour Institute, was set up by the ministry on January 17, 2018, to determine methodology for fixing national minimum wage.

The recommendations, which weren't accepted by the Centre, included setting the national floor wage at Rs 375 per day (Rs 9,750 per month) as per July 2018 prices.

Q.50) Consider the following statements regarding Sustainable Development Goals India Index, seen recently in news:

- 1. It is launched by NITI Aayog.
- 2. It is developed in collaboration with the World Bank.
- 3. Only Achiever Category State is Kerala.

Which of the above statements is/are correct?

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

Solution: Sustainable Development Goals India Index is designed and developed by NITI Aayog. It was first launched in 2018. The preparation of the index followed extensive consultations with the primary stakeholders i.e. the States and Union Territories, the UN agencies in India, Ministry of Statistics and Programme Implementation (MoSPI), and the key Union Ministries.

The States and Union Territories are classified as below based on their SDG India Index score:

Aspirant: 0-49

Performer: 50-64

Front-Runner: 65-99

Achiever: 100

Key Highlights of SDG India Index 2020-21:

The country's overall SDG score has improved by 6 points i.e. from 60 in 2019 to 66 in 2020–21.

Mizoram, Haryana, and Uttarakhand are the top gainers in 2020–21in terms of improvement in score from 2019, with an increase of 12, 10 and 8 points, respectively.

There are no states in Achiever Category.

Kerala has retained the top rank in Niti Aayog's SDG India Index 2020-21, while Bihar has been adjudged as the worst performer. Both Himachal Pradesh and Tamil Nadu took the second spot with a score of 74.

Bihar, Jharkhand and Assam were the worst performing states in this year's India index.

Q.51) Kedar Nath Singh v. State of Bihar (1962) case is related to:

- a) Sedition
- b) Domestic violence
- c) Trafficking
- d) Unnatural offences

Solution: The Supreme Court quashed case of sedition filed against journalist Vinod Dua for allegedly making remarks against Prime Minister Narendra Modi and the government's handling of the migrant crisis during the Covid-19 lockdown last year.

Section 124A of the IPC penalises sedition as punishable with either imprisonment ranging from three years to a lifetime, a fine, or both.

The Supreme Court shielded Dua from arrest earlier and the case itself was quashed recently by a two-judge bench comprising Justice U U Lalit and Justice Vineet Saran.

It held that his remarks constituted genuine criticism of the government and could not be labelled seditious. In doing so, the court also reiterated the principles in the landmark case on sedition — Kedar Nath Singh v Union of India (1962).

Kedar Nath Singh v. State of Bihar (1962)

In the landmark 1962 Kedar Nath Singh case, the Supreme Court upheld the constitutional validity of the sedition law, but it also attempted to restrict its scope for misuse.

The court held that unless accompanied by an incitement or call for violence, criticism of the government cannot be labelled sedition.

"Strong words" of disapproval about the ruling regime did not amount to sedition.

Hence, option (a) is the correct answer.

Q.52) What is Variant Delta (B.1.617.2), recently seen in news?

a) Most pervasive variant of the coronavirus in India

- b) India's first indigenous mRNA vaccine
- c) A study to determine the DNA sequence of the entire human genome
- d) None of the above

Solution: Variant Delta (B.1.617.2), the most pervasive variant of the coronavirus in India, constituted nearly three in four breakthrough infections in Delhi, according to a research.

Breakthrough infections are instances of people testing positive for the virus after getting vaccinated.

The study also reports a new mutation in Delta called T478K that the scientists believe has a role to play in allowing the coronavirus to better infiltrate human cells.

Alpha variant

However international variant Alpha, that in previous studies has been associated with a spike in cases in Delhi in February and March was absent in vaccination breakthrough-cases analysed.

Previous studies had shown that the farmer protests and religious gatherings had contributed to amplifying the Alpha variant in North India. The latter variant has now been outcompeted by the Delta.

Hence, option (a) is the correct answer.

Q.53) With reference to the Central Vigilance Commission (CVC), consider the following statements:

- 1. It is an investigating agency
- 2. The commission members shall be appointed by the President of India on recommendation of a Committee consisting of the Prime Minister (Chairperson) and the Speaker of Lok Sabha.

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

Solution: The Central Vigilance Commission (CVC) has laid down a defined procedure to be followed by government organisations for getting vigilance clearance before employing a 'retired' official on a contractual or consultancy basis.

Before offering employment to retired All India Services and Group A officers of the Central government or their equivalent in other organisations owned or controlled by the Centre, vigilance clearance from the employer organisation, from which the officer has retired, should be obtained.

In case a retired officer served in more than one organisation, clearance has to be obtained from all of them where the person was posted in the 10 years prior to retirement.

Simultaneously, a communication seeking clearance should also be sent to the CVC.

If no reply is received from the erstwhile employer (s) within 21 days of sending the communication by speed post, vigilance clearance should be deemed to have been given. Later, if the employee is found involved in any vigilance-related matter or not cleared from the vigilance point of view, the erstwhile employer organisation would be responsible for all consequential actions.

Central Vigilance Commission (CVC)

Mandate:

it is an apex Indian governmental statutory body to address governmental corruption.

The CVC is not an investigating agency: the only investigation carried out by the CVC is that of examining Civil Works of the Government.

History:

it was set up by the Government in 1964 on the recommendations of the Committee on Prevention of Corruption, headed by Shri K. Santhanam.

Consequent upon promulgation of an Ordinance by the President, the CVC has been made a multi member Commission with "statutory status" with effect from 25th August,1998.

Later on the Central Vigilance Commission Act 2003 was enacted which governs it.

The Commission shall consist of -

A Central Vigilance Commissioner - Chairperson;

Not more than two Vigilance Commissioners - Members:

Nittoor Srinivasa Rau, was selected as the first Chief Vigilance Commissioner of India.

Appointment: The commission members shall be appointed by the President of India on recommendation of a Committee consisting of the Prime Minister (Chairperson), the Minister of home affairs (Member) and the Leader of the Opposition in Lok Sabha.

Hence both statements are incorrect

Q.54) With reference to the Citizenship (Amendment) Act, 2019 (CAA), consider the following statements:

- 1. Migrants belonging to six non-Muslim minority communities from Pakistan, Afghanistan and Bangladesh who came to India on long term visa (LTV) before 2014 are eligible to apply online for citizenship under the Citizenship Act, 1955 from any part of the country.
- 2. For foreigners of non-Indian origin, a longer-term visa is classed as one that permits the holder to stay in India for longer than 180 days (six months) continuously.

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

Solution: Migrants belonging to six non-Muslim minority communities from Pakistan, Afghanistan and Bangladesh who came to India on long term visa (LTV) before 2014 are eligible to apply online for citizenship under the Citizenship Act, 1955 from any part of the country, Home Ministry said.

The six communities are Hindus, Christians, Sikhs, Jains, Buddhists and Parsis.

Citizenship is a Home Ministry subject but it can delegate powers to States for specific objective.

Citizenship (Amendment) Act, 2019 (CAA)

The official asserted that this particular awareness drive was not related to the Citizenship (Amendment) Act, 2019 (CAA) that is intended to benefit undocumented (illegal migrants) from the six persecuted communities who entered India before December 31, 2014.

The CAA is yet to come into force as the rules that govern the law have not been notified by the Ministry yet.

Long term visa (LTV)

For foreigners of non-Indian origin, a longerterm visa is classed as one that permits the holder to stay in India for longer than 180 days (six months) continuously.

The main visas that provide this are the Employment, Entry and Student visas.

Hence both statements are correct.

Q.55) Consider the following statements about the Education Ministry's Performance Grading Index.

- 1. Set of 70 parameters to catalyze transformational change in the field of school and higher education.
- 2. The index monitors the progress that the States and Union Territories have made in school education with regard to learning outcomes, access and equity, infrastructure and facilities, and governance and management processes.
- 3. Punjab, Tamil Nadu, and Kerala have all scored higher than 90% in the Education Ministry's Performance Grading Index for 2019-20

Correct statements is/are

a) 1 and 2 only

b) 2 and 3 only

- c) 1 and 3 only
- d) All of the above

Solution:

- Set of 70 parameters to catalyze transformational change in the field of school education.
- Punjab, Tamil Nadu, and Kerala have all scored higher than 90% in the Education

Ministry's Performance Grading Index for 2019-20.

- Gujarat dropped from second to the eighth rank in the index, while Madhya Pradesh and Chhattisgarh are the only States which have seen actual regression in scores over this period.
- The index monitors the progress that the States and Union Territories have made in school education with regard to learning outcomes, access and equity, infrastructure and facilities, and governance and management processes.

Q.56) Consider the following statements about labor code 2020.

- 1. Four labor codes will rationalize 44 Central labor laws.
- Labour is on the state List of the Constitution.
- 3. Once the wages code comes into force, there will be significant changes in the way basic pay and the provident fund of employees are calculated.

Correct statements is/are

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

Solution:

- Once the wages code comes into force, there will be significant changes in the way basic pay and the provident fund of employees are calculated.
- These four labour codes will rationalise 44 Central labour laws.
- Labour is on the Concurrent List of the Constitution.

- Under the new wages code, allowances are capped at 50%. This means half of the gross pay of an employee would be basic wages. Provident fund contribution is calculated as a percentage of the basic wage.

Q.57) Consider the following statements regarding Indian Navy's 30 year Submarine Plan:

- 1. The Plan includes indigenous construction of 24 conventional submarines by 2030.
- 2. Project 75 (I) and Project 75 are the parts of this plan.
- 3. INS Arihant and INS Arighat are nuclear powered submarines commissioned under this Plan.

Which of the statements given above is/are correct?

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

d) 1, 2 and 3

Solution: The Cabinet Committee on Security, in June 1999, had approved a 30-year submarine-building plan which included construction of 24 conventional submarines indigenously by 2030. Hence, statement 1 is correct.

Project 75 (I), approved in 2007, is part of the Indian Navy's 30 year Plan for indigenous submarine construction.

P75I succeeded the Project-75 (P75) under which six diesel-electric attack submarines of the Kalvari class, based on the Scorpene class, were being built at MDL (Mazagon Dock Limited) – the third submarine, INS Karanj, was commissioned in March 2021. Hence, statement 2 is correct.

Out of the total 24 submarines to be built in India, six will be nuclear-powered.

India has only one nuclear submarine, INS Arihant, at the moment. The INS Arighat, also a nuclear-powered ballistic missile submarine, is to be commissioned soon. Hence, statement 3 is correct.

INS Chakra, a nuclear submarine, which is taken on lease from Russia, is believed to be on its way back to the country of origin.

Q.58) NASA announced missions Davinci+ and Veritas for exploration of which of the following planets?

- a) Mercury
- b) Jupiter
- c) Mars

d) Venus

Solution: NASA has announced two new missions to Venus. These two sister missions both aim to understand how Venus became an inferno-like world, capable of melting lead at the surface. These include:

Davinci+ (Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging) mission will:

Measure the planet's atmosphere to gain insight into how it formed and evolved.

Determine whether Venus ever had an ocean.

Return the first high resolution images of the planet's "tesserae" geological features (These features could be comparable to continents on Earth).

Veritas (Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy):

This mission will map the planet's surface to understand its geological history and investigate how it developed so differently than Earth.

It will use a form of radar to chart surface elevations and discover whether volcanoes and earthquakes are still happening.

Q.59) Consider the following statements regarding GeM, seen recently in news:

- 1. It is a national portal to facilitate online procurement of common use goods and services.
- 2. It operates under the Ministry of Consumer Affairs.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: GeM is a one-stop National Public Procurement Portal to facilitate online procurement of common use Goods and Services required by various Central and State Government Departments/ Organizations/ Public Sector Undertakings (PSUs).

It operates under the Ministry of Commerce and Industry.

The procurement of goods and services by Ministries and the Central Public Sector Enterprises (CPSEs) is mandatory for goods and services available on GeM.

It also provides the tool of e-bidding and reverse e-auction to facilitate the government users achieve the best value for their money.

Q.60) With reference to the H10N3 avian influenza, consider the following statements:

- 1. China has reported the world's first case of a human infected with H10N3 avian influenza in its eastern province of Jiangsu.
- 2. It is mostly present in wild avian species.

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

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

Influenza A virus subtype H10N3 is a subtype of viruses that causes influenza (flu). It is mostly present in wild avian species. The first human case was reported in 2021.

H10N3 has been isolated across a wide geographic distribution, including in species such as domestic poultry (chickens), ducks, other waterfowl, and terrestrial birds.

In animals, the viruses display a complex pathology, with complex reassortments and mutations contributing to pathobiology patterns in chickens, ducks and mice indicative of a possible threat to humans, although H10N3 is usually a less severe strain and is unlikely to cause a significant outbreak.

Hence both statements are correct.

Q.61) With reference to the Fugitive Economic Offenders Bill, 2018, consider the following statements:

1. Fugitive economic offender (FEO) is defined as an individual who has committed a scheduled offence (economic offences contained in the Schedule to this Bill) or

offences involving an amount of 10 crore rupees or more.

2. It proposes to establish a special court under the Prevention of Money-laundering Act, 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

Solution: Union Minister Dr Jitendra Singh addressed the Special Session of the UN General Assembly on international cooperation to combat the challenge of Fugitive Economic Offenders and Assets.

Fugitive Economic Offenders Bill, 2018

The bill was passed by both the houses of Parliament in 2018 after the Nirav Modi–PNB fraud worth more than ₹12,000 crore and Vijay Mallya having fled the country to avoid being arrested for economic fraud.

Objective:

To deter economic offenders from evading the process of Indian law by remaining outside the jurisdiction of Indian courts,

To ensure that fugitive economic offenders return to India to face the action in accordance with law.

Salient features of the Bill:

Defining Fugitive economic offender (FEO): FEO is defined as an individual

who has committed a scheduled offence (economic offences contained in the Schedule to this Bill) or offences involving an amount of 100 crore rupees or more and

has absconded from India or refused to come back to India to avoid or face criminal prosecution in India.

Special Court:

It proposes to establish a special court under the Prevention of Money-laundering Act, 2002.

It will be able to declare an alleged fraudster a fugitive economic offender.

Application:

A director or deputy director (appointed under the Prevention of Money-Laundering Act, 2002) may file an application before a special court (designated under the 2002 Act) to declare a person as a fugitive economic offender.

Upon receiving an application, the special court will issue a notice to the individual requiring him/her to appear at a specified place within six weeks

If the person appears at the specified place, the special court will terminate its proceedings under the provisions of this Bill.

Failure to appear will result in him being declared a fugitive economic offender.

Attachment of property:

Director or deputy director may confiscate properties with the permission of a special court which: (i) are proceeds of crime, (ii) are benami properties in India or abroad, and (iii) any other property in India or abroad.

Further, these authorities may provisionally attach any property without the prior permission of the special court, provided that they file an application before the court within 30 days.

Appeal: Appeals against the orders of the special court will lie before the High Court.

Can the offender file a civil claim? No. Section 11 of the Act disqualifies those declared as offenders from either filing or defending a civil claim in court.

Hence only statement 2 is correct.

Q.62) With reference to the corporate tax deal by G7 countries, consider the following statements:

- 1. The first decision that has been ratified is to force multinationals to pay taxes where they operate so as to counter tax avoidance.
- 2. The second decision in the agreement commits states to a global minimum corporate tax rate of 15% to counter the possibility of countries undercutting each other to attract investments.

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

Solution: Advanced economies making up the G7 grouping have reached a "historic" deal on taxing multinational companies. The deal announced involving the US, the UK, Germany, France, Canada, Italy and Japan, is likely to be put before a G20 meeting in July.

The first decision that has been ratified is to force multinationals to pay taxes where they operate so as to counter tax avoidance.

The second decision in the agreement commits states to a global minimum corporate tax rate of 15% to counter the possibility of countries undercutting each other to attract investments.

Suggestions by USA

The decision to ratify a 15% floor rate follows from a declaration of war on low-tax jurisdictions around the globe announced by US Treasury Secretary Janet Yellen in April 2021, who had urged the world's 20 advanced nations to move in the direction of adopting a minimum global corporate income tax in April.

She that the move to put a minimum rate in place attempted to reverse a "30-year race to

the bottom" in which countries have resorted to slashing corporate tax rates to attract multinational corporations.

The US proposal had proposed a higher 21 per cent minimum corporate tax rate, coupled with cancelling exemptions on income from countries that do not legislate a minimum tax to discourage the shifting of multinational operations and profits overseas.

Hence both statements are correct.

Q.63) consider following statements about Draft Rules for live-streaming of court proceedings.

- 1. It propose a 10-minute delay in transmission and exclusion of all cases and matters.
- 2. The Rules would cover live-streaming and recording of proceedings in High Courts and supreme courts only.
- 3. right to access live court proceedings is a fundamental right.

Correct statements is/are

- a) 1 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) All of the above.

Solution: Justice Chandrachud said the right of access to justice, guaranteed under Article 21 of the Constitution, "encompasses the right to access live court proceedings".

Matrimonial matters, cases under the Protection of Children from Sexual Offences Act (POCSO) and under the Juvenile Justice (Care and Protection of Children) Act would also be exempted from livestream.

The Rules would cover live-streaming and recording of proceedings in High Courts, lower courts and tribunals.

Q.64) Bhagwan Birsa Biological Park, was recently in news due to infection of COVID-19 to wild animals, is located at

a) Chhattisgarh

b) Jharkhand

- c) Madhya Pradesh
- d) West Bengal

Solution: Neela, 9, a lioness at Chennai's Vandalur Zoo, died of suspected coronavirus infection last week, having suffered nasal discharge the previous day.

A 10-year-old tiger died at Ranchi's Bhagwan Birsa Biological Park after suffering from fever, zoo sources said.

Q.65) Consider following statements.

- 1. India has more numbers of landowners and cultivators than farm labourers.
- 2. In the recent time, the largest number of farmers' protests have taken place in Odisha, Andhra Pradesh and Telangana than Haryana and Punjab.

Correct statements is/ are

a) 1 only

b) 2 only

- c) 1 and 2
- d) None of the above

Solution: Apart from the three contentious Central farm laws, procurement and agricultural market price-related failures have contributed to a fivefold increase in major farmers' protests since 2017, according to data collated by the Centre for Science and Environment (CSE).

Although Punjab and Haryana farmers have caught the limelight for the recent protests outside Delhi, data shows that the largest

number of recent protests have taken place in Odisha, Andhra Pradesh and Telangana.

The report notes that India now has more farm labourers than landowning farmers and cultivators. This is true in 52% of the country's districts, as well as in all districts of Bihar and Kerala.

Q.66) Consider the following statements regarding Performance Grading Index, seen recently in news:

- 1. It is a tool to provide insights on the status of school education in India.
- 2. It also ranks the performance of teachers in the school.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: The Performance Grading Index (PGI) is a tool to provide insights on the status of school education in States and UTs including key levers that drive their performance and critical areas for improvement. Department of School Education and Literacy (DoSEL) has designed the PGI to catalyse transformational change in the field of school education.

The Government has introduced the Performance Grading Index with a set of 70 parameters to catalyse transformational change in the field of school education.

Latest report released for the year 2019-20. The highlights of the report are:

Punjab, Chandigarh, Tamil Nadu, Andaman & Nicobar Islands and Kerala occupy the highest grade (Grade A++) for 2019-20.

Most of the States/UTs have improved their grade in PGI 2019-20 compared to the earlier years.

As many as thirteen States and UTs have shown improvement by 10% (15 points) or more in the PGI domain: Infrastructure and Facilities.

Andaman & Nicobar Islands and Odisha have shown improvement by 20% or more.

Arunachal Pradesh, Manipur and Odisha have shown more than 10% improvement in the PGI domain: Equity.

Q.67) Which of the following international groupings decided to levy Global Minimum Corporate Tax on Multinational Companies?

- a) G4
- b) G77
- c) G20

d) G7

Solution: Advanced economies making up the G7 grouping have reached a "historic" deal on taxing multinational companies.

The Group of Seven nations have backed a minimum global corporation tax rate of at least 15%.

They also seek to put in place measures to ensure that taxes are paid in the countries where businesses operate based on the principle of 'Significant Economic Presence'.

The global minimum tax rate would apply to overseas profits of a multinational.

The envisaged framework allows individual governments to set whatever local corporate tax rate 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.

Q.68) YounTab scheme was seen in the news recently. In which of the following is the objective of the scheme?

- a) It is a scheme that provides access to all elderly care products and services developed by startups
- b) It is a scheme for government doctors in Kerala to access patients previous history digitally
- c) It is the scheme for students in Ladakh to encourage digital learning and bridge the digital divide.
- d) It is an Author Mentorship scheme that aims to mentor authors under the age of 30.

Solution: Ladakh Lt Governor has launched the YounTab scheme for students in the Union Territory to encourage digital learning.

Objective: YounTab scheme formulated to encourage digital learning, bridge the digital divide and mitigate the Covid pandemic disruptions.

Mobile tablets has been distributed to the students of 9 to 12 class as part of the first phase of the YounTab Scheme. A total of 12 thousand 300 students of 6th to 12th class from government schools will benefit from the scheme.

Q.9) Consider the following statements regarding Low Earth Orbit (LEO) satellites.

- 1. LEO satellites are positioned around 500km-2000km from earth, compared to stationary orbit satellites which are approximately 36,000km away.
- 2. They are able to provide stronger signals and faster speeds than traditional fixed-satellite systems.

3. Internet connectivity through Low Earth Orbit (LEO) satellites are cost effective compared to fibre-optic internet.

Which of the above statements is/are correct?

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

Solution: LEO satellites have been orbiting the planet since the 1990s, providing companies and individuals with various communication services. LEO satellites are positioned around 500km-2000km from earth, compared to stationary orbit satellites which are approximately 36,000km away. Latency, or the time needed for data to be sent and received, is contingent on proximity. As LEO satellites orbit closer to the earth, they are able to provide stronger signals and faster speeds than traditional fixed-satellite systems. Additionally, because signals travel faster through space than through fibre-optic cables, they also have the potential to rival if not exceed existing ground-based networks.

However, LEO satellites travel at a speed of 27,000 kph and complete a full circuit of the planet in 90-120 minutes. As a result, individual satellites can only make direct contact with a land transmitter for a short period of time thus requiring massive LEO satellite fleets and consequently, a significant capital investment. Due to these costs, of the three mediums of Internet – fibre, spectrum and satellite – the latter is the most expensive.

Q.70) Consider the following statements regarding Special 301 Report.

1. It is prepared annually by WTO.

- 2. The Report includes a list of "Priority Foreign Countries" that have inadequate intellectual property laws.
- 3. Those countries listed under "Priority Foreign Countries" may be subjected to trade sanctions.
- 4. India has never been listed under "Priority Foreign Countries".

Which of the above statements is/are correct?

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

Solution: Special 301 report is prepared annually by the Office of the United States Trade Representative (USTR) that identifies trade barriers to United States companies and products due to the intellectual property laws, such as copyright, patents and trademarks, in other countries.

It is published pursuant to Section 301 of the Trade Act of 1974.

The Report includes a list of "Priority Foreign Countries", that are judged to have inadequate intellectual property laws; these countries may be subject to sanctions.

In addition, the report contains a "Priority Watch List" and a "Watch List", containing countries whose intellectual property regimes are deemed of concern.

Observations made about India in the latest report:

India continues to be on the 'Priority Watch List' for lack of adequate intellectual property (IP) rights protection and enforcement.

Q.71) Which of the following is highest peak in Aravalli Range?

- a) Guru Shikhar
- b) Kamet
- c) Trisul
- d) Anamudi

Solution: The Supreme Court ordered the Haryana government and the Faridabad Municipal Corporation to take "all essential measures" to remove encroachments, including about 10,000 residential constructions, in the ecologically fragile Aravali forest land near Lakarpur Khori village.

The Aravalli Range (also spelled Aravali) is a mountain range in Northwestern India.

It runs approximately 670 km (430 mi) in a south-west direction, starting near Delhi, passing through southern Haryana and Rajasthan, and ending in Gujarat.

The highest peak is Guru Shikhar at 1,722 metres (5,650 ft). Guru Shikhar is a peak in the Arbuda Mountains of Rajasthan. It is 15 km from Mount Abu.

Three major rivers and their tributaries flow from the Aravalli, namely Banas and Sahibi rivers which are tributaries of Yamuna, as well as Luni River which flows into the Rann of Kutch.

Hence, option (a) is the correct answer.

Q.72) What is INS Sandhayak, recently seen in news?

- a) Indian Navy's oldest Hydrographic Survey Vessel
- b) Nuclear-powered submarine
- c) Stealth destroyer
- d) Nuclear powered icebreaker

Solution: INS Sandhayak, the Indian Navy's oldest Hydrographic Survey Vessel was decommissioned at Naval Dockyard in Visakhapatnam after serving the nation for 40 glorious years.

INS Sandhayak undertook over 200 major hydrographic surveys.

The ship also took part in important operations like

Op Pawan in Sri Lanka, 1987,

Op Rainbow for Humanitarian Assistance in the aftermath of the Tsunami in 2004 and

the maiden Indo-US HADR Exercise Tiger-Triumph in 2019.

The Sandhayak-class survey ships are a series of eight vessels built by Garden Reach Shipbuilders and Engineers (GRSE), Kolkata and Goa Shipyard, Ltd., Vasco for the Indian Navy.

Hence, option (a) is the correct answer.

Q.73) Ratle Hydoelectric Project, recently seen in news, is a run of river scheme located on which of the following river?

- a) Chenab
- b) Ravi
- c) Beas
- d) Yamuna

Solution: NHPC limited, India's premier hydropower company under Ministry of Power has formed a joint venture company, "Ratle Hydroelectric Power Corporation Limited" for the implementation of 850 MW Ratle Hydroelectric Project.

The JVC has been incorporated on 01.06.2021 with NHPC and Jammu & Kashmir State Power Development Corporation Ltd (JKSPDC) holding equity share of 51% and 49% respectively.

Ratle Hydoelectric Project (850 MW), is a Run of River Scheme located on River Chenab, Kishtwar district, Union Territory of Jammu and Kashmir.

In January 2021, the Union Cabinet has given its approval for the investment of Rs.5281.94 crore for 850 MW Ratle Hydro Electric (HE) Project. It shall be commissioned within a span of 5 years.

Hence, option (a) is the correct answer.

Q.74) With reference to the e-Committee of the Supreme Court of India, consider the following statements:

- 1. The e-Committee of the Supreme Court of India along with the Department of Justice, Government of India is working under the National Policy and Action Plan for implementation of Information and Communication Technology ICT in the Indian Judiciary.
- 2. The right of access to justice, guaranteed under Article 21 of the Constitution encompasses the right to access live court proceedings.

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

Solution: The e-Committee of Supreme Court of India has released the Draft Model Rules for Live-Streaming and Recording of Court Proceedings and has invited feedback on them.

The e-Committee of the Supreme Court of India along with the Department of Justice, Government of India is working under the National Policy and Action Plan for implementation of Information and

Communication Technology ICT in the Indian Judiciary.

Dr. Justice Dhananjaya Y. Chandrachud is the Supreme Court Judge and Chairperson of e-Committee.

The right of access to justice, guaranteed under Article 21 of the Constitution encompasses the right to access live court proceedings.

Features

According to the draft rules, all proceedings in high courts can be telecast except for cases relating to matrimonial disputes, genderbased violence, those involving minors and "cases, which in the opinion of the Bench, may provoke enmity amongst communities likely to result in a breach of law and order".

"The final decision as to whether or not to allow the Live-streaming of the Proceedings or any portion thereof will be of the Bench, however, the decision of the Bench will be guided by the principle of an open and transparent judicial process. The decision of the Bench shall not be justiciable,"

Hence both statements are correct.

Q.75) Performance Grading Index for school education, recently seen in news, was released by:

- a) World Economic Forum
- b) NITI Aayog
- c) Union Ministry of Education
- d) None of the above

Solution: The Education Ministry released the latest edition of the Performance Grading Index or PGI. The Education Ministry released the first PGI in 2019 for the reference year 2017-18.

States are scored on a total of 1,000 points across 70 parameters, which are grouped

under five broad categories: access; governance and management; infrastructure; equity and learning outcomes.

States are graded under it. The PGI grading system has 10 levels.

Level 1 indicates top-notch performance and a score between 951 and 1,000 points.

Level II, also known as Grade 1++, indicates a score between 901 and 950.

Those with Grade 1+ (or Level III) have scored between 851 and 900.

The lowest is Grade VII, and it means a score between 0 and 550 points.

In PGI 2019-20, no state or Union Territory could achieve the highest grade, that is Level I.

Punjab, Chandigarh, Tamil Nadu, Andaman & Nicobar Islands and Kerala have scored more than 90% and obtained Grade 1++ (or Level II), which makes them the best performing states.

The top-performing states of Gujarat, Chandigarh, and Kerala in 2018-19 were given Grade 1+ (or Level III), that is, a score between 851 and 900 points.

Only the UT of Ladakh has been placed in the lowest grade, that is Grade VII, but that's because it was the first time it was assessed after it was carved out of Jammu and Kashmir in 2019.

Hence, option (c) is the correct answer.

Q.76) Consider the following statements:

- 1. The Sustainable Development Goals target 3.4 aims for reducing mental illness within the population.
- 2. In India, a person who attempts suicide is presumed to be suffering from mental illness at that time.

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

- a) 1 only
- b) 2 only
- c) Both 1 & 2
- d) None of the above

Solution: Both statements are correct

The Sustainable Development Goals target 3.4 and 3.5 talks about reducing mental illness within the population.

Suicide is decriminalised

Mental Health Act, 2017 brought changes in Section 309 of the Indian Penal Code (which criminalized attempted suicide).

A person who attempts suicide shall be presumed to be suffering from mental illness at that time and will not be punished under the Indian Penal Code.

The government shall have a duty to provide care, treatment and rehabilitation to a person, having severe stress and who attempted to commit suicide, to reduce the risk of recurrence of attempt to commit suicide.

Q.77) Consider following statements.

- "Operation Pangea XIV" is the operation to crack down fake medicines with more than
 1.1 lakh web links, including websites and online marketplaces.
- 2. The operation involved the police, customs and health regulatory authorities of 92 countries.
- 3. It was co-ordinated by the WHO.

Correct statements is/are

- a) 1 and 2 only
- b) 2 and 3 only

- c) 1 and 3 only
- d) All of the above

Solution: More than 1.1 lakh web links, including websites and online marketplaces, have been taken down in an operation involving the police, customs and health regulatory authorities of 92 countries against the sale of fake and illicit medicines and medical products.

Code-named "Operation Pangea XIV", the exercise was coordinated by Interpol. Indian agencies also participated in the operation, said an official of the Central Bureau of Investigation that is the nodal body for the Interpol in the country.

Q.78) Consider following statements about the vaccine.

- 1. The first small pox vaccine was administered in India in 1802.
- 2. The first animal vaccine depot was set up in Shillong in 1890.
- 3. Historically, challenge for universal vaccination was not a lack of access to vaccines, but social and economic factors surrounding vaccination.

Correct statements is/are

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

d) All of the above

Solution: A vaccine for smallpox, as a history of vaccination in India published in the Indian Journal of Medical Research (IJMR) by Chandrakant Lahariya in 2012 said, was first administered to a three-year-old Indian, in 1802, a mere four years after English physician Edward Jenner published the result of his experiments on inoculating subjects with a cowpox virus.

The first animal vaccine depot was set up in Shillong in 1890, from where it started to be produced.

The challenge, said Dr. Lahariya, was not a lack of access to vaccines, but social and economic factors surrounding vaccination.

Q.79) Consider following statements about Climate change and its's impact.

- 1. India may lose anywhere around 3 to 10 per cent of its GDP annually by 2100 and its poverty rate may rise by 3.5 per cent in 2040 due to climate change.
- India is already experiencing the consequences of 1°C of global warming, it said. Extreme heatwaves, heavy rainfall, severe flooding, catastrophic storms and rising sea levels.

Correct statements is/are:

- a) 1 only
- b) 2 only
- c) Both
- d) None

Solution: India may lose anywhere around 3 to 10 per cent of its GDP annually by 2100 and its poverty rate may rise by 3.5 per cent in 2040 due to climate change, according to a report released by the London-based global think tank Overseas Development Institute on Tuesday.

The report, titled 'The Costs of Climate Change in India', looks at economic costs of climate-related risks in the country and points to the possibility of increased inequality and poverty.

India is already experiencing the consequences of 1°C of global warming, it said. Extreme heatwaves, heavy rainfall, severe flooding, catastrophic storms and rising sea levels are damaging lives,

livelihoods and assets across the country, says the report.

Q.80) What is Project P 75 (I), seen often in news:

- a) ISRO's mission to Mars
- b) To develop a new variety of Paddy
- c) To study geomagnetism

d) Indigenous construction of Submarines

Solution: Project P 75 (I) envisages indigenous construction of six conventional submarines equipped with the state-of-the-art air-independent propulsion system at an estimated cost of Rs 43,000 crore. This is one of the largest Make in India projects.

Q.81) With reference to the QS World University rankings, consider the following statements:

- 1. Jawaharlal Nehru University (JNU) has entered the top 1,000 of the QS World University rankings for the first time.
- 2. No Indian institute secured a position among the top 100 universities of the world.

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

Solution: 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.

QS World University Rankings is published annually by Quacquarelli Symonds (QS), a British company specialising in the analysis of higher education institutions around the world.

Top 5 universities in World

Massachusetts Institute of Technology (MIT), Cambridge, USA

University of Oxford, UK

Stanford University, USA

Cambridge University, UK

Harvard University, USA

Indian scenario

No Indian institute secured a position among the top 100 universities of the world.

Overall, there are 22 Indian institutions in the top 1,000 list compared to 21 last year.

IIT Bombay maintained its position as the top Indian institution for the fourth consecutive year, although it fell five places in the global rankings to the joint 177th position.

IIT Delhi (185th rank) overtook the Indian Institute of Science, Bangalore (186th rank), giving India three institutions in the world's top 200.

IISc was also declared the world's top research university by the indicator of most citations per faculty member, when adjusted for faculty size.

Aligarh Muslim University, Banaras Hindu University (BHU) and Amrita Vishwa Vidyapeetham are no longer among the top 1,000, having dropped from the 801-1,000 band to 1,001-1,200.

Hence both statements are correct.

Q.82) With reference to the Operation Pangea XIV, consider the following statements:

1. It is an initiative taken by National Investigative Agency.

2. It aims to target the sale of counterfeit and illicit medicines and medical products.

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

Solution: A record number of fake online pharmacies have been shut down under Operation Pangea XIV targeting the sale of counterfeit and illicit medicines and medical products.

The operation coordinated by INTERPOL involved police, customs and health regulatory authorities from 92 countries. Indian agencies also participated in the operation, said an official of the Central Bureau of Investigation that is the nodal body for the Interpol in the country.

It resulted in 1.1 Lakh web links including websites and online marketplaces being closed down or removed, the highest number since the first Operation Pangea in 2008.

Raising public awareness of the potential dangers of buying medicines online was also part of Operation Pangea XIV.

Hence only statement 2 is correct.

Q.83) Rengma tribe, often mentioned in news, is located in:

- a) Nagaland
- b) Tamil Nadu
- c) Gujarat
- d) Odisha

Solution: The Rengma Nagas in Assam have written to Union Home Minister Amit Shah demanding an autonomous district council

amid a decision by the Central and the State governments to upgrade the Karbi Anglong Autonomous Council (KAAC) into a territorial council by the name of Karbi-Anglong Autonomous Territorial Council (KAATC).

Rengma is a Naga tribe found in Nagaland and Assam states of India.

According to the 2011 Population Census of India, Rengma population stands at 62,951.

Ngada festival: The harvest festival of the Rengmas is called Ngada. It is an eight-day Ngada festival that marks the end of the agricultural season. Ngadah is celebrated just after the harvest, towards the end of November.

Hence, option (a) is the correct answer.

Q.84) With reference to the Central Adoption Resource Authority (CARA), consider the following statements:

- 1. It regulates in-country and inter-country adoptions.
- 2. The mandatory registration of CCIs and linking to CARA has been provided in Juvenile Justice (Care and Protection of Children) Act, 2015.

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

Solution: 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. It said that it was illegal to invite strangers to adopt children without the involvement of the Central Adoption Resource Authority (CARA).

Statement 1 is correct:

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

It regulates in-country and inter-country adoptions (in accordance with the provisions of The Hague Convention on Inter-Country Adoption, 1993, ratified by Government of India in 2003).

Status: It is an autonomous and a statutory body of the Union Women and Child Development Ministry.

Statement 2 is correct:

The mandatory registration of CCIs and linking to CARA has been provided in Juvenile Justice (Care and Protection of Children) Act, 2015.

It was set up in 1990.

In 2018, CARA has allowed individuals in a live-in relationship to adopt children from and within India.

HQ: New Delhi.

Q.85) Consider following statements about Nargono- Karabakh Region which is in news.

- 1. It is landlocked between Armenia and Azerbaijan.
- 2. Nagorno-Karabakh region has 95% of the population as ethnically Armenian.
- 3. India is part of the International North—South Transport Corridor (INSTC), a multimodal network of ship, rail, and road route for moving freight which passes through Azerbaijan.

Correct statements are

- a) 1 and 2
- b) 2 and 3

c) 1 and 3

d) All of the above

Solution: Turkish President Recep Tayyip Erdogan said on Wednesday he will visit Azerbaijan to celebrate its victory over Armenia in a brief war last year, touring a region recaptured in disputed Nagorno-Karabakh.

Azerbaijan seized back swathes of territory in the separatist ethnic Armenia region with the help of Turkish combat drones and other weaponry from Ankara.

The conflict claimed 6,000 lives and ended with a Russian-brokered truce in November that saw ethnic Armenians pushed out of large parts of the land they had won during a brutal post-Soviet war in the 1990s.

Q.86) Addu atoll which was recently in news is a part of

- a) Maldives
- b) Mauritius
- c) Seychelles
- d) Chagos Archipelago

Solution: The Maldives has made no decision on opening an Indian consulate in its southern Addu Atoll, President Ibrahim Mohamed Solih said on Tuesday, a fortnight after the Indian Cabinet cleared a proposal for it.

 Apart from its strategic location in the Indian Ocean, Addu is the second largest city in the archipelago, home to over 30,000 people.

Q.87) Consider the following statements in context of genetic sequencing:

1. Genome sequencing is figuring out the order of DNA nucleotides, or bases.

2. Genetic sequencing reveals how a virus originated.

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

- a) 1 only
- b) 2 only
- c) Both 1 & 2
- d) Neither 1 nor 2

Solution: Both statements are correct.

Genetic sequencing

Genome sequencing is figuring out the order of DNA nucleotides, or bases, in a genome—the order of As, Cs, Gs, and Ts that make up an organism's DNA.

The human genome is made up of over 3 billion of these genetic letters.

Unravelling the genetic code, letter-by-letter, is known as genetic sequencing.

Genetic sequencing also reveals how the virus originated, and to some extent, help predict how it may change in the future.

Genetic sequencing is also a valuable tool for vaccine development.

Q.88) Consider the following statements:

- 1. The National Policy and Action Plan for Implementation of ICT in Indian Judiciary was submitted by Ministry of Law and Justice.
- 2. e-Courts Mission Mode Project is funded by the supreme court of India.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2

d) Neither 1 nor 2

Solution: The e-Courts project was conceptualized on the basis of the "National Policy and Action Plan for Implementation of Information and Communication Technology (ICT) in the Indian Judiciary – 2005".

National Policy and Action Plan for Implementation of ICT in the Indian Judiciary-2005 was submitted by e-Committee, Supreme Court of India with a vision to transform the Indian Judiciary by ICT enablement of Courts. Hence, statement 1 is not correct.

The e-Courts Mission Mode Project, is a Pan-India Project, monitored and funded by the Ministry of Law and Justice for the District Courts across the country. Hence, statement 2 is not correct.

Q.89) Consider the following statements:

- 1. Surakshit Hum Surakshit Tum Abhiyan was launched for providing home care support to Covid-19 patients in aspirational districts.
- The Aspirational Districts Programme is anchored by the Ministry of Rural Development at the Central level.

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

Solution: Recently, NITI Aayog and Piramal Foundation launched 'Surakshit Hum Surakshit Tum Abhiyan' in 112 aspirational districts.

This drive was launched to assist the administration in providing home care support to Covid-19 patients, who are either asymptomatic or have mild symptoms. Hence, statement 1 is correct.

Most of these districts are in Jharkhand, Chhattisgarh, Odisha and Maharashtra.

The campaign is under a special initiative — Aspirational Districts Collaborative — in which local leaders, civil societies and volunteers will work with the district administrations to address emerging issues across key focus areas of the Aspirational Districts Programme.

The Aspirational Districts Programme was launched in January 2018, the 'Transformation of Aspirational Districts' Programme (TADP).

Aspirational Districts are those districts in India that are affected by poor socio-economic indicators.

These are aspirational in the context, that improvement in these districts can lead to the overall improvement in human development in India.

At the Government of India level, the programme is anchored by NITI Aayog. In addition, individual Ministries have assumed responsibility to drive the progress of districts. Hence, statement 2 is not correct.

Q.90) Consider the following statements regarding the YUVA scheme:

- 1. It is aimed at training aspiring writers to express India's culture and literature globally.
- 2. The Ministry of Education is the implementing agency of the scheme.

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

Solution: Recently, the Prime Minister of India has announced the 'Young, Upcoming and Versatile Authors' (YUVA) scheme - a mentorship programme to train young authors.

The scheme is aimed at training 75 aspiring writers below 30 years, who are ready to express project India and its culture and literature globally. Hence, statement 1 is correct.

A consolidated scholarship of Rs. 50,000 per month for a period of six months per author will be paid under the mentorship scheme.

The National Book Trust (under the Ministry of Education) will ensure phase-wise execution of the Scheme. Hence, statement 2 is correct.

Q.91) Consider following statements about Maharashtra govt. action plan to protect heritage trees.

- 1. The plan includes the concept of heritage tree and plan of action for conservation.
- 2. As per the plan, trees older than 100 years will be termed heritage trees.
- 3. Compensatory plantation will include planting the number of trees equivalent to the age of trees to be cut.

Correct statements are:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Solution: The Maharashtra Cabinet on Thursday passed an action plan to protect and preserve trees older than 50 years in urban areas by terming them heritage trees.

The plan includes the concept of heritage tree and plan of action for conservation; method

to define age of the tree; compensatory plantation; rules to be followed before hacking trees; formation of the Maharashtra Tree Authority; structure of the local tree authority and their duties; tree census; fixing land of tree plantation; transplantation of trees; and tree cess and fine to be charged.

As per the plan, trees older than 50 will be termed heritage trees.

Compensatory plantation will include planting the number of trees equivalent to the age of trees to be cut.

The saplings need to be six to eight feet in height while planting and they will undergo geo-tagging with seven years of caring period.

The option of monetary compensation has also been given, instead of compensatory plantation.

Q.92) COMSOL Platform was recently in news. It is

- a) Platform for observation of cosmic rays entering earth's atmosphere.
- b) Platform for enrichment of vermisol culture of the land.
- c) Is used worldwide as an indispensable tool for a variety of computer simulations for R&D as well as for learning and instruction.
- d) Easy collection of minor forests produce by the tribal people.

Solution: COSMOL is used worldwide as an indispensable tool for a variety of computer simulations for R&D as well as for learning and instruction. d) easy collection of minor forests produce by the tribal people.

For the first time in the country, through the I-STEM portal academic users in India will now be able to access the COMSOL Multiphysics software suite at no cost.

The Indian Science Technology and Engineering facilities Map (I-STEM), the national web portal for sharing R&D facilities.

I-STEM (www.istem.gov.in) is an initiative of Office of the Principal Scientific Adviser to the Govt. of India under the PM-STIAC mission.

The goal is to strengthen the R&D ecosystem by connecting researchers with resources, in part by promoting technologies and scientific equipment development indigenously and providing necessary supplies and supports to researchers and enable them to access existing R&D facilities through the I-STEM web portal.

The portal hosts the database of facilities across India so that a researcher desirous of using any of them can search for the same and make a booking online for using it.

The COMSOL Multiphysics software suite(https://www.comsol.co.in/), developed by the COMSOL Group, is used worldwide as an indispensable tool for a variety of computer simulations for R&D as well as for learning and instruction.

It is a general-purpose simulation software package for modelling designs, devices, and processes in all fields of engineering, manufacturing, and scientific research.

In addition to using Multiphysics modelling for one's own R&D projects, one can also turn the resulting models into applications for instruction, especially in classes for undergraduates and graduate students.

Q.93) CHIME telescope, which was recently in news due to its discovery of largest collection of fast radio bursts (FRBs), is located at,

- a) India
- b) USA
- c) Canada

d) China

Solution: Scientists with the Canadian Hydrogen Intensity Mapping Experiment (CHIME) Collaboration, who include researchers at 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) in the telescope's first FRB catalogue.

While catching sight of an FRB is considered a rare thing in the field of radio astronomy, prior to the CHIME project, radio astronomers had only caught sight of around 140 bursts in their scopes since the first FRB was spotted in 2007.

FRBs are oddly bright flashes of light, registering in the radio band of the electromagnetic spectrum, which blaze for a few milliseconds before vanishing without a trace

These brief and mysterious beacons have been spotted in various and distant parts of the universe, as well as in our own galaxy.

Their origins are unknown and their appearance is highly unpredictable.

According to Professor Masui, the scientists plan to use the bursts, and their dispersion estimates, to map the distribution of gas throughout the universe.

Q.94) Consider following statements about the election commission.

- 1. The Election Commission shall consist of the Chief Election Commissioner (CEC) and such number of other election commissioners, if any, as the Parliament may from time to time fix.
- 2. The CEC can be removed from office only through a process of removal similar to that of a SC judge by Parliament.

Which above statement is correct-

a) 1 only

b) 2 only

- c) 1 and 2 both
- d) None of the above

Solution: The commission used to have just one election commissioner, but with the Election Commissioner Amendment Act of 1989, it was expanded to include multiple members.

The Election Commission will be made up of the Chief Election Commissioner (CEC) and as many other election commissioners as the President deems necessary.

It is currently made up of the CEC and two Election Commissioners.

The Chief Electoral Officer, who is an IAS rank officer, assists the electoral commission at the state level.

The CEC can be removed from office only through a process of removal similar to that of a SC judge by Parliament.

Q.95) What are Khirsapati and Lakshamanbhog, seen recently in news?

- a) Drought resistant varieties of Chickpea
- b) GI certified varieties of Mango
- c) Fortified varieties of Paddy
- d) High yield varieties of Wheat

Solution: Khirsapati and Lakshamanbhog are GI certified varieties of Mangoes.

Recently, sixteen varieties of mangoes including three GI certified Khirsapati & Lakshmanbhog (West Bengal), Zardalu (Bihar) were exported to Bahrain.

Mango in India is also referred as 'king of fruits' and referred as Kalpavriksha (wish granting tree) in ancient scriptures. While most of the states in India have mango

plantations, Uttar Pradesh, Bihar, Andhra Pradesh, Telangana, Karnataka have major share in total production of the fruit.

Alphonso, Kesar, Totapuri and Banganpalli are leading export varieties from India. Mango exports primarily take place in three forms: fresh mango, mango pulp, and mango slice.

Mangoes are processed by the APEDA registered packhouse facilities and then exported to various regions and countries including Middle East, European Union, USA, Japan and South Korea.

Q.96) Consider the following statements-

- Climate Vulnerability Assessment for Adaptation Planning in India report is released by the Department of Science and Technology.
- 2. Global Climate Risk Index is released by German Watch.
- 3. India announced the National Action Plan on Climate Change in 2019 using 2008 as the base year.

Which of the above statements is/are not correct?

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

Solution: The Department of Science and Technology (DST) has released the report titled 'Climate Vulnerability Assessment for Adaptation Planning in India Using a Common Framework'. Hence, statement 1 is correct.

Global Climate risk Index

- It is released by Germany-based think tank Germanwatch.
- It indicates a level of exposure and vulnerability to extreme events, which

countries should understand as warnings in order to be prepared for more frequent and/or more severe events in the future. In the CRI 2021, data from 180 countries were analysed.

• India has improved its ranking from 5th in CRI 2020 to 7th in CRI 2021. Hence, statement 2 is correct.

NAPCC- In 2008, India announced NAPCC that includes eight ambitious goals set for the country to tackle climate change. Hence, statement 3 is not correct.

Q.97) With reference to Minimum Support Prices (MSP), which of the following statements is/are incorrect?

- 1. They are announced by the Government of India at the end of the sowing season.
- MSP is fixed twice a year on the recommendations of the Commission for Agricultural Costs and Prices (CACP) and its recommendation is binding.
- 3. MSP also covers commercial crops.

Options:

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

Solution:

The Minimum Support Price (MSP) is the rate at which the government purchases crops from farmers.

They are announced by the Government of India at the beginning of the sowing season.

MSP is fixed twice a year on the recommendations of the Commission for Agricultural Costs and Prices (CACP) and its recommendations are not binding and are only advisory in nature.

MSP also covers commercial crops.

MSPs cover:

Cereals (paddy, wheat, maize, sorghum, pearl millet, barley and ragi)

Pulses (gram, tur, moong, urad, lentil)

Oilseeds (groundnut, rapeseed-mustard, soyabean, sesamum, sunflower, safflower, nigerseed)

Commercial crops (copra, sugarcane, cotton and raw jute).

Q.98) Which of the following National Parks are in the state of Assam?

- 1. Kaziranga National Park
- 2. Dibru Saikhowa National Park
- 3. Nameri National Park
- 4. Orang National Park
- 5. Dihing Patkai National Park
- 6. Raimona National Park

Options:

- a) 1, 2, 3 and 6 only
- b) 2, 3, 4, 5 and 6 only
- c) 1, 2, 3, 4 and 5 only

d) 1, 2, 3, 4, 5 and 6

Solution: There are 7 national parks in the state of Assam with Dihing Patkai recently being notified as a National Park.

National Parks in Assam are: Kaziranga, Manas, Nameri, Orang, Dibru-Saikhowa, Raimona and Dihing Patkai.

Q.99) Category: current affairs

Kalakkad-Mundanthurai Tiger Reserve, recently in news, is located in which of the following state?

a) Tamil Nadu

- b) Kerala
- c) Andhra Pradesh
- d) Karnataka

Solution: Tamil Nadu has 5 tiger reserves:

Kalakad-Mundanthurai

Mudumala

Sathyamangalam

Anamalai

Srivilliputhur Meghamalai

Q.100) Consider the following statements regarding Alzheimer disease:

- 1. It causes the brain to atrophy.
- 2. It is thought to be caused by the abnormal build-up of proteins in brain cells.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Both statements are correct

Alzheimer's disease is a progressive neurologic disorder that causes the brain to shrink (atrophy) and brain cells to die.

The disease is the most common cause of dementia — a continuous decline in thinking, behavioural and social skills that affect a person's ability to function independently.

Q.101) With reference to the amendments to the Maharashtra (Urban Areas) Protection

and Preservation of Trees Act of 1975, consider the following statements:

- 1. Under the proposed amendment, a tree with an estimated age of 50 years or more shall be defined as a heritage tree.
- 2. The local Tree Authority will have to ensure tree census to be carried out every five years along with counting of heritage trees.

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

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

Under the proposed amendment, a tree with an estimated age of 50 years or more shall be defined as a heritage tree.

It may belong to specific species, which will be notified from time to time.

In addition to the age, the state climate change department (which will be implementing the Tree Act), will also consider a tree's rarity, its botanical, historical, religious, mythological and cultural importance in defining a heritage tree.

The local Tree Authority will have to ensure tree census to be carried out every five years along with counting of heritage trees.

Hence both statements are correct.

Q.102) Nanjundeshwara Temple, recently seen in news, is located in:

a) Tamil Nadu

- b) Odisha
- c) Kerala

d) Karnataka

Solution: After noticing that B.Y. Vijayendra, son of Chief Minister B.S. Yediyurappa, has admitted to entering Sri Nanjundeshwara temple in Nanjangud recently, the Karnataka High Court asked the State government why then even ordinary citizens are not allowed to enter temples like him despite a ban imposed in view of COVID-19 lockdown.

The Nanjundeshwara Temple is also called Srikanteshwara Temple.

It is an ancient temple in the Hindu pilgrimage town of Nanjanagudu in the Karnataka.

it is dedicated to god Nanjundeshwara (another name for the god Shiva, also known as Nanjundeshwara).

Nanju in Kannada means poison; the name Nanjundeshwara means the "God who Drank the Poison" (halahala), a word that has its origins in the legend of the Great Churning of the Ocean of Milk; thus the town got the name 'Nanjangudu' which means "the abode of the god Nanjundeshwara".

Hence, option (d) is the correct answer.

Q.103) With reference to the National Action Plan on Climate Change and Human Health, consider the following statements:

- 1. It aims of creating awareness amongst the general population, health-care providers and policy makers regarding impact of climate change on human health.
- 2. India became signatory to the Malé Declaration in 2017 and agreed to promote climate-resilient healthcare facilities to be able to withstand any climatic event.

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

Solution: Dr. Harsh Vardhan, Union Minister for Health and Family Welfare digitally addressed the first meeting of the World Health Organization High-Level Coalition on Health and Energy Platform of Action.

An expert body called the National Action Plan on Climate Change and Human Health was constituted by government of India with the multiple objectives of creating awareness amongst the general population, health-care providers and policy makers regarding impact of climate change on human health.

This National Expert Group submitted its report recently in April 2021 with inclusion of Subject Specific Health Action Plans on identified Climate Sensitive Diseases and 'One Health'.

In the context of "Green and Climate Resilient Healthcare Facilities", India became signatory to the Malé Declaration in 2017 and agreed to promote climate-resilient healthcare facilities to be able to withstand any climatic event.

Hence both statements are correct.

Q.104) With reference to the All-India Survey on Higher Education 2019-20, consider the following statements:

- 1. Kerala comes at number one with the highest student enrolment followed by Maharashtra and Tamil Nadu.
- 2. Gross Enrolment Ratio (GER) in Higher education in India is 27.1, which is calculated for 18-23 years of age group.

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

Solution: Union Education Minister released the report of All India Survey on Higher Education 2019-20.

In 2019-20 There are 1043 Universities (2%), 42343 Colleges (77%) and 11779 Stand Alone Institutions (21%) listed on AISHE web portal. 307 Universities are affiliating i.e. having Colleges.

The top 8 States in terms of highest number of colleges in India are Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Tamil Nadu, Madhya Pradesh and Gujarat.

Bangalore Urban district tops in terms of number of colleges with 1009 colleges followed by Jaipur with 606 colleges. Top 50 districts have about 32% of colleges.

College density, i.e. the number of colleges per lakh eligible population (population in the age-group 18-23 years) varies from 7 in Bihar to 59 in Karnataka as compared to All India average of 30.

Total enrolment in higher education has been estimated to be 38.5 million with 19.6 million boys and 18.9 million female. Female constitute 49% of the total enrolment.

Uttar Pradesh comes at number one with the highest student enrolment followed by Maharashtra and Tamil Nadu.

Gross Enrolment Ratio (GER) in Higher education in India is 27.1, which is calculated for 18-23 years of age group. Gross Enrolment Ratio (GER), the percentage of students belonging to the eligible age group enrolled in Higher Education, in 2019-20 is 27.1% against 26.3% in 2018-19 and 24.3% in 2014-2015.

Highest share of foreign students come from the neighboring countries of which Nepal is 28.1% of the total, followed by, Afghanistan 9.1%, Bangladesh 4.6%, Bhutan constitutes 3.8% and Sudan 3.6%.

Pupil Teacher Ratio (PTR) in Universities and Colleges is 28 if regular mode enrolment is considered whereas PTR for Universities and its Constituent Units is 18 for regular mode.

Gender Parity Index (GPI) in Higher Education in 2019-20 is 1.01 against 1.00 in 2018-19 indicating an improvement in the relative access to higher education for females of eligible age group compared to males.

Hence only statement 2 is correct.

Q.105) With reference to the Indian Railways, consider the following statements:

- 1. The Union Cabinet has recently approved the proposal for allotment of 5 MHz Spectrum in 700 MHz frequency band to Indian Railways for public safety and security services at stations and in trains.
- 2. TCAS (Train Collision Avoidance System) is an indigenously developed ATP (Automatic Train Protection) System.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: The Union Cabinet has approved the proposal for allotment of 5 MHz Spectrum in 700 MHz frequency band to Indian Railways for public safety and security services at stations and in trains.

With this spectrum, Indian Railways has envisaged to provide LTE (Long Term Evolution) based Mobile Train Radio Communication on its route.

The estimated investment in the project is more than Rs. 25,000 Crore.

The project will be completed in the next 5 years.

The purpose of the LTE for Indian Railways is to provide secure and reliable voice, video and data communication services for operational, safety and security applications.

It will be used for modern signalling and train protection systems and ensure seamless communication between loco pilots and guards.

It will also enable Internet of Things (IoT) based remote asset monitoring especially of coaches, wagons & locos, and live video feed of CCTV cameras in the train coaches to ensure efficient, safer and faster train operations.

Other steps

In addition to this, Indian Railways has approved TCAS (Train Collision Avoidance System), an indigenously developed ATP (Automatic Train Protection) System, which will help in avoiding train collisions thereby reducing accidents and ensuring passenger safety.

Hence both statements are correct.

Q.106) The New Atlantic Charter is an agreement that was signed by United Kingdom and which of the following country?

- a) France
- b) Germany
- c) China

d) U.S.A

Solution: The New Atlantic Charter is an agreement that was signed by the Prime Minister of the United Kingdom Boris Johnson and the President of the United States Joe Biden on 10 June 2021.

The agreement was signed at the first face-toface meeting between Johnson and Biden at the 2021 G7 Summit in Cornwall, England.

The agreement is a new version of the Atlantic Charter, signed by Winston Churchill and Franklin D. Roosevelt in 1941.

Hence, option (d) is the correct answer.

Q.107) With reference to the Canadian Hydrogen Intensity Mapping Experiment (CHIME), consider the following statements:

- 1. It is an interferometric radio telescope.
- 2. It is located in Hawaii.

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

Solution: Scientists with the Canadian Hydrogen Intensity Mapping Experiment (CHIME) Collaboration have assembled the largest collection of fast radio bursts (FRBs) in the telescope's first FRB catalogue.

CHIME is an interferometric radio telescope.

It is located in British Columbia, Canada.

It consists of four antennas consisting of 100 x 20 metre cylindrical parabolic reflectors with 1024 dual-polarization radio receivers suspended on a support above them.

The antenna receives radio waves from hydrogen in space at frequencies in the 400–800 MHz range.

Hence only statement 1 is correct.

Q.108) Which of the following countries are part of the SAHEL region?

- 1. Burkina Faso
- 2. Cameroon
- 3. Chad
- 4. The Gambia
- 5. Kenya

Select the correct answer from the code below:

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

c) 1, 2, 3 and 4 only

d) 1, 2, 3, 4 and 5

Solution: Sahel is located in western and north-central Africa extending from Senegal eastward to Sudan.

The Sahel stretches over 5000 km across the width of Africa roughly between 10 and 20°N .

It forms a transitional zone between the arid Sahara (desert) to the north and the belt of humid savannas to the south.

The Sahel, the vast semi-arid region of Africa separates the Sahara Desert to the north and tropical savannas to the south.

The Sahel stretches from the Atlantic Ocean eastward towards Senegal..

Countries located in SAHEL: Burkina Faso, Cameroon, Chad, The Gambia, Guinea Mauritania, Mali, Niger, Nigeria and Senegal.

Q.109) The Global Economic Prospects report is released recently by:

- a) International Monetary Fund
- b) World Trade Organization
- c) World Economic Forum

d) World Bank

Solution: The Global Economic Prospects report 2021 is recently released by the World Bank.

It has forecast India's GDP growth to be 8.3% for the year 2021-22.

India's economy is expected to grow at 7.5% for 2022-23 and 6.5% for 2023-24.

The world economy is expected to expand at 5.6%, the fastest post-recession growth rate in eighty years.

However, global output will still be 2% below pre-pandemic projections by year-end.

Q.110) In context of digital service tax, consider the following statements:

- 1. India is the first country that imposes digital service tax.
- 2. In India 12% digital service tax is levied on trade and services by resident e-commerce operators with a turnover up to 20 crore.

Which of the statements given above is/are not correct?

- a) 1 only
- b) 2 only
- c) Both 1 & 2
- d) None of the above

Solution: Recently, the Office of the United States Trade Representative (USTR) has said that the Digital services taxes adopted by India, Italy and Turkey discriminate against US companies and are inconsistent with international tax principles. Hence, statement 1 is not correct.

Digital Services Taxes (DSTs) are the adopted taxes on revenues that certain companies generate from providing certain digital services. E.g. digital multinationals like Google, Amazon and Apple etc.

The government had moved an amendment in the Finance Bill 2020-21 imposing a 2% digital service tax (DST) on trade and services by non-resident e-commerce operators with a turnover of over Rs. 2 crore. Hence, statement 2 is not correct.

Q.111) Umling La Pass, recently seen in news, is located in:

- a) Ladakh
- b) Himachal Pradesh
- c) Sikkim
- d) Uttarakhand

Solution: Raksha Mantri flagged off the first ever Solo Woman Motorcycle Expedition by Ms Kanchan Ugursandi to Umling La Pass, Ladakh and back.

Umling La Pass, located at an altitude of 19,300ft, has overtaken Khardung La Pass to become the highest motorable road in the world.

The construction of this road has been achieved by the BRO (Border Road Organization) as part of "Project Himank"

Umling La Pass, stretching to a distance of almost 86km, connects Chisumle and Demchok villages. Both these villages lie in close proximity to the Indo-China border in the eastern sector.

Hence, option (a) is the correct answer.

Q.112) With reference to the 44th GST Council, consider the following statements:

- 1. It decided not to waive the tax levied on two critical drugs against COVID-19 and mucormycosis tocilizumab and amphotericin B.
- 2. The 5% GST levied on vaccines was left unchanged.

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

Solution: The 44th GST Council met under the Chairmanship of Union Finance Minister. The Council in its meeting has decided to reduce the GST rates on various items being used in Covid-19 relief and management till 30th September, 2021.

It decided to waive the tax levied on two critical drugs against COVID-19 and mucormycosis — tocilizumab and amphotericin B — and reset the tax rate to 5% for 14 major pandemic relief items, till September 30.

The 5% GST levied on vaccines was left unchanged.

The GST rate on Remdesivir and anticoagulants like Heparin has been reduced from 12% to 5%.

Ambulances, which are currently taxed at 28%, will attract a GST levy of 12%, while temperature checking equipment and electric furnaces used in crematoriums will attract a 5% GST instead of 18%.

For oxygen concentrators, medical grade oxygen and related devices such as ventilators, BiPAP machines, the GST rate has also been brought down to 5% from 12%.

The same reduction has been approved in the levies on COVID-testing kits and pulse oximeters.

The 5% rate will apply to personal imports of oxygen concentrators as well as pulse oximeters, while the 18% GST payable on hand sanitisers has been reduced to 5%.

Hence only statement 2 is correct.

Q.113) With reference to the "Operation Olivia", consider the following statements:

- 1. It is an initiative of IUCN.
- 2. It was initiated in the early 1980s, helps protect Olive Ridley turtles as they congregate along the Odisha coast for breeding and nesting from November to December.

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

Solution: Every year, the Indian Coast Guard's "Operation Olivia", initiated in the early 1980s, helps protect Olive Ridley turtles as they congregate along the Odisha coast for breeding and nesting from November to December.

Round-the-clock surveillance is conducted from November till May utilising Coast Guard assets such as fast patrol vessels, air cushion vessels, interceptor craft and Dornier aircraft to enforce laws near the rookeries.

The Orissa Marine Fisheries Act empowers the Coast Guard as one of its enforcement agencies.

The Olive Ridley (Lepidochelys olivacea) is listed as vulnerable under the International Union for Conservation of Nature's Red list.

All five species of sea turtles found in India are included in Schedule I of the Indian Wildlife Protection Act, 1972, and in the Appendix I of the Convention of International Trade in Endangered Species of Wild Fauna and Flora which prohibits trade in turtle products by signatory countries.

Hence only statement 2 is correct.

Q.114) Which of the following covered under United Nations Convention on the Law of the Sea (UNCLOS)?

- 1. Deep seabed mining
- 2. Settlement of disputes
- 3. Archipelagic status and transit regimes
- 4. Exclusive economic zones (EEZs)

Select the correct answer using the code given below:

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

d) 1, 2, 3 and 4

Solution: The United Nations Convention on the Law of the Sea (UNCLOS), is the international agreement that resulted from the third United Nations Conference on the Law of the Sea (UNCLOS III), which took place between 1973 and 1982. The Law of the Sea Convention defines the rights and responsibilities of nations with respect to their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources. This convention introduced a number of provisions and covered the most significant issues such as setting limits, navigation, archipelagic status and transit regimes, exclusive economic zones (EEZs), continental shelf jurisdiction, deep seabed mining, the exploitation regime, protection of the marine environment, scientific research, and settlement of disputes. Hence, option (d) is the correct answer.

The Central government informed the Supreme Court on that Italy had paid ₹10 crore compensation for disbursal among the families of fishermen shot dead/injured by two Italian marines detailed on Enrica Lexie, an Italian-flagged vessel in 2012, who mistook them for pirates off the coast of Kerala.

Q.115) With reference to the EnVision mission, consider the following statements:

- 1. EnVision is an ESA led mission with contributions from NASA.
- 2. The spacecraft will carry a range of instruments to study the planet Venus atmosphere and surface, monitor trace gases in the atmosphere and analyse its surface composition.

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

Solution: 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.

EnVision is an ESA led mission with contributions from NASA. It is likely to be launched sometime in the 2030s.

The earliest launch opportunity for EnVision is 2031, followed by 2032 and 2033. Once launched on an Ariane 6 rocket, the spacecraft will take about 15 months to reach Venus and will take 16 more months to achieve orbit circularisation.

The spacecraft will carry a range of instruments to study the planet's atmosphere and surface, monitor trace gases in the atmosphere and analyse its surface composition. A radar provided by NASA will help to image and map the surface.

At the core of the ESA's mission is the question of how Earth and Venus evolved so differently from each other considering that they are roughly of the same size and composition.

Hence both statements are correct.

Q.116) With reference to the total fertility rate, consider the following statements:

- 1. According to the UN Population Division, a total fertility rate (TFR) of about 2.1 children per woman is called replacement-level fertility.
- 2. The fertility rate of less than 3.1 implies that the total population will be less than the existing population which is also called the negative growth rate.

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

Solution: The Assam unit of the Congress has slammed Chief Minister for asking a minority community to adopt population control measures to prevent encroachment and pressure on land resources. It cited the latest National Family Health Survey (NFHS) released in December 2020, which said the total fertility rate (TFR) declined across most Indian States in the last five years.

The total fertility rate is defined as the average number of children that would be born to a woman by the time she ends childbearing.

According to the UN Population Division, a total fertility rate (TFR) of about 2.1 children per woman is called replacement-level fertility.

The fertility rate of less than 2.1 implies that the total population will be less than the existing population which is also called the negative growth rate.

The same survey said the fertility rate of women in Assam declined from 2.2 in 2015-16 to 1.9 in 2020-21, which means the future population of Assam will only be less than the

current population. Hence there is no question of an increase in population.

Indicators of fertility

High fertility: Total fertility levels above 5 children per woman.

Replacement-level fertility: Total fertility levels of about 2.1 children per woman.

Below-replacement fertility: Total fertility levels below 2.1 children per woman.

Very low fertility: Total fertility levels below 1.3 children per woman.

Hence only statement 1 is correct.

Q.117) Tigray region is recently in news. It is located in

a) Nigeria

b) Ethiopia

- c) Madagascar
- d) Bolivia

Solution: The conflict that began between Ethiopia's federal government and the ruling party in the Tigray region in the country's north last September has since blown up into a full scale crisis in the Horn of Africa. Now, hundreds of thousands in Tigray are facing famine, and millions more are at risk, UN agencies have said.

In November, local government officials in Tigray had told Reuters that some 2.2 million people had been displaced by the fighting and many forced to flee to neighbouring countries.

Although Ethiopia's federal National Disaster Risk Management Commission disputed the number of displaced people, independent observers had agreed that it was exceptionally high.

According to the IPC analysis, famine conditions in Tigray are in phase 5, which,

according to a Reuters report, "starts with a catastrophe warning and rises to a declaration of famine in a region".

According to the IPC analysis, approximately 350,000 people out of Tigray's 6 million population are experiencing famine. This was the result of several factors rooted in the ongoing military conflict.

Q.118) consider following statements about rare earth metals.

- 1. They are rarely found in earth's crust.
- 2. neodymium, praseodymium and dysprosium are rare earth metals used for manufacturing of magnets.
- 3. China is dominant player in the market of rare earth metals.

Correct statements is/are

a) 1 and 2

b) 2 and 3

- c) 3 only
- d) All of the above

Solution: In 2019, the U.S. imported 80% of its rare earth minerals from China, the U.S. Geological Survey says.

The EU gets 98% of its supply from China, the European Commission said last year.

Amid the transition to green energy, in which rare earth minerals are sure to play a role, China's market dominance is enough to sound an alarm in western capitals.

Rare earth minerals, with names like neodymium, praseodymium and dysprosium, are crucial to the manufacture of magnets used in industries of the future, such as wind turbines and electric cars.

And they are already being used in consumer goods such as smartphones, computer screens and telescopic lenses.

They are known as "rare" because it is very unusual to find them in a pure form, but it turns out there are deposits of some of them all over the world.

Q.119) consider following statements.

- 1. Pyrostria laljii is Tree of coffee family discovered in Andaman and Nicobar.
- 2. Plants belonging to genus Pyrostria are usually found in Madagascar.
- 3. Pyrostria laljii has been assessed as 'Critically Endangered' based on the International Union for Conservation of Nature's (IUCN) Red List criteria.

Correct statements is/are

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3

d) All of the above

Solution: A 15-metre-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. The new species, Pyrostria Ialjii, is also the first record of the genus Pyrostria in India, the researchers said.

Plants belonging to genus Pyrostria are usually found in Madagascar, but the recently discovered species is new to science.

Pyrostria laljii has been assessed as 'Critically Endangered' based on the International Union for Conservation of Nature's (IUCN) Red List criteria.

it was found growing under large trees, shaded and rocky areas, along with herbs and shrubby plants.

The species has been named Pyrostria laljii after Lal Ji Singh, Joint Director and Head of

Office, Andaman and Nicobar Regional Centre, Botanical Survey of India.

pound and yen held in the foreign exchange reserves.

Q.120) Consider the following statements regarding Forex reserves of India:

- 1. Gold is the largest component of forex reserve of India.
- 2. Rise in forex reserve strengthens the Rupee against dollar.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Foreign exchange reserves are assets held on reserve by a central bank in foreign currencies, which can include bonds, treasury bills and other government securities.

India's Forex Reserve include:

Foreign Currency Assets (FCA)

Gold reserves

Special Drawing Rights

Reserve position with the IMF

FCAs are assets that are valued based on a currency other than the country's own currency.

FCA is the largest component of the forex reserve. It is expressed in dollar terms.

The FCAs include the effect of appreciation or depreciation of non-US units like the euro,

Importance of Increasing Foreign Exchange Reserves:

The government is in a comfortable position if there are rising forex reserves and the RBI in managing India's external and internal financial issues at a time of major contraction in economic growth.

It Assist the government in meeting its foreign exchange needs and external debt obligations.

Appreciation in Rupee – The rising foreign exchange reserves helps the rupee to strengthen against the dollar. to characterise the conditions that may have led to the emergence of habitable environments among the Jovian icy satellites

Crisis Management: Rising Forex Reserve serves as a cushion in the event of a Balance of Payment crisis on the economic front

Confidence in the Market: Forex Reserves provides a level of confidence to markets and investors that a country can meet its external obligations.

Q.121) A 15-metre-tall tree that belongs to the genus of the coffee family has recently been discovered from:

- a) Kerala
- b) Lakshadweep
- c) Sikkim

d) Andaman Islands

Solution: A 15-metre-tall tree that belongs to the genus of the coffee family has recently been discovered from the Andaman Islands.

Regions in India: The new species, Pyrostria laljii was first reported from the Wandoor

forest in South Andaman. The other places in the Andaman and Nicobar Islands where the tree could be located are the Tirur forest near the Jarawa Rerserve Forest and the Chidia Tapu (Munda Pahar) forest.

Global distribution: The new species is also the first record of the genus Pyrostria in India. Plants belonging to genus Pyrostria are usually found in Madagascar.

Features: The tree is distinguished by a long stem with a whitish coating on the trunk and oblong-obovate leaves with a cuneate base. Other physical features that distinguish the tree from other species of the genus is its umbellate inflorescence with eight to 12 flowers.

IUCN status: Pyrostria laljii has been assessed as 'Critically Endangered' based on the International Union for Conservation of Nature's (IUCN) Red List criteria.

Name: The species has been named Pyrostria laljii after Lal Ji Singh, Joint Director and Head of Office, Andaman and Nicobar Regional Centre, Botanical Survey of India.

Hence, option (d) is the correct answer.

Q.122) With reference to the Innovations for Defence Excellence (iDEX), consider the following statements:

- 1. iDEX will be funded and managed by a 'Defence Innovation Organization (DIO)' which has been formed as a 'not for profit' company as per Section 8 of the Companies Act 2013
- 2. It is aimed at promoting innovation and indigenisation in the aerospace and defence sector at the start-up level.

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

Solution: Defence Minister Rajnath Singh has approved the budgetary support of ₹498.8 crore to Innovations for Defence Excellence (iDEX) - Defence Innovation Organisation (DIO) for the next five years.

Innovations for Defence Excellence (iDEX) was launched by the Government of India in 2018.

iDEX will be funded and managed by a 'Defence Innovation Organization (DIO)' which has been formed as a 'not for profit' company as per Section 8 of the Companies Act 2013 by the two founder members i.e. Defence Public Sector Undertakings (DPSUs) - HAL & BEL alongwith the Department of Defence Production (DDP).

iDEX will function as the executive arm of DIO, carrying out all the required activities while DIO will provide high level policy guidance to iDEX.

The iDEX framework and establishment of the DIO is aimed at promoting innovation and indigenisation in the aerospace and defence sector at the start-up level. The scheme is aimed at providing financial support to nearly 300 start-ups, MSME, individual innovators and 20 partner incubators.

Hence both statements are correct.

Q.123) Which of the following comprises of India's foreign exchange reserves?

- 1. Foreign currency assets (FCAs)
- 2. Gold and Silver
- 3. SDR (special drawing rights) in IMF
- 4. RTP (reserve tranche position) in IMF

Select the correct answer using the code given below:

- a) 1 and 4 only
- b) 1 and 2 only

c) 1, 2 and 3 only

d) 1, 3 and 4 only

Solution: India's foreign exchange reserves crossed the \$600 billion mark for the first time after rising by \$6.842 billion in the week ended on June 4. Forex reserves rose to a record \$605.008 billion in the reporting week, helped by a rise in Foreign Currency Assets (FCA), a major component of the overall reserves.

Countries with the highest foreign reserves according to IMF (June 13, 2021)

China - \$3,330 Billion

Japan - \$1,378 Billion

Switzerland - \$1,070 Billion

Russia – \$605.200 Billion

India – \$605.008 Billion

Foreign-exchange reserves (also called forex reserves or FX reserves) are reserve assets held by a central bank in foreign currencies.

They are used to back liabilities on their own issued currency, support the exchange rate and set monetary policy.

Components: India's foreign exchange reserves comprise

Foreign currency assets (FCAs). These are maintained in currencies like US dollar, euro, pound sterling, Australian dollar and Japanese yen.

Gold

SDR (special drawing rights) in IMF: This is the reserve CURRENCY with IMF

RTP (reserve tranche position) in IMF: This is the reserve CAPITAL with IMF

Hence, option (d) is the correct answer.

Q.124) 'Open Societies Statement, recently seen in news, is an initiative of which of the following organisation?

- a) G7
- b) BRICS
- c) Shanghai Cooperation Organization
- d) None of the above

Solution: India signed off on a joint statement by G-7 and guest countries on "open societies".

The 'Open Societies Statement' was adopted at the end of an G7 outreach session titled 'Building Back Together—Open Societies and Economies', where Prime Minister Narendra Modi was invited as a lead speaker.

The joint statement was signed by the G-7 countries, and India, South Korea, Australia and South Africa, with host British Prime Minister Boris Johnson calling them "Democracies 11".

Features

This statement reaffirm the values of "freedom of expression, both online and offline, as a freedom that safeguards democracy".

The statement also refers to "politically motivated internet shutdowns" as one of the threats to freedom and democracy.

It also affirmed "human rights for all, both online and offline, as set out in the Universal Declaration of Human Rights and other human rights instruments, and opposition to any form of discrimination, so that everyone can participate fully and equally in society".

Hence, option (a) is the correct answer.

Q.125) With reference to the rare-earth elements, consider the following statements:

- 1. Scandium and yttrium are considered rareearth elements.
- 2. There is a shortage of rare earths elements.
- 3. All rare earth elements exhibit same colour that is Iron Gray.

Which of the statements given above is/are correct?

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

Solution: The U.S. Senate passed a law aimed at boosting American production and processing of rare earths. In 2019, the U.S. imported 80% of its rare earth minerals from China, the U.S. Geological Survey says.

These are a set of 17 chemical elements in the periodic table, specifically the 15 lanthanides plus scandium (Atomic Number 21) and Yttrium (Atomic Number 39).

Lanthanide series comprises the 15 metallic chemical elements with atomic numbers 57 through 71, from lanthanum through lutetium.

Scandium and yttrium are considered rareearth elements because they tend to occur in the same ore deposits as the lanthanides and exhibit similar chemical properties, but have different electronic and magnetic properties.

Cerium (AN 58) is the most abundant rare earth metal.

Why these elements called as RARE? There is no shortage of rare earths. But their extraction is difficult (Requires high skill, Capital intensive, Environmental issues).

2 main ore of extractions are Monazite and Bastansite.

Properties: Their colour ranges from Shiny Silver to Iron Gray. They are soft, malleable, ductile and usually reactive, especially at elevated temperatures or when finely divided.

Its application ranges from Civilian (smartphones, laptops, petroleum refining catalysts) to military including nuclear applications. Rare minerals that are essential to electric vehicles, wind turbines and drones.

China has the largest reserve (37 percent), followed by Brazil and Vietnam (18 percent each), Russia (15 percent), and the remaining countries (12 percent). Deng Xiaoping said once, The Middle East has oil and China has rare earth.

Hence, option (a) is the correct answer.

Q.126) PRABANDH portal, seen recently in news, is related to:

- a) Mining
- b) Environment
- c) Agriculture

d) Education

Solution: PRABANDH (PRoject Appraisal, Budgeting, Achievements and Data Handling System) portal:

The objective of the portal is to compiling the data of out-of-school children identified by each state/UT and their mapping with special training centres (STC).

Through this the government will facilitate age-appropriate admissions of children in the age group of 6-14 years.

For out of school children in the 16-18 years age group, financial assistance will be provided in the session 2021-22.

It is a step towards utilising technology to increase efficiency and manage the implementation. It will enable transparency and accuracy.

Q.127) The Resolution 75/260 of the United Nations General Assembly (UNGA), seen recently in news, deals with:

- a) Situation of Human Rights in Syria.
- b) Development of an international legallybinding instrument on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.

c) Implementation of the Declaration of Commitment on HIV/AIDS.

d) Declaration on the Rights of Indigenous Peoples.

Solution: Recently, The Union Health Minister addressed the 75th session of the United Nations General Assembly (UNGA) on prevention of HIV/AIDS.

The Resolution 75/260 of UNGA deals with the Implementation of the Declaration of Commitment on HIV/AIDS and the political declarations on HIV/AIDS.

Key points of address are:

India's unique HIV prevention model is centred on the concept of 'Social Contracting' through which the 'Targeted Interventions Program' is implemented.

The HIV & AIDS Prevention and Control Act, 2017, provide a legal and enabling framework to safeguard the human rights of infected and affected populations.

India is providing free anti-retro-viral treatment to close to 1.4 million people.

Q.128) Consider the following statements regarding "Project O2 for India", launched recently:

- 1. It an initiative of the Office of Principal Scientific Adviser, Government of India.
- 2. It aims to ensure adequate national level supply of Zeolite.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Project O2 for India is initiated in aftermath of second wave of COVID-19 which witnessed an increase in demand for medical oxygen across the country.

It is an initiative of the Office of Principal Scientific Adviser, Government of India (GoI), aims to help stakeholders working to augment the country's ability to meet the rise in demand for medical oxygen.

Under the project, a 'National Consortium of Oxygen' is enabling supply of critical raw materials such as zeolites, setting up of small oxygen plants, manufacturing compressors, final products such as oxygen plants, concentrators, and ventilators. Besides, the consortium is also working to strengthen the manufacturing ecosystem for long-term preparedness.

Zeolite is an important raw material used for production of liquid oxygen.

Q.129) Consider the following statements in context of Cybersecurity.:

- 1. The Information Technology Act, 2000 of India states that when a cyber crime has been committed, a complaint can be filed at the cyber cell of the place of crime.
- 2. The Act especially provides protection to Critical Information Infrastructure (CII).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only

- c) Both 1 & 2
- d) None of the above

Solution: Information Technology Act, 2000

The Information Technology Act of India states that when a cyber crime has been committed, it has a global jurisdiction and a complaint can be filed at any cyber cell.

The Act especially provides protection to Critical Information Infrastructure (CII) by prescribing punishment in the form of imprisonment for a term of up to 10 years.

The IT Act defines "critical information infrastructure" to be "the computer resource, incapacitation or destruction of which, shall have a debilitating impact on national security, economy, public health or safety" like power and energy, telecom sector etc.

Q.130) Which one of the following suggests that there is 'jobless growth' in the economy?

- a) GDP growth rate of a country is very high in comparison to the employment growth rate
- b) Employment growth rate of a country is very high in comparison to the GDP growth rate
- c) Labour force participation of women is decreasing
- d) The economy of the country is going towards informalization

Solution: During the period 1950–2010, Gross Domestic Product (GDP) of India grew positively and was higher than the employment growth. However, there was always fluctuation in the growth of GDP. During this period, employment grew at the rate of not more than 2 per cent.

In the late 1990s: At this time employment growth started declining and reached the level of growth that India had in the early stages of planning. During these years, we also find a widening gap between the growth of GDP and employment. This means that in the Indian economy, without generating employment, we have been able to produce more goods and services. Scholars refer to this phenomenon as jobless growth.

Q.131) With reference to the United Nations Convention to Combat Desertification (UNCCD), consider the following statements:

- 1. It is the first and only internationally legally binding framework set up to address the problem of desertification.
- 2. Its secretariat has been located in New York.

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

Solution: PM Modi delivered keynote address at the UN 'high-level dialogue on desertification, land degradation and drought'. He spoke at the Opening Segment in his capacity as the President of the 14th Session of the Conference of Parties (COP) of United Nations Convention to Combat Desertification (UNCCD).

Key highlights of his address

In last 10 years, around 3 million hectares of forest cover added in India, enhancing the combined forest cover to almost one-fourth of the country's total area.

India is on track to achieve its national commitment of Land degradation neutrality.

India is also working towards restoring 26 million hectares of degraded land by 2030. This will achieve an additional carbon sink of 2.5 to 3 billion tons of carbon dioxide equivalent.

He gave an example of the Banni region in Rann of Kutch in Gujarat to illustrate how restoration of land can start a virtuous cycle of good soil health, increased land productivity, food security and improved livelihoods.

United nations convention to combat desertification (UNCCD):

It is the first and only internationally legally binding framework set up to address the problem of desertification.

1992: The United Nations Conference on Environment and Development (UNCED) or so called Rio Earth Summit of 1992 resulted in 5 document's. One of them was Agenda 21. UNCCD stems from a direct recommendation of agenda 21.

1994: UNCCD was finally adopted in Paris, France on June 17, 1994. That's why June 17 has been observed as the 'World Day to Combat Desertification (WDCD).

1996: It was ratified in December 1996 and thus came into force

Its secretariat has been located in Bonn, Germany.

Hence only statement 1 is correct.

Q.132) With reference to the North Atlantic Treaty Organization, consider the following statements:

- 1. It is an intergovernmental military alliance between North American and European countries.
- 2. Three former Soviet states (Estonia, Latvia and Lithuania) are members of NATO.
- 3. Its headquarters is located in London.

Which of the statements given above is/are correct?

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

Solution: In a summit statement in Brussels, NATO leaders have declared China a constant security challenge and said the Chinese are working to undermine global order.

NATO is also called the North Atlantic Alliance.

Objective: It is an intergovernmental military alliance between North American and European countries. It constitutes a system of collective defence whereby its independent member states agree to mutual defence in response to an attack by any external party.

HQ: Brussels, Belgium.

Supreme Headquarters Allied Powers Europe (SHAPE) is the headquarters of the NATO's Allied Command Operations (ACO). Since 1967 it has been located in Casteau, north of the Belgian city of Mons.

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

Member Countries:

It consists of 30 members. Montenegro joined it in 2017 and North Macedonia in 2020.

Of the 30 member countries, two are located in North America (Canada and the United States), 28 are in Europe, one of which (Turkey) is in both Europe and Asia.

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

Hence, option (a) is the correct answer.

Q.133) Dagmara Hydro Electric Project, recently seen in news, would come up on which of the following river?

- a) Kosi
- b) Krishna
- c) Yamuna
- d) Narmada

Solution: NHPC signs MoU with Bihar State Hydroelectric Power Corporation (BSHPC) for Implementation of 130.1 MW Dagmara HE Project.

It would come up on Kosi River in Suapul district, Bihar.

The project will be located near village Bhaptiahi on the left bank, about 31 km downstream of Bhimnagar barrage on Kosi River.

The 130.1 MW Dagmara HE Project, the largest hydropower project of Bihar is to be implemented by NHPC on ownership basis.

NHPC

NHPC Limited (erstwhile National Hydroelectric Power Corporation) is a Category-A Miniratna Company under Ministry of Power, Govt. of India in the field of Hydropower.

Currently, NHPC has 24 operational power stations with a total installed capacity of 7071 MW.

Founded in: 1975.

Headquarters: Faridabad, Haryana.

Hence, option (a) is the correct answer.

Q.134) With reference to the Stockholm **International Peace Research Institute (SIPRI)** Yearbook 2021, consider the following statements:

- 1. Russia and the U.S. together possessed over 90% of global nuclear weapons.
- 2. India possessed an estimated 156 nuclear warheads at the start of 2021, compared with 150 at the start of last year.

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

Solution: The Stockholm International Peace Research Institute (SIPRI) launched the findings of SIPRI Yearbook 2021, which assesses the current state of armaments, disarmament and international security.

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.S. together possessed over 90% of global nuclear weapons.

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.

Signs that decline in nuclear arsenals has stalled

The nine nuclear-armed states together possessed an estimated 13,080 nuclear weapons at the start of 2021. This marked a decrease from the 13,400 possessed at the beginning of 2020.

Despite this overall decrease, the estimated number of nuclear weapons currently deployed with operational forces increased to 3825, from 3720 last year.

Around 2000 of these—nearly all of which belonged to Russia or the USA—were kept in a state of high operational alert.

Hence both statements are correct.

Q.135) With reference to the Treaty on the Prohibition of Nuclear Weapons (TPNW), consider the following statements:

- 1. It is not a legally binding international agreement.
- 2. All United Nations member countries have ratified or acceded to the treaty.

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

Solution: The entry into force of the Treaty on the Prohibition of Nuclear Weapons in early 2021 highlights the growing divide between the nuclear-armed states and other countries that are impatient to see progress on nuclear disarmament promised by the Nuclear Non-Proliferation Treaty.

The Treaty on the Prohibition of Nuclear Weapons (TPNW) is also known as the Nuclear Weapon Ban Treaty.

It is the first legally binding international agreement to comprehensively prohibit nuclear weapons, with the goal of leading towards their total elimination.

It was adopted in July 2017 and came into force in January 2021.

As of March 2021, 54 states have ratified or acceded to the treaty, most recently Comoros in February 2021.

Strategy:

For those nations that are party to it, the treaty prohibits the development, testing, production, stockpiling, stationing, transfer, use and threat of use of nuclear weapons, as well as assistance and encouragement to the prohibited activities.

For nuclear armed states joining the treaty, it provides for a time-bound framework for negotiations leading to the verified and irreversible elimination of its nuclear weapons programme.

Need of Treaty: The Non-Proliferation Treaty (NPT) of 1968 contains only partial prohibitions, and nuclear-weapon-free zone treaties prohibit nuclear weapons only within certain geographical regions.

Hence both statements are incorrect.

Q.136) Consider following statements.

- 1. ITLOS is a multi-governmental establishment formed by the UN Convention on the Law of the Sea which entered into force in 1994.
- 2. The tribunal is based in Hamburg, Germany.
- 3. India is not party to this convention.

Correct statements is/are

a) 1 only

b) 1 and 2 only

- c) 1 and 3 only
- d) All of the above

Solution: India is signatory to this convention.

Q.137) Consider following statements about ethanol production in India.

1. Government is planning to double distilling capacities by 2025, partly by encouraging an increase in the share of grain-based ethanol

production from the current focus on molasses-based production.

2. Rice would form the primary feedstock for grain-based ethanol production.

Correct statement is/are

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Solution: The Central government has allocated 78,000 tonnes of rice procured for food security purposes to be diverted to ethanol production instead this year, at a subsidised rate of ₹20 a kg, Food Secretary Sudhanshu Pandey said on Tuesday.

However, he insisted that the share of rice in ethanol production was "miniscule and transitory", emphasising that maize would form the primary feedstock for grain-based ethanol production instead.

This is part of the government's plan to double distilling capacities by 2025, partly by encouraging an increase in the share of grain-based ethanol production from the current focus on molasses-based production.

Earlier this month, Prime Minister Narendra Modi presented a road map advancing the target date for achieving 20% blending of ethanol in petrol by five years to 2025.

The last two years have seen blending levels of around 5%, which is likely to jump to 8.5% in the current year, according to a Ministry statement.

Q.138) Which of the following steps are taken by Indian Government to curb carbon emissions?

- 1. Introduction BS-VI norms
- 2. H-CNG Buses

3. Zig-Zag Technology in Brick Kilns

Select the correct answer using the code below:

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

d) 1, 2 and 3

Solution: The switch to BS-VI vehicles was to happen in 2022 but looking at the poor air condition, the move was advanced by four years.

All vehicles will have to follow new standards (BS -VI) from 1st April, 2020. The standards cover four and two-wheelers and commercial vehicles.

At present, BS IV and BS III fuels are available across India.

Due to their use, hazardous pollutants in the air are increasing leading to health ailments like Asthma, Bronchitis, heart diseases and even cancer.

"The adoption of the zig-zag technology in 3,000 out of 6,000 brick kilns around the National Capital Region (NCR) has also helped in reduction of air pollution. Soon all brick kilns will follow the suit," he said.

In zig-zag kilns, bricks are arranged to allow hot air to travel in a zigzag path which results in better mixing of air and fuel, allowing complete combustion, reducing coal consumption by about 20 per cent. Hence, all options are correct.

Q.139) The term "Democracies 11" was recently seen in news in the wake of G7 summit. Along with G7 member nations which of the following countries are part of Democracies 11?

1. India

- 2. Brazil
- 3. South Korea
- 4. Australia
- 5. South Africa

Choose the correct answer from the codes given below:

a) 1, 2, 3 and 4

b) 1, 3, 4 and 5

c) 2, 3, 4 and 5

d) 1, 2, 4 and 5

Solution: In the wake of G7 summit, India recently signed off on a joint statement by G-7 and guest countries on "open societies" that reaffirm and encourage the values of "freedom of expression, both online and offline, as a freedom that safeguards democracy and helps people live free from fear and oppression".

The joint statement was signed by the G-7 countries, and India, South Korea, Australia and South Africa, with host British Prime Minister Boris Johnson calling them "Democracies 11".

Democracies 11 is facing threats to freedom and democracy from rising authoritarianism, electoral interference, corruption, economic coercion, manipulation of information, including disinformation, online harms and cyber attacks, politically motivated internet shutdowns, human rights violations and abuses, terrorism and violent extremism.

Q.140) Which of the following conventions was the outcome of Earth Summit, 1992?

- a) United Nations Convention to Combat Desertification
- b) Cartagena Protocol on Biosafety
- c) Minamata Convention

d) Stockholm Convention

Solution: Earth Summit 1992 is also known as The United Nations Conference on Environment and Development (UNCED).

Earth Summit 1992 succeeded in raising public awareness of the need to integrate environment and development.

The Earth Summit resulted in the following documents:

Rio Declaration on Environment and Development

Agenda 21

Forest Principles

Moreover, important legally binding agreements (Rio Convention) were opened for signature:

Convention on Biological Diversity

Framework Convention on Climate Change (UNFCCC)

United Nations Convention to Combat Desertification

United Nations Convention to Combat Desertification (UNCCD):

It is a Convention to combat desertification and mitigate the effects of drought through national action programs (NAP).

National action programs (NAP) incorporate long-term strategies supported by international cooperation.

It is the only internationally legally binding framework set up to address desertification.

It was adopted in Paris, France in 1994 and entered into force in 1996.

It has 196 parties, making it truly global in reach.

2006 was declared "International Year of Deserts and Desertification".

Q.141) "Sankalp Se Siddhi – Mission Van Dhan", recently seen in news, is an initiative of:

- a) Ministry of Environment, Forest and Climate Change
- b) Ministry of Health and Family Welfare
- c) Ministry of Education

d) Ministry of Tribal Affairs

Solution: Minister for Tribal Affairs launches the tribal livelihoods initiative "Sankalp Se Siddhi – Mission Van Dhan"

TRIFED now plans to expand its operations through convergence of various schemes of different Ministries and Departments and launch the various tribal development programs in Mission Mode under "Sankalp Se Siddhi – Mission Van Dhan" for expediting its implementation in a Mission mode.

Through this mission, establishment of 50,000 Van Dhan Vikas Kendras, 3000 Haat Bazaars, 600 Godowns, 200 Mini TRIFOOD Units, 100 Common Facility Centres, 100 TRIFOOD parks, 100 SFURTI clusters, 200 Tribes India retail stores, ecommerce platforms for TRIFOOD and Tribes India brands is being targeted.

Hence, option (d) is the correct answer.

Q.142) Which of the following are the Geographical Indications (GI) certified products?

- 1. Jalgaon banana
- 2. Jardalu mangoes
- 3. Gholvad sapota

Select the correct answer using the code given below:

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

d) 1, 2 and 3

Solution: A consignment of fibre and mineral rich GI CERTIFIED Jalgaon banana has been exported to Dubai from Tandalwadi village, Jalgaon district of Maharashtra. In 2016, Jalgaon Banana got GI certification which was registered with Nisargraja Krishi Vigyan Kendra (KVK) in Jalgaon.

India is the world's leading producer of bananas with a share of around 25 per cent in total output.

Banana is widely grown in tropical, subtropical, and coastal region of India.

Andhra Pradesh is the largest producer in India followed by Gujarat, Tamil Nadu, Maharashtra, Kerala, Uttar Pradesh, Bihar and Madhya Pradesh. All these states contribute more than 70 per cent of the country's banana production.

Exports

Country's banana export has been rising sharply because of adoption of farm practices as per the global standards.

The majority of banana exports from India are to West Asian and North African countries like UAE, Bahrain, Egypt, Saudi Arabia, Qatar and Iran.

'Jardalu' mangoes from Bhagalpur district of Bihar received GI certification in 2018

Recently GI certified Gholvad sapota exported from Maharashtra to U.K. The sweet fruit has a unique taste derived from the calcium rich soil in the State's Palghar district.

Hence, option (d) is the correct answer.

Q.143) Consider following statement about Adiprashikshan Portal.

1. It was developed by ministry of human resource development.

2. Its purpose is to provide quality training to teachers under new education policy.

Correct statement is/are

- a) 1 only
- b) 2 only
- c) 1 and 2

d) None

Solution: ADI PRASHIKSHAN portal developed by the Ministry of tribal affairs would act as a Central Repository of all training programs conducted by Tribal Research Institutes (TRIs), different divisions of Ministry, National Society for Education of Tribal Students (NESTS), Centre of Excellences funded by Ministry of Tribal Affairs and National Tribal Research Institute.

Q.144) The term 'Ring Fencing' is associated with which of the following.

a) New model of development of roads across city

b) Strategy for vaccination

- c) New method of fertilisation of crop
- d) None of the above

Solution: focus not only on areas where the infection is intense but also on places where there are indications that the test positivity rate is still low and that if you saturate the priority groups there through innovative vaccine delivery mechanism, you can stop a surge. This is known as ring-fencing..

Q.145) Consider following statement about deep ocean mission launched by Government of India.

1. It involves developing a submersible vehicle that will allow a crew to plunge 6,000 metres into the ocean.

- 2. It will hunt the floor for precious metals.
- 3. The Ministry of Earth Sciences (MoES) will be the nodal Ministry implementing this multi-institutional mission.

Correct statements is/are

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

d) All of the Above

Solution: The Union Cabinet has approved the long-pending deep ocean mission, which among other things involves developing a submersible vehicle that will allow a crew to plunge 6,000 metres into the ocean and hunt the floor for precious metals.

The Ministry of Earth Sciences (MoES) will be the nodal Ministry implementing this multiinstitutional mission.

Q.146) Consider the following statements:

- 1. Right to a fair trial originates from Article 14 of the Indian Constitution.
- 2. The Supreme Court in State of Punjab vs Ramdev Singh (2003) held that the name of the rape victim should not be mentioned in the judgments.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only

c) Both 1 & 2

d) Neither 1 nor 2

Solution: Right to a fair trial: Article 14 of the Indian Constitution exclusively deals with the Right to Equality. Conducting fair trails is an important aspect of the law which ensures equality.

The disclosure of identity of the survivor of rape by anyone was made punishable under a newly added Section 228-A.

The Supreme Court in State of Punjab vs Ramdev Singh (2003) held that the name of the victim should not be mentioned in the judgments and she should be described as 'victim' in the judgment.

Q.147) Consider the following statements with respect to GATI:

- 1. The Ministry of Education has launched GATI.
- 2. It is a system of grading institutes to achieve gender equity in science.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

- c) Both 1 & 2
- d) None of the above

Solution: Statement 1 is incorrect.

The Department of Science and Technology (DST), Government of India, launched a system of grading institutes - GATI, based on a programme started by the United Kingdom in 2005 called the Athena SWAN, to achieve gender equity in science.

The system of grading institutes will depend on the enrolment of women and the advancement of the careers of women faculty and scientists.

The concept borrows from a programme started by the United Kingdom in 2005 called the Athena SWAN (Scientific Women's Academic Network).

Q.148) With reference to gender equity, consider the following statements:

- 1. Gender equity in science is one of the focuses of the Draft 5th National Science, Technology, and Innovation Policy.
- 2. India is the third-worst performer in South Asia according to the World Economic Forum's Global Gender Gap Report 2021.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only

c) Both 1 & 2

d) Neither 1 nor 2

Solution: Both statements are correct

One of the focuses of the new Science, Technology and Innovation Policy, currently being drafted by the Department of Science and Technology (DST), will be to increase the participation of women in science.

To this end, the govt. will incorporate a system of grading institutes depending on the enrolment of women and the advancement of the careers of women faculty and scientists.

India has slipped 28 places to rank 140th among 156 countries in the World Economic Forum's Global Gender Gap Report 2021, becoming the third-worst performer in South Asia.

Q.149) What is "New Shephard" seen recently in news?

a) An asteroid

b) A rocket system

- c) A missile system
- d) A Submarine

Solution: New Shephard, named after astronaut Alan Shephard (the first American to go to space), is a rocket system developed by Jeff Bezos's space company Blue Origin to

take astronauts and research payloads past the Karman line, the internationallyrecognized boundary of space.

It aims at providing easier and cost-effective access to space for academic and research-oriented purposes. It will also allow space tourists to experience microgravity by taking them 100 km above the Earth.

Q.150) The Karman line, an internationally recognized boundary of space, lies in which layer of the atmosphere?

- a) Stratosphere
- b) Troposphere
- c) Thermosphere
- d) Exosphere

Solution: The Karman line is the internationally recognized boundary of space. The line is named after Theodore von Kármán (1881–1963), a Hungarian American engineer and physicist, who was active primarily in aeronautics and astronautics.

It is an imaginary boundary 100 kilometers (62 miles) above mean sea level. In theory, once this 100 km line is crossed, the atmosphere becomes too thin to provide enough lift for conventional aircraft to maintain flight. At this altitude, a conventional plane would need to reach orbital velocity or risk falling back to Earth.

Q.151) Which of the following are the major components of Deep Ocean Mission?

- 1. Development of Technologies for Deep Sea Mining, and Manned Submersible
- 2. Deep Ocean Survey and Exploration
- 3. Energy and freshwater from the Ocean

Select the correct answer using the code given below:

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

d) 1, 2 and 3

Solution: The Cabinet Committee on Economic Affairs chaired by PM Modi, has approved the proposal of Ministry of Earth Sciences (MoES) on "Deep Ocean Mission".

Objective: To explore deep ocean for resources and develop deep sea technologies for sustainable use of ocean resources.

The estimated cost of the Mission will be Rs. 4077 crore for a period of 5 years to be implemented in a phase-wise manner. The estimated cost for the first phase for the 3 years (2021-2024) would be Rs.2823.4 crore.

Ministry of Earth Sciences (MoES) will be the nodal Ministry implementing this multi-institutional ambitious mission.

The Deep Ocean Mission consists of the following six major components:

Development of Technologies for Deep Sea Mining, and Manned Submersible

Development of Ocean Climate Change Advisory Services

Technological innovations for exploration and conservation of deep-sea biodiversity

Deep Ocean Survey and Exploration

Energy and freshwater from the Ocean

Advanced Marine Station for Ocean Biology.

Hence, option (d) is the correct answer.

Q.152) Consider following statement about Deepor Beel lake.

1. It is located in west Bengal.

- 2. It is a wetland under the Ramsar Convention which has listed the lake in November 2002.
- 3. It is one of the important site of residence of Asian Elephants.

Correct statement is/are

a) 1 only

b) 2 and 3 only

- c) 2 only
- d) All of the above

Solution: The Assam government has proposed the realignment of a broad gauge railway line through the Deepor Beel, an 'Important Bird Area' designated under the Ramsar Convention of Wetlands.

Several elephants have been run over on the railway track between the elevated Rani Reserve Forest and the sanctuary.

The elephants use four corridors crossing the track to often bathe and feed on the aquatic plants in the wetland.

Q.153) Consider following statements about releases Desertification and Land Degradation Atlas of India.

- 1. It has been published by Space Application Centre, ISRO, Ahmedabad.
- 2. It provides the change analysis for the duration of 15 years, from 2003-05 to 2018-19.
- 3. India hosted the 14th session of Conference of Parties (COP 14) of United Nations Convention to Combat Desertification (UNCCD) in September 2019.

Correct statement is/are

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

d) All of the above

Solution: It has been published by Space Application Centre, ISRO, Ahmedabad. The Atlas provides state wise area of degraded lands for the time frame 2018-19.

It also provides the change analysis for the duration of 15 years, from 2003-05 to 2018-19.

the salient findings of this Atlas are not only useful as a ready reference, but, will also be helpful in strengthening the envisaged National Action Plan for achieving land restoration targets by providing important baseline and temporal data and technical inputs.

India hosted the 14th session of Conference of Parties (COP 14) of United Nations Convention to Combat Desertification (UNCCD) in September 2019.

India is striving towards achieving the national commitments of Land Degradation Neutrality (LDN) and restoration of 26 Million ha of degraded land by 2030 which focus on sustainable and optimum utilisation of land resources.

India has been at the forefront of bringing the issue of land degradation to the core of relevant international alliances for protection and conservation of environment.

The government of India has adopted collective approach for making progress towards achieving the national commitments related to land restoration.

Q.154) Consider following statements about Neutrinos.

- 1. Neutrinos are mysterious particles, produced copiously in nuclear reactions in the Sun, stars, and elsewhere.
- Neutrinos interact very weakly with everything else – trillions of them pass

through every human being every second without anyone noticing.

3. Neutrinos are massless particles.

Correct statement is/are

- a) 1 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) All of the above

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

Neutrinos are mysterious particles, produced copiously in nuclear reactions in the Sun, stars, and elsewhere.

They also "oscillate"-- meaning that different types of neutrinos change into one another – as has been found in many experiments.

Probing of oscillations of neutrinos and their relations with mass are crucial in studying the origin of the universe.

Neutrinos interact very weakly with everything else – trillions of them pass through every human being every second without anyone noticing; a neutrino's spin always points in the opposite direction of its motion, and until a few years ago, neutrinos were believed to be massless.

It is now generally believed that the phenomenon of neutrino oscillations require neutrinos to have tiny masses.

Q.155) Varnam, kriti, tillana, pallavi,, keertana are the terms associated with

- a) Carnatic music
- b) Hindustani music
- c) Vesara style temple structures
- d) guild system in Tamilnadu during Chola period.

Solution: For starters, there is far greater variety of composition in Carnatic music: varnam, kriti, tillana, pallavi, ragamalika, keertana, swarajati, padam, javali etc. Dhrupad uses the compositional forms of dhrupad and dhamar.

Khayal seems to be shedding the variety that it had at one time. We only ever get to hear the khayal and tarana forms in Khayal concerts: trivat, chaturanga, khayalnuma etc. are hardly heard today.

Q.156) Consider the following statements:

- 1. Right to privacy is an intrinsic part of life and liberty under Article 14.
- 2. Information Technology Act, 2000 does not provide for safeguarding the Right to privacy.

Which of the statements given above is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 & 2
- d) None of the above

Solution: Both statements are incorrect

In Justice K. S. Puttaswamy (Retd) Vs Union of India, SC unanimously held that Indians have a constitutionally protected fundamental right to privacy that is an intrinsic part of life and liberty under Article 21.

Information Technology Act, 2000 provides for safeguard against certain breaches in relation to privacy of data from computer systems.

Q.157) "Enhanced Trade Partnership" has been recently launched by India as Trade Agreement with-

a) United States

b) United Kingdom

- c) Russia
- d) Belgium

Solution: Prime Minister Modi and Prime Minister of the United Kingdom Boris Johnson, held a Virtual Summit. India and the UK have enjoyed a Strategic Partnership since 2004.

An ambitious 'Roadmap 2030' was adopted at the Summit to elevate bilateral ties to a 'Comprehensive Strategic Partnership'.

The roadmap will pave the way for a deeper and stronger engagement over the next ten years in the key areas of people-to-people contacts, trade and economy, defence and security, climate action and health.

The two leaders launched an 'Enhanced Trade Partnership' (ETP) to unleash the trade potential between the 5th and 6th largest economies of the world. It has set an ambitious target of more than doubling bilateral trade by 2030.

Q.158) Consider the following statements about Right to be forgotten:

- 1. In India, there are no legal provisions related to it.
- 2. The Supreme Court recognised the right to be forgotten as being under the ambit of the right to privacy.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only

c) Both 1 & 2

d) None of the above

Solution: Both statements are correct

The right to be forgotten is, generally, the right to have information about a person removed from public access.

In India, there are no legal provisions related to it. This right is currently not available under the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 ("DP Rules 2011") framed under the Information Technology Act, 2000 ("IT Act 2000").

Justice Puttaswamy v. Union of India, 2017: The Supreme Court recognised the right to be forgotten as being under the ambit of the right to privacy (specifically, informational privacy) under the Constitution.

Q.159) Raja Prabha festival, seen recently in news, is celebrated in which of the following states?

- a) Jharkhand
- b) Chhattisgarh
- c) Bihar

d) Odisha

Solution: Raja Prabha of Odisha is a three- day festival during the mid- June marking the beginning of monsoon.

This is a three-day-long festival dedicated to Mother Earth (Bhuma Devi) and womanhood at large.

The first day of the festival is called Pahili Raja, the second is Mithuna Sankranti and the third Bhu daha or Basi Raja.

The fourth and final day is called Vasumati snana (bathing of Mother Earth).

This festival is also associated with the end of the summer season and the arrival of the monsoon.

Q.160) Dagmara multipurpose hydropower project is proposed to be set up over which of the following River?

*a) Kosi

- b) Bhagmati
- c) Burhi Gandak
- d) Ghaghara

Solution: Recently, a Memorandum of Understanding (MoU) has been signed between National Hydro Power Corporation (NHPC) Limited and Bihar State Hydroelectric Power Corporation Limited (BSHPC) for Implementation of Dagmara Hydro-Electric Project, Supaul, Bihar. The project is located on Kosi River.

The total generation capacity of the 'Run-of-River' project will be 130.1 MW, which will comprise two power houses, while the barrage length would be 753 metre and it would have 36 gates on river Kosi River which has a total length of 233 km.

Kosi for long has been known as 'sorrow of Bihar', but Dagmara project will convert it into a river of opportunities. The barrage on the Kosi would provide an alternate route to cross over the river. Besides, the project will control river meandering to a greater extent.

Q.161) Revdanda port, recently seen in news, is located in:

- a) Karnataka
- b) Andhra Pradesh
- c) Tamil Nadu

d) Maharashtra

Solution: Indian Coast Guard (ICG) rescued all 16 crew of sinking MV Mangalam near Revdanda port of Maharashtra on June 17, 2021.

Revadanda is located on the W coast, approx 44km S of Mumbai.

The port provides an open roadstead lighterage anchorage and small alongside jetties for unloading iron ore to the nearby steel plant via conveyor.

Hence, option (d) is the correct answer.

Q.162) Recently seen in news, Kimin-Potin road built by Border Roads Organisation (BRO) is in:

- a) Sikkim
- b) Himachal Pradesh
- c) Ladakh

d) Assam

Solution: Raksha Mantri dedicated to the nation 12 roads, built by Border Roads Organisation (BRO) in the Northern and Eastern border areas.

At an event organised in Lakhimpur district of Assam, the Raksha Mantri e-inaugurated a 20-km long double lane Kimin-Potin road in Assam's Lakhimpur district, along with nine other roads in Arunachal Pradesh and one each in the Union Territories of Ladakh and Jammu & Kashmir.

The roads have been constructed under 'Arunank', 'Vartak', 'Brahmank', 'Udayak', 'Himank' and 'Sampark' projects of BRO.

These road projects are part of the 'Act East Policy' of the Government wherein special emphasis is being laid on the overall development of the border areas.

Hence, option (d) is the correct answer.

Q.163) Consider following statements about BT cotton.

- 1. Bt cotton is the only transgenic crop that has been approved by the Centre for commercial cultivation in India.
- 2. The HTBt cotton variant adds another layer of modification, making the plant resistant to the herbicide glyphosate.
- 3. It is feared that glyphosate having a carcinogenic effect, as well as the unchecked spread of herbicide resistance to nearby plants through pollination, creating a variety of superweeds.

Correct statements is/are

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

d) All of the above

Solution: The illegal cultivation of herbicidetolerant (HT) Bt cotton has seen a huge jump this year, with seed manufacturers claiming that the sale of illegal seed packets has more than doubled from 30 lakh last year to 75 lakh this year.

Industry lobbies have written to the Agriculture Ministry, demanding that action be taken to stop such sales and punish offenders, noting that cultivation of the genetically modified cotton variant has serious environmental and economic consequences.

Bt cotton is the only transgenic crop that has been approved by the Centre for commercial cultivation in India. It has been genetically modified to produce an insecticide to combat the cotton bollworm, a common pest.

The HTBt cotton variant adds another layer of modification, making the plant resistant to the herbicide glyphosate, but has not been approved by regulators. Fears include glyphosate having a carcinogenic effect, as

well as the unchecked spread of herbicide resistance to nearby plants through pollination, creating a variety of superweeds.

Q.164) Which of the following committee/s is/are concerened with censoring of films in India?

- 1. Shyam Benegal Committee.
- 2. Subhash Ghai Committee
- 3. Mukul Mudgal committee
- 4. Lokhandwala committee.
- a) 1 only
- b) 1 and 3
- c) 1 and 4
- d) 2 and 3

Solution: Centre plans Bill to order censors to re-examine a cleared film (GS 2)

The Centre on Friday sought public comments on its draft Cinematograph (Amendment) Bill, 2021, which proposes to bring back its "revisionary powers" over the Central Board of Film Certification. This would empower the Centre to order "re-examination" of an already certified film, following receipt of complaints.

In November 2000, the Supreme Court had upheld a Karnataka High Court order which struck down the Centre's "revisional powers in respect of films that are already certified by the Board".

The draft Bill also includes provisions to penalise film piracy with jail term and fine, and introduce age-based certification.

The Ministry of Information and Broadcasting said it wanted to add a provision "for granting revisionary powers to the government on account of violation of Section 5B(1) of the Act" (principles for guidance in certifying films).

It said that under Section 6 of the existing Cinematograph Act, 1952, the Centre was empowered to call for the record of proceedings in relation to certification of a film and pass any order thereon.

This "means that the Central Government, if the situation so warranted, has the power to reverse the decision of the Board," it said.

It said the recommendations of the Justice Mukul Mudgal Committee of 2013 and the Shyam Benegal Committee of 2016 had also been considered.

Q.165) Consider the following statements regarding Sustainable Development Report 2021:

- 1. India is only ahead of Pakistan and Afghanistan in South Asia.
- 2. India made significant progress in the SDG goal of clean water and sanitation and climate action.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Solution: Sustainable Development Report 2021 is prepared by experts from the UN's Sustainable Development Solutions Network (SDSN); this report compares how countries implement the 2030 Agenda for Sustainable Development.

Finland has ranked highest in the annual Sustainable Development Report.

India is ranked 120: ranked ahead of Pakistan and Afghanistan in South Asia.

India made significant progress and is on track or maintaining its SDG achievement in:

SDG6: Clean water and sanitation

SDG 13: Climate action

Performance of India declined in:

SDG 4: Quality Education

SDG 15: Life on Land

Q.166) A report titled "The race against time for smarter development" is recently released by:

- a) UNESCO
- b) UNDP
- c) NASA
- d) IMF

Solution: The 7th edition of the UNESCO Science report has been released recently under the title "The race against time for smarter development". This report makes a detailed analysis of the development path that countries have been following over the last five years in the field of science.

The report finds that:

India's investment in research and development (R&D) remains unsatisfactory.

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.

India also has one of the lowest GERD/GDP ratios among the BRICS nations.

Target: The Science and Technology Policy of 2003 fixed the threshold of devoting 2% of GDP to research and development (R&D) by 2007. However, the target has not been achieved and is being extended again and again.

Research and Development (R&D) in the government sector has been declining steadily since 2015.

There has been an increase in scientific publications by Indian researchers on cutting-edge technologies. Total publications have risen from 80,458 in 2011 to 1.61 lakh in 2019. However, patenting by domestic corporations, research institutes, universities, and individuals remain low in India.

Q.167) Which of the following committees of Parliament ascertains whether the money granted by Parliament has been spent by Government "within the scope of the Demand" and examines the audit report of Comptroller and Auditor General of India?

- a) Estimates Committee
- b) Committee on Public Undertakings
- c) Committee on Subordinate Legislation

d) Public Accounts committee

Solution: Public Accounts committee:

This Committee consists of 15 members elected by the Lok Sabha and 7 members of the Rajya Sabha. A Minister is not eligible for election to this Committee. The term of the Committee is one year.

The main duty of the Committee is to ascertain whether the money granted by Parliament has been spent by Government "within the scope of the Demand".

The Appropriation Accounts of the Government of India and the Audit Reports presented by the Comptroller and Auditor General mainly form the basis for the examination of the Committee.

Cases involving losses, nugatory expenditure and financial irregularities come in for severe criticism by the Committee. The Committee is not concerned with questions of policy. It is concerned only with the execution of the policy laid down by Parliament and its results.

Q.168) Consider the following statements regarding Citizenship Amendment Act(CAA)

- 1. The act applies to tribal areas of Tripura, Mizoram, Assam and Meghalaya
- Under the Act, the central government may cancel the registration of Overseas Citizenship of India(OCI) card

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

Solution: Recently, Union Home Ministry invited citizenship applications under the Citizenship Amendment Act. But it faces the Supreme Court challenge. A recent petition filed in the Supreme Court said the government order "utterly discriminates and deprives a class of persons namely, the Muslims".

The objective of the CAA is to grant Indian citizenship to persecuted minorities — Hindu, Sikh, Jain, Buddhist, Parsi and Christian — from Pakistan, Bangladesh and Afghanistan.

Those from these communities who had come to India till December 31, 2014, facing religious persecution in their respective countries, will not be treated as illegal immigrants but given Indian citizenship.

The Act provides that the central government may cancel the registration of OCIs on certain grounds.

Exceptions:

The Act does not apply to tribal areas of Tripura, Mizoram, Assam and Meghalaya because of being included in the 6th Schedule of the Constitution.

Also, areas that fall under the Inner Limit notified under the Bengal Eastern Frontier

Regulation, 1873, will also be outside the Act's purview.

Q.169) Consider the following statements regarding The Cable Television Networks (Amendment) Rules 2021:

- 1. They allow for both self-regulation by broadcasters and by self-regulating bodies of broadcasters.
- 2. Programme and advertising code is covered under these rules.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Both statements are correct

The Information and Broadcasting Ministry on Thursday amended the rules regulating Cable TV networks, providing for a "statutory" mechanism for complaints raised by citizens regarding any content broadcast.

At present, there are over 900 TV channels that are required to comply with the Programme and Advertising Code laid down by the Ministry of Information and Broadcasting under the Cable Television Network Rules.

The Cable Television Networks (Amendment) Rules, 2021 provides for a three-level grievance redressal mechanism — self-regulation by broadcasters, self-regulation by the self-regulating bodies of the broadcasters, and oversight by an Inter-Departmental Committee at the level of the Union government.

Q.170) Consider the following statements regarding Land Degradation Neutrality (LDN):

- 1. The concept of LDN emerged from the UN Conference on Sustainable Development (Rio+20).
- 2. LDN initiative has been enshrined under Sustainable Development Goals (SDG).
- 3. It envisions a world where human activity has a neutral, or even positive, impact on the land.

Which of the above statements is/are correct?

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

d) 1, 2 and 3

Solution: All statements are correct: The concept of LDN emerged from the UN Conference on Sustainable Development (Rio+20) in 2012. LDN responds to an immediate challenge: intensifying the production of food, fuel and fiber to meet future demand without further degrading our finite land resource base.

In other words, LDN envisions a world where human activity has a neutral, or even positive, impact on the land.

The UNCCD Secretariat launched a new initiative: Land Degradation Neutrality, which has been enshrined in the SDGs as target 15.3 on achieving a land degradation neutral world by 2030.

Q.171) Ajit Mishra expert group, recently seen in news, is related to:

a) provide technical inputs and recommendations on fixation of Minimum Wages and National Floor Wages to the Government.

- b) financing Infrastructure through PPP model
- c) simplification of Transfer Rules in Security Markets
- d) None of the above

Solution: The Central Government has constituted an Expert Group under the Chairmanship of Professor Ajit Mishra, a renowned economist.

Its mandate is to provide technical inputs and recommendations on fixation of Minimum Wages and National Floor Wages to the Government.

The tenure of the Expert Group is three years.

Hence, option (a) is the correct answer.

Q.172) With reference to the Integrated power development scheme (IPDS), consider the following statements:

- 1. Integrated Power Development Scheme (IPDS) was launched in the year 2014 by Ministry of Finance, Government of India.
- 2. All Discoms will be eligible for financial assistance under the scheme.
- 3. Schemes for Enterprise Resource Planning (ERP) and IT enablement of balance urban towns are also included under IPDS.

Which of the statements given above is/are correct?

a) 1 and 2 only

b) 2 and 3 only

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

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

Integrated Power Development Scheme (IPDS) was launched in the year 2014 by Ministry of Power, Government of India.

Eligible Utilities: All Discoms will be eligible for financial assistance under the scheme.

It has following components:

Strengthening of sub-transmission and distribution networks in the urban areas.

Metering of distribution transformers / feeders / consumers in the urban areas.

IT enablement of distribution sector and strengthening of distribution network under R-APDRP for 12th and 13th Plans by carrying forward the approved outlay for R-APDRP to IPDS.

Schemes for Enterprise Resource Planning (ERP) and IT enablement of balance urban towns are also included under IPDS. Scope of IT enablement has been extended to all 4041 towns as per Census 2011.

Underground cabling to include additional demand of States and smart metering solution for performing UDAY States and Solar panels on Govt. buildings with net-metering are also permissible under the scheme.

Hence, option (b) is the correct answer.

Q.173) Which of the following grievance redressal mechanism are provided under Cable Television Networks (Amendment) Rules, 2021?

- 1. Self-regulation by broadcasters
- 2. Self-regulation by the self-regulating bodies of the broadcasters
- 3. Oversight by an Inter-Departmental Committee at the level of the Centre

Select the correct answer using the code given below:

a) 1 only

- b) 1 and 2 only
- c) 2 and 3 only

d) 1, 2 and 3

Solution: The Central Government has amended the Cable Television Network Rules, 1994 to provide a statutory mechanism for redressal of grievances and complaints of citizens relating to content broadcast by television channels in accordance with the provisions of the Cable Television Network Act, 1995.

The Cable Television Networks (Amendment) Rules, 2021, provides for a three-level grievance redressal mechanism —

self-regulation by broadcasters,

self-regulation by the self-regulating bodies of the broadcasters, and

oversight by an Inter-Departmental Committee at the level of the Centre.

A viewer could file a complaint directly to the broadcaster, who would have to respond within 15 days. If the complainant was not satisfied with the response, the complaint could be escalated to the self-regulating bodies set up by TV channels, which should deal with the case in 60 days.

If the complainant is not satisfied with the decision of the self-regulating body, he may, within 15 days of such decision, prefer an appeal to the Central government for its consideration under the Oversight Mechanism.

Such appeals would be dealt with by the Inter-Departmental Committee set up under the Oversight Mechanism.

The Committee would be headed by the Additional Secretary in the Ministry of Information and Broadcasting, and have members from the Ministry of Women and Child Development, Home Ministry, Ministry of Electronics and Information Technology, Ministry of External Affairs, Ministry of

Defence, and representatives of other Ministries and organisations, including experts, as the Centre may decide.

This third tier was not only kept aside to hear the appeals, it could take up complaints that come directly to the Centre.

Hence, option (d) is the correct answer.

Q.174) With reference to the Sickle Cell Anaemia, consider the following statements:

- Anaemia is a medical condition in which the red blood cell count or hemoglobin is less than normal.
- 2. Sickle cell disease (SCD), which is the most prevalent inherited blood disorder, is widespread amongst many tribal population groups in India.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: The Minister of Tribal Affairs inaugurated the Second National Sickle Cell Conclave on 'Sickle Cell Disease'. The Conclave is being held to mark the World Sickle Cell Day observed on 19thJune 2021 every year.

It is characterized by a modification in the shape of the red blood cell from a smooth, donut-shape into a crescent or half-moon shape.

These cells lack plasticity and can block small blood vessels, impairing blood flow. This condition leads to shortened red blood cell survival, and subsequent anaemia, often called sickle-cell anaemia.

This leads to chronic acute pain syndromes, severe bacterial infections, and necrosis

(tissue death). Anaemia is a medical condition in which the red blood cell count or hemoglobin is less than normal. Symtoms of anemia include Fatigue, Shortness of breath, Hair loss etc.

Regions where it more common: Africa.

Treatment: It can be managed by simple procedures including:

High fluid intake

Healthy diet

Folic acid/Iron supplementation

Pain medication

Vaccination and antibiotics for the prevention and treatment of infections

A number of other therapeutic measures.

Indian scenario:

Sickle cell disease (SCD), which is the most prevalent inherited blood disorder, is widespread amongst many tribal population groups in India

The disease in India is prevalent predominantly in Jharkhand, Maharashtra, Madhya Pradesh, Chhattisgarh, western Odisha, eastern Gujarat and in pockets of the Nilgiri Hills in north Tamil Nadu and Kerala.

Hence both statements are correct.

Q.175) What is 'Krivak', which was recently in news.

- a) Asteroid in the Kuiper belt
- b) New portal launched by AYUSH ministry for information about Ayurveda.
- c) Mission of Government of India for Tokyo Olympic.
- d) Class of frigate used by Indian Navy.

Solution:

- The keel of the second frigate of the additional Krivak class stealth ships being built with technology transfer from Russia by Goa Shipyard Ltd. (GSL) was laid by the Vice-Chief of the Naval Staff, Vice Admiral, G. Ashok Kumar, on Friday.
- In October 2016, India and Russia signed an Inter-Governmental Agreement (IGA) for four Krivak or Talwar stealth frigates two to be procured directly from Russia and two to be built by the GSL. Following that, India signed a \$1-billion deal with Russia for the direct purchase.
- The basic structures of the two frigates are already ready at the Yantar shipyard in Russia and are now being completed.
- India had earlier procured six Krivak class frigates weighing around 4,000 tonnes in two different batches, the Talwar class and the upgraded Teg class.
- -The four ships to be built will weigh 300 tonnes more than the earlier ones and will be armed with BrahMos supersonic cruise missiles, the Navy said earlier.

Q.176) Consider following statements about the Hayagriva Madhava Temple in Assam.

- 1. Though it is in Assam it has some features of Dravidian style architecture.
- 2. Hayagriva Madhava Temple harbour various threatened species of turtles in their ponds.
- 3. The temple, revered by both Hindus and Buddhists.

Correct statement is/are:

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

Solution:

- A major temple in Assam has signed a memorandum of understanding with two green NGOs, the Assam State Zoo-cum-Botanical Garden and the Kamrup district administration for the long-term conservation of the rare freshwater black softshell turtle or the Nilssonia nigricans.
- A vision document 2030 was also launched after Turtle Survival Alliance India and Help Earth signed the pact involving the Hayagriva Madhava Temple Committee.
- The temple, revered by both Hindus and Buddhists, is at Hajo, about 30 km northwest of Guwahati.
- The International Union for Conservation of Nature had in 2021 listed the turtle as "critically endangered".
- But it does not enjoy legal protection under the Indian Wildlife (Protection) Act of 1972, although it has traditionally been hunted for its meat and cartilage, traded in regional and international markets.
- "Various temple ponds in Assam such as that of the Hayagriva Madhava Temple harbour various threatened species of turtles.
- Since the turtles are conserved in these ponds only based on religious grounds, many biological requirements for building a sustainable wild population have since long been overlooked," Arpita Dutta of Turtle Survival said.

Q.177) Consider the following statements regarding Global Assessment Report:

- 1. It is published by the United Nations Environment Programme.
- 2. It aims to help focus international attention on the problems and need to address Carbon Dioxide emission.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2

d) Neither 1 nor 2

Solution: Global Assessment Report (GAR) is the flagship report of United Nations. It is published biennially by the UN office for Disaster Risk Reduction (UNDRR).

The GAR aims to focus international attention on the issue of disaster risk and encourage political and economic support for disaster risk reduction.

The GAR Special Report on Drought 2021 explores the systemic nature of drought and its impacts on achievement of Sendai Framework for Disaster Risk Reduction.

The report estimated impact of severe droughts on India's GDP to be about 2-5% per annum, despite decreasing contribution of agriculture in the country's expanding economy.

Q.178) Kalibhanjadiha Island, seen recently in news, is located inside:

- a) Silent Valley National Park
- b) Marine National Park in Gulf of Kutch
- c) Papikonda National Park

d) Bhitarkanika National park

Solution: Kalibhanjadiha Island is situated on the River Dhamra inside the Bhitarkanika National park in Odisha.

Recently, it was found that Cyclone Yaas, which hit the state in May, 2021 had negligible impact in Kalibhanjadiha Island inside the national park due to the presence of mangroves.

The Odisha government has proposed to raise mangrove and casuarinas plantation in the coastal belt.

Q.179) With respect to "black softshell turtle", consider the following statements:

- 1. Having a soft shell allows them to move much faster on land than most turtles.
- 2. It is categorized as endangered in IUCN Red List Status.
- 3. It is found only in the ponds of some temples in Assam and Bangladesh.

Which of the statements given above is/are correct?

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

Solution: The Ugratara Temple, in Guwahati, Assam, organised a special darshan of 34 hatchlings of the rare black softshell turtle as these hatchlings will be reintroduced into the wild.

The black softshell turtle or Bostami turtle Or Mazari is a species of freshwater turtle.

Statement 1 is correct: These turtles are called "softshell" because their shell is light and flexible. This allows them to move more easily in open water, or in muddy lake bottoms. Having a soft shell also allows them to move much faster on land than most turtles.

Statement 2is incorrect: IUCN conservation status is Extinct in the wild.

Statement 3 is correct: It is found only in the ponds of some temples in Assam and Bangladesh (Chittagong and Sylhet).

Q.180) Which among the following is the most correct statement in context with Carbon footprint?

a) It is a measure of Greenhouse gas emissions by a product

- b) It is a unit under the Kyoto Protocol representing a reduction of greenhouse gases under the Joint Implementation mechanism
- c) It is a administrative approach used to control pollution by providing economic incentives for achieving reductions in the emissions of pollution
- d) All of above are correct

Solution: It is a measure of Green house gas emissions by a product. Please note that Carbon footprint is amount of carbon dioxide released in the atmosphere everyday by an electronic gadget / organization. The quantity of all green house gases put together required to maintain the temperature of the environment at a fixed level of 30 degree C at nodal points in the country is also referred to as carbon foot print. The second statement a unit under the Kyoto Protocol representing a reduction of greenhouse gases under the Joint Implementation mechanism is the definition of Emission Reduction Unit, while statement C is emission trading.

Q.181) Vidarbha Tiger corridors, recently seen in news, is located in:

- a) Tamil Nadu
- b) Odisha
- c) Maharashtra
- d) Gujarat

Solution: In a first-of-its-kind project, radio telemetry has been deployed to identify corridors used by tigers in the Vidarbha landscape, tracking their actual movement.

The study indicates that the animals are moving in a much wider swathe of area

outside the protected areas than previously known.

The investigators belonged the Maharashtra Forest Department and Wildlife Institute of India (WII),

Vidarbha has 331 tigers in a forest area of around 26,775 sq km, dissected by 84,202 km of roads, apart from irrigation canals and other projects. There have been growing instances of man-tiger conflict in the region.

The project, carried out between 2017 and 2020 using radio signals, identified 37,067 sq km, in all, of tiger corridors.

They tracked the epic journey of Walker (as the tiger was dubbed) over 3,000 km from Tipeshwar Sanctuary in Yavatmal district to Dnyanganga Sanctuary in Buldhana district.

Hence, option (c) is the correct answer.

Q.182) With reference to Indian Navy's 'Blue Water Operations with a Green Footprint', consider the following statements:

- 1. Indian Navy recently commissioned one of its largest solar plant with a capacity of 3MW at Indian Naval Academy (INA), Ezhimala.
- 2. The viability of setting up urban forests concepts such as Miyawaki forests is being emphasised to match the theme of World Environment Day 2021- 'Ecosystem Restoration'.

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

Solution: Indian Navy has adopted a comprehensive 'Indian Navy Environment Conservation Roadmap (INECR)' for

synergising the aim of 'Blue Water Operations with a Green Footprint'.

Some of the noteworthy initiatives towards 'Clean and Green Navy' are

Indian Navy commissioned one of its largest solar plant with a capacity of 3MW at Indian Naval Academy (INA), Ezhimala in July 2020. Another 2MW solar power plant was installed at Naval Station Karanja, Mumbai in July 2020. With this, the overall installed solar plant capacity at Naval Stations is 11 MW.

The installation of SPVs are in line with Navy's objective of fulfilling Govt of India's 'Jawaharlal Nehru National Solar Mission (JNNSM)' mission.

Further, viability of setting up urban forests concepts such as Miyawaki forests is being emphasised to match the theme of World Environment Day 2021- 'Ecosystem Restoration'

Miyawaki is a technique pioneered by Japanese botanist Akira Miyawaki (born 1928), that helps build dense, native forests. The approach is supposed to ensure that plant growth is 10 times faster and the resulting plantation is 30 times denser than usual.

It involves planting dozens of native species in the same area, and making them maintenance-free after the first three years.

In July 2020, Union Environment Minister inaugurated a unique urban forest at the office of the Comptroller and Auditor General of India (CAG) in New Delhi. This would be a dense urban forest with multiple tree layers including 12000 saplings of 59 indigenous species in another year or so. The Miyawaki method of forest creation is employed.

Hence both statements are correct.

Q.183) With reference to the National Population Register (NPR), consider the following statements:

- 1. The NPR was first compiled in 2010 simultaneously with the decadal Census exercise and later updated in 2015.
- 2. It is a register of usual residents linked with location particulars down to the village level and is updated periodically "to incorporate the changes due to birth, death and migration".

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

Solution: Migrants belonging to six non-Muslim minority communities from Afghanistan, Pakistan and Bangladesh, while applying for long-term visas (LTVs), can also produce National Population Register (NPR) enrolment slips as proof of the duration of their stay in India, according to a Union Home Ministry manual.

The NPR number is part of an illustrative list of more than 10 documents that could be provided to apply for an LTV, which is a precursor to acquiring Indian citizenship either by naturalisation or registration under Section 5 and 6 of the Citizenship Act, 1955, for the six communities — Hindus, Sikhs, Jains, Parsis, Christians and Buddhists — from the three countries.

The special provision of LTVs for Hindus and Sikhs from Pakistan and Afghanistan was first made in 2011.

Ministry officials assert that the awareness drive is not related to the Citizenship (Amendment) Act, 2019 (CAA), which is intended to benefit undocumented migrants from the six groups who entered India before the 2014 cut-off date. The CAA is yet to implemented.

The NPR was first compiled in 2010 simultaneously with the decadal Census exercise and later updated in 2015.

It already has a database of 119 crore residents.

The NPR is a register of usual residents linked with location particulars down to the village level and is updated periodically "to incorporate the changes due to birth, death and migration".

The next phase of the NPR, expected to include contentious questions on date and place of birth of father and mother, last place of residence and mother tongue, was to be simultaneously updated with the 2021 House Listing and Housing Census that has been indefinitely postponed due to the COVID-19 pandemic.

Hence both statements are correct.

Q.184) What is T478K, recently seen in news?

a) New COVID-19 variant

- b) Cryptocurrency
- c) Satellite launched by China
- d) None of the above

Solution: An analysis of more than one million SARS-CoV-2 genome sequences has led to the identification of a new variant that, over the past weeks, has been spreading mostly in Mexico but has also been found in Europe.

The scientific name of new variant is T478K.

Like other strains, this presents a mutation in the spike protein.

This variant has been increasingly spreading among people in North America, particularly in Mexico.

Hence, option (a) is the correct answer.

Q.185) Consider following statement about Lakshadweep island.

- 1. The highest peak in the islands is Peak Sadddle with height of 732 mtr.
- 2. Studies have found that sea levels around Lakshadweep are estimated to rise between 0.4 mm and 0.9 mm annually, causing coastal erosion in many of the islands, and possibly submerging the smaller islets.

Correct statement is/are:

a) 1 only

b) 2 only

- c) 1 and 2
- d) None

Solution: Saddle peak is highest peak in Andaman and Nicobar islands.

A group of scientists at IIT-Kharagpur, in a study carried out under the Department of Science and Technology, have found that sea levels around Lakshadweep are estimated to rise between 0.4 mm and 0.9 mm annually, causing coastal erosion in many of the islands, and possibly submerging the smaller islets.

The Lakshadweep archipelago comprises 36 islands of coral and reef formation in the Arabian Sea, spanning just over 32 sq km.

The islands are characterized by low elevations, with maximum elevation ranging from 4-6 metres above Mean Sea Level and minimum elevations lower than 1 metre.

Q.186) Consider various measures of coastal erosion.

- 1. Hard measure of coastal erosion is planting trees and mangroves along coastline which is costly affair.
- 2. Soft engineering solutions includes the building of firm structures like sea walls which is cost effective method.

Correct statements is/are:

- a) 1 only
- b) 2 only
- c) 1 and 2

d) None

Solution: "Coastal protection measures need to be taken now. There are two kinds that the government can adopt – soft measures, that is, the creation of mangroves, which we think is more effective. And hard engineering solutions including the building of sea walls – a proposition which is extremely expensive."

Q.187) Consider following statements about Indira Gandhi Canal.

- 1. It is one of the largest canal system of India.
- 2. The canal originates at Harike barrage in Punjab and runs parallel to the Pakistan border at an average distance of 40 km in Thar Desert (Marusthali) of Rajasthan.
- 3. It confluences with Sabarmati river In Gujrat to meet Arabian Sea in the end.

Correct statement is/are:

- a) 1 only
- b) 1 and 3

c) 1 and 2

d) All of the above

Solution: In an engineering feat, the repair and relining of the Indira Gandhi Canal, the country's longest canal which terminates in irrigation facilities in Thar desert, was accomplished in a record 60-day period amid the second wave of COVID-19 pandemic, restoring 70 km of both the main canal and the feeder distributaries.

The project was a race against time, as the repairs required closure of the canal system, which directly impacted the drinking and

irrigation needs of 1.75 crore people as well as numerous cattle, Army cantonment along the international border and industrial usage in the border districts.

Q.188) Consider following statements about FATF.

- 1. The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 during the G7 Summit in Paris.
- 2. The FATF has a grey list of countries that are deemed safe havens for terrorist financing and money laundering.
- 3. The blacklist includes countries designated as Non-Cooperative Countries or Territories (NCCTs). These countries aid in the financing of terrorism and the laundering of money.

Correct statement is/are:

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

d) All of the above

Solution: Pakistan's fate at the Financial Action Task Force (FATF) will be under the scanner this week, as the global financing watchdog is holding its plenary session beginning Monday.

Decision will be made on whether Islamabad stays on the grey list or gets out of it, although New Delhi has been pushing for its blacklisting for the last three years.

The Asia Pacific Group on Money Laundering has retained Pakistan on "enhanced follow-up" status for outstanding requirements, and Islamabad will continue to report back to it on the country's progress to strengthen its implementation of anti-money laundering and combating financing terror measures.

Pakistan was put on the grey list by the Parisbased FATF in June 2018, and the country has been struggling to come out of it.

The Asia Pacific Group (APG) is a regional affiliate of FATF. The FATF will finalise key reports, including on money laundering and environmental crime, ethnically and racially motivated terrorist financing and two reports that explore the opportunities that technology can offer to improve anti-money laundering and counter-terrorist financing efforts.

It will also finalise its second 12-month review of the implementation of revised FATF Standards for virtual assets and virtual asset service providers, and guidance on proliferation financing risk assessment and mitigation.

Q.189) Consider the following statements about Sagaramala:

- 1. The Sagarmala project seeks to develop a string of ports around India's coast.
- 2. The Union Ministry of Commerce has been appointed as the nodal ministry for this initiative.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 & 2
- d) None of the above

Solution: The Sagarmala project seeks to develop a string of ports around India's coast.

The objective of this initiative is to promote "Port-led development" along India's long coastline. Statement 1 is correct.

The Union Ministry of Shipping has been appointed as the nodal ministry for this initiative. Statement 2 is incorrect.

Q.190) Which of the following is a Ramsar Sites in India?

a) Tsomgo Lake

b) Deepor Beel

- c) Barapani Lake
- d) Shilloi Lake

Solution: Deepor Beel is located to the southwest of Guwahati city, in Kamrup district of Assam.

It is a permanent freshwater lake, in a former channel of the Brahmaputra River, to the south of the main river.

It was declared as Ramsar site in 2002 for undertaking conservation measures on the basis of its biological and environmental importance.

Recently, The Assam government has proposed the realignment of a broad gauge railway line through the Deepor Beel. Several elephants have been run over on the railway track between the elevated Rani Reserve Forest and the Deepor Beel wildlife sanctuary.

Q.191) With reference to the draft amendments to the Consumer Protection (Ecommerce) Rules, 2020, consider the following statements:

- 1. It proposed appointment of Chief Compliance Officer, a nodal contact person for 24x7 coordination with law enforcement agencies.
- 2. To ensure that consumers are not adversely affected in the event where a seller fails to deliver the goods or services, provisions of Fall-back liability for every marketplace ecommerce entity have been provided.

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

Solution: The Government of India is sharing a draft of the proposed amendments to the Consumer Protection (E-commerce) Rules, 2020.

The proposed amendments are as follows:

To ensure compliance of the Consumer Protection Act, 2019 and Rules, appointment of

Chief Compliance Officer, a nodal contact person for 24x7 coordination with law enforcement agencies, and

Resident Grievance Officer for redressing of the grievances of the consumers on the ecommerce platform, has been proposed.

Putting in place a framework for registration of every e-commerce entity with the Department for Promotion of Industry and Internal Trade (DPIIT) for allotment of registration number. Registration of e-commerce entities would help create a database of genuine e-commerce entities

To protect the interests of consumers, misselling has been prohibited i.e selling goods and services entities selling goods or services by deliberate misrepresentation of information by such entities about such goods or services.

To ensure that consumers are aware about the expiry date of the products they are buying on the e-commerce platform all sellers on marketplace e-commerce entities and all inventory e-commerce entities to provide best before or use before date to enable consumers to make an informed purchase decision.

To ensure that the domestic manufacturers and suppliers get a fair and equal treatment on the e-commerce platform it has been provided that where an e-commerce entity

offers imported goods or services, it shall incorporate a filter mechanism to identify goods based on country of origin.

To ensure that consumers are not adversely affected in the event where a seller fails to deliver the goods or services, provisions of Fall-back liability for every marketplace ecommerce entity have been provided.

Hence both statements are correct.

Q.192) Consider following statements:

- 1. World's first genetically modified (GM) rubber plant was planted in Kerala.
- 2. The GM rubber has additional copies of the gene MnSOD, or manganese-containing superoxide dismutase, inserted in the plant, which is expected to tide over the severe cold conditions during winter.

Correct statement is/are

a) 1 only

b) 2 only

- c) 1 and 2
- d) None

Solution: A Rubber Board research farm on the outskirts of Guwahati now sports the world's first genetically modified (GM) rubber plant tailored for the climatic conditions in the Northeast.

The GM rubber has additional copies of the gene MnSOD, or manganese-containing superoxide dismutase, inserted in the plant, which is expected to tide over the severe cold conditions during winter — a major factor affecting the growth of young rubber plants in the region.

Natural rubber is a native of warm humid Amazon forests and is not naturally suited for the colder conditions in the Northeast, which is one of the largest producers of rubber in India.

Q.193) Consider following statements.

- 1. Pygmy hogs are listed as Critically Endangered in the IUCN Red List.
- 2. Pygmy Hog Conservation Programme is a collaborative project of Durrell Wildlife Conservation Trust, IUCN/SSC Wild Pig Specialist Group, Assam Forest Department and India's Ministry of Environment, Forest & Climate Change.

Correct statement is/are

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Solution: Smallest among wild pigs, the shy and secretive pygmy hogs (Porcula salvania) are found nowhere else in India except in Assam and number only a few hundred.

The plight of these 25 cm-high animals and how they have made an amazing comeback was recently made into a documentary Durrell's Underhogs.

Pygmy hogs are listed as Critically Endangered in the IUCN Red List. Conservation breeding of pygmy hogs, which act as indicator species for health of grasslands, forms the core of Pygmy Hog Conservation Programme's activities.

Pygmy Hog Conservation Programme is a collaborative project of Durrell Wildlife Conservation Trust, IUCN/SSC Wild Pig Specialist Group, Assam Forest Department and India's Ministry of Environment, Forest & Climate Change, with EcoSystems-India and Aaranyak as local partners.

Q.194) Consider following statements about cryptocurrency.

1. China becomes the first country in the world to allow bitcoin as legal tender.

2. El Salvador has taken stringent actions against mining of Cryptocurrencies.

Correct statements is/ are

- a) 1 only
- b) 2 only
- c) Both 1 and 2

d) None

Solution: El Salvador becomes the first country in the world to allow bitcoin as legal tender. In June 2021, the country's Congress approved a proposal to formally adopt bitcoin as a form of payment making it completely legal.

In recent weeks, China has reportedly cracked down on crypto mining operations. The country has over the years accounted for a large percentage of the total crypto mining activity that takes place.

Q.195) What is the main objective of NISHTHA programme:

- a) To identify and encourage talented children to enrich their skills and knowledge.
- b) To support social science research in the higher educational institutions.
- c) To improve learning outcome at elementary level through an integrated Teacher Training Programme.
- d) To create level playing field for the meritorious girls in high school to pursue science, technology, engineering and mathematics in higher education.

Solution: NISHTHA (National Initiative on School Teachers Head Holistic Advancement) is an intiative of the Ministry of Education.

NISHTHA is a capacity building programme for "Improving Quality of School Education through Integrated Teacher Training". It aims to build competencies among all the teachers and school principals at the elementary stage.

The functionaries (at the state, district, block, cluster level) are trained in an integrated manner on learning outcomes, school based assessment, learner – centred pedagogy, new initiatives in education, addressing diverse needs of children through multiple pedagogies, etc.

Q.196) Which of them are correctly matched?

Military Exercises	Countries
1. SAMPRITI Bangladesh	India and
2. SLINEX	India and Sri Lanka
3. Yudh Abhyas	India and USA

Select the correct answer using the code below:

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

Solution: All of them are correctly matched.

Q.197) Which of the following organisation releases the Future of Jobs Report:

- a) World Bank
- b) World Economic Forum
- c) World Trade Organization
- d) UNICEF

Solution: The World Economic Forum (WEF) in its report 'Future of Jobs' found that machines are increasingly replacing jobs done by people. It projected that more than half of all workplace tasks will be carried out by machines by 2025.

It predicts the loss of some 75 million jobs worldwide by 2022, but also says 133 million new jobs will be created.

According to WEF, despite bringing widespread disruption, the advent of the Fourth Industrial Revolution could actually have a positive impact on human employment.

Key Findings

Four specific technological advances: universal high-speed mobile internet; artificial intelligence; widespread adoption of big data analytics; and cloud technology—are set to dominate the 2018–2022 period as drivers positively affecting business growth.

By 2022, large proportions of companies are likely or very likely to have expanded their adoption of technologies such as the internet of things, big data analytics and app and web enabled markets, and to make extensive use of cloud computing.

Companies across all sectors are most likely to adopt the use of stationary robots, in contrast to humanoid, aerial or underwater robots, however leaders in the Oil & Gas industry report the same level of demand for stationary and aerial and underwater robots, while employers in the Financial Services industry are most likely to signal the planned adoption of humanoid robots in the period up to 2022.

Q.198) With reference to the Sovereign Gold Bonds scheme 2021-22, consider the following statements:

- 1. The minimum permissible investment will be one gram of gold.
- 2. The tenor of the Bond will be for a period of 8 years with exit option after 5th year to be exercised on the next interest payment dates.

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

Solution: Both statements are correct.

The Central Government in consultation with the Reserve Bank of India, has decided to issue Sovereign Gold Bonds.

The Sovereign Gold Bonds will be issued in six tranches from 17th May to September 2021.

The Bonds will be sold through Scheduled Commercial banks (except Small Finance Banks and Payment Banks), Stock Holding Corporation of India Limited (SHCIL), designated post offices, and recognised stock exchanges viz., National Stock Exchange of India Limited and Bombay Stock Exchange Limited.

The minimum permissible investment will be one gram of gold.

Investors will be compensated at a fixed rate of 2.50 percent per annum payable semi-annually on the nominal value.

The Bonds will be restricted for sale to resident individuals, Hindu Undivided Families, Trusts, Universities and Charitable Institutions.

The tenor of the Bond will be for a period of 8 years with exit option after 5th year to be exercised on the next interest payment dates.

Q.199) Consider the following statements regarding Belt and Road Initiative-

- 1. It was launched by China in 2013.
- 2. The plan is two-pronged: the overland Silk Road Economic Belt and the Maritime Silk Road.
- 3. No member of Group of 7 (G-7) has joined the Belt and Road Initiative yet.

Which of the statements given above is/are correct?

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

d) 1 and 2 only

Solution: The Belt and Road Initiative, reminiscent of the Silk Road, is a massive infrastructure project that would stretch from East Asia to Europe.

It was launched in 2013.

The plan is two-pronged: the overland Silk Road Economic Belt and the Maritime Silk Road- The two were collectively referred to first as the One Belt, One Road initiative but eventually became the Belt and Road Initiative. Hence, statements 1 and 2 are correct.

The project involves creating a vast network of railways, energy pipelines, highways, and streamlined border crossings.

Italy, a member of Group of 7 (G-7), has joined the Belt and Road Initiative in 2019. Hence, statement 3 is not correct.

Q.200) With reference to e-courts project, consider the following statements-

- 1. It is a pan-India project and funded by the Ministry of Electronics & Information Technology.
- 2. It is conceptualized on the recommendations of the Justice Verma Committee.
- 3. It will increase the judiciary's transparency, productivity and make the justice delivery system more accessible and affordable.

Which of the statements above is/are correct?

a) 1 and 2 only

b) 3 only

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

Solution: e-Courts Project

The e-Courts project was conceptualized on the basis of the "National Policy and Action Plan for Implementation of Information and Communication Technology (ICT) in the Indian Judiciary – 2005" submitted by e-Committee, Supreme Court of India with a vision to transform the Indian Judiciary by ICT enablement of Courts. Hence, statement 2 is not correct.

The e-Courts Mission Mode Project, is a Pan-India Project, monitored and funded by the Ministry of Law and Justice for the District Courts across the country. Hence, statement 1 is not correct.

The project envisages:

To provide efficient & time-bound citizencentric services delivery as detailed in e-Court Project Litigant's Charter.

To develop, install & implement decision support systems in courts.

To automate the processes to provide transparency in the accessibility of information to its stakeholders.

To enhance judicial productivity, both qualitatively & quantitatively, to make the justice delivery system affordable, accessible, cost-effective, predictable, reliable and transparent. Hence, statement 3 is correct.

Q.201) With reference to the green hydrogen, consider the following statements:

1. India had recently organised the two-day summit on green hydrogen involving BRICS nations, on their initiatives around the green fuel.

2. Green hydrogen gas is produced by splitting water into hydrogen and oxygen using an electrolyser that may be powered by electricity generated from renewable energy sources.

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

Solution: India had organised the two-day summit on green hydrogen involving BRICS nations, on their initiatives around the green fuel. The summit started on 22 June and was organised by state-run NTPC Ltd.

India pitched for common international standards for green hydrogen at the BRICS Green Hydrogen Summit, to ensure safe transportation and storage of the new age emission-free fuel.

Green hydrogen gas is produced by splitting water into hydrogen and oxygen using an electrolyzer that may be powered by electricity generated from renewable energy sources.

Leveraging India's landmass and green energy sources for exporting green hydrogen is one of the steps for achieving energy sufficiency for the country, according to a draft proposal circulated by the ministry of new and renewable energy (MNRE), for the planned National Hydrogen Energy Mission.

Hence both statements are correct.

Q.202) With reference to the liberalised guidelines for Other Service Providers (OSPs), consider the following statements:

1. Distinction between Domestic and International OSPs has been removed.

2. The interconnectivity between all types of OSP centres is now permitted.

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

Solution: Department of Telecommunication has further liberalized the guidelines for Other Service Providers (OSPs).

These entities are business process outsourcing (BPO) organisations giving Voice based services, in India and abroad.

The Guidelines issued today further liberalized the special dispensation given to OSPs in addition to the major measures already announced and implemented in November, 2020.

The main features of the liberalised guidelines announced today are:

Distinction between Domestic and International OSPs has been removed. A BPO centre with common Telecom resources will now be able to serve customers located worldwide including in India.

EPABX (Electronic Private Automatic Branch Exchange) of the OSP can be located anywhere in the world. OSPs apart from utilising EPABX services of the Telecom Service Providers can also locate their EPABX at third Party Data Centres in India.

With the removal of the distinction between Domestic and International OSP centres, the interconnectivity between all types of OSP centres is now permitted.

Remote Agents of OSP can now connect directly with the Centralised EPABX/ EPABX of the OSP/ EPABX of the customer using any technology including Broadband over wireline/ wireless.

Hence both statements are correct.

Q.203) With reference to the Supreme Court, consider the following statements:

- 1. When there is a conflict of interest, a judge can withdraw from hearing a case to prevent creating a perception that she carried a bias while deciding the case.
- 2. There are no formal rules governing the process, it is often left to individual judges to record reasons for recusal.

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

Solution: In the last week, two Supreme Court judges — Justice Indira Banerjee and Justice Aniruddha Bose — have recused themselves from hearing cases relating to West Bengal.

When there is a conflict of interest, a judge can withdraw from hearing a case to prevent creating a perception that she carried a bias while deciding the case.

The practice stems from the cardinal principle of due process of law that nobody can be a judge in her own case.

The decision to recuse generally comes from the judge herself as it rests on the conscience and discretion of the judge to disclose any potential conflict of interest.

There are no formal rules governing recusals, although several Supreme Court judgments 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 is the reasonableness of the apprehension in the mind of the party.

Once a request is made for recusal, the decision to recuse or not rests with the judge.

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

Hence both statements are correct.

Q.204) With reference to the National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA), consider the following statements:

- 1. It is an initiative of NITI Aayog.
- 2. It is the world's largest teachers' training programme of its kind in the world.

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

Solution: To fulfill the long-standing vision of Ministry of Tribal Affairs (MoTA) to achieve academic excellence in Eklavya Model Residential Schools (EMRSs), 120 EMRS teachers and principals from 3 states completed a 40 days' NISHTHA Program, a national flagship program of NCERT on 19th June 2021.

In August 2019, Union Human Resource Development (HRD) Minister launched NISHTHA to build capacities of 42 Lakh government teachers across the country.

NISHTHA is the world's largest teachers' training programme of its kind in the world.

Objective: To motivate and equip teachers to encourage and foster critical thinking in students.

Features: Under it, teachers will develop their skills on various aspects related to Learning Outcomes, School Safety and Security, ICT in teaching-learning including Artificial Intelligence, Environmental Concerns and School Based Assessment in a joyful learning manner.

Coverage: It aims to build the capacities of around 42 lakh participants covering all teachers and Heads of Schools at the elementary level in all Government schools, faculty members of SCERTs, DIETs as well as Block Resource Coordinators and Cluster Resource Coordinators in all States/UTs.

Strategy: Training will be conducted directly by 33120 Key Resource Persons (KRPs) and State Resource Persons (SRP) identified by the State and UTs, who will in turn be trained by 120 National Resource Persons identified from NCERT, NIEPA, Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS), CBSE and NGO.

Hence only statement 2 is correct.

Q.205) Consider the following statements:

- 1. Portland Communications rankings are related to the use of hard power in global politics.
- 2. Soft power consists of foreign policy, cultural and political influence.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

- c) Both 1 & 2
- d) None of the above

Solution: The UK leads the world in 'soft power', according to a Portland Communications ranking, which assesses nations on six measures of reputation and influence — Government, Culture, Education,

Global Engagement, Enterprise, and Digital. Statement 1 is incorrect.

Soft power consists of foreign policy, cultural and political influence.

Foreign policy influence comes from the legitimacy and morality of one's dealings with other countries.

Cultural influence is based on others' respect for one's culture.

Political influence is how much others are inspired by one's political values.

Q.206) Consider the following statements with reference to Green-Ag Project-

- 1. It has been launched to increase the afforestation in the country.
- 2. It is launched by Ministry of Environment Forest and Climate Change (MoeFCC)
- Other key players involved in its implementation are the Food Agriculture Organisation (FAO).

Which of the above statement is/are not correct?

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

Solution: The Union government on July 28, 2020, launched the Green-Ag Project in Mizoram, to reduce emissions from agriculture and ensure sustainable agricultural practices. Statements 1 and 2 are not correct.

Mizoram is one of the five states where the project will be implemented. Other states include Rajasthan, Madhya Pradesh, Odisha and Uttarakhand.

About the Project:

The Green-Ag Project is funded by the Global Environment Facility, while the Department of Agriculture, Cooperation, and Farmers' Welfare (DAC&FW) is the national executing agency.

Other key players involved in its implementation are Food and Agriculture Organization (FAO) and the Union Ministry of Environment, Forest and Climate Change (MoEF&CC). Statement 3 is correct.

The project seeks to integrate biodiversity, climate change and sustainable land management objectives and practices into Indian agriculture.

It aims to cover 35 villages and includes two protected areas — the Dampa Tiger Reserve and the Thorangtlang Wildlife Sanctuary.

Targets:

Achieve multiple global environmental benefits in at least 1.8 million hectares (ha) of land in five landscapes, with mixed land use systems.

Bring at least 104,070 ha of farms under sustainable land and water management.

Ensure 49 million Carbon dioxide equivalent (CO2eq) sequestered or reduced through sustainable land use and agricultural practice

Emissions from Agriculture-

In India agriculture and livestock accounts for 18% of gross national emissions, the third-highest sector after energy and industry.

Out of this more than 85% of emissions are due to cattle production system, rice cultivation and ruminant meat and remaining 15% comes from other crops and nitrous oxide emitted from fertilisers.

Q.207) Yellow Gold 48, seen recently in news, is a variety of:

a) Papaya

b) Watermelon

- c) Mango
- d) Musturd

Solution: German agrochemicals major Bayer has launched the first-ever yellow watermelon variety Yellow Gold 48 under Seminis brand in India.

The yellow watermelon variety has been commercially introduced in India following two years of local trials. With Yellow Gold 48, watermelon growers can benefit from enhanced yield potential, better disease and pest tolerance, and higher returns.

Yellow Gold 48 variety is best suited for cultivation from October to February and for harvest from April onwards and will be available in the market until mid-July.

Q.208) Consider the following statements:

- 1. Biofuels manufactured from non-food biomass are known as second generation biofuels.
- 2. Micro-organisms like algae can be used to produce second generation biofuels.

Which of the above statements is/are correct?

a) 1 only

- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Biofuel is fuel that is produced through contemporary processes from biomass, rather than by the very slow geological processes involved in the formation of fossil fuels, such as oil.

First-generation biofuels are made from sugar-starch feedstocks (e.g., sugarcane and corn) and edible oil feedstocks (e.g., rapeseed and soybean oil), which are generally converted into bioethanol and biodiesel, respectively.

Second-generation biofuels, also known as advanced biofuels, are fuels that can be manufactured from various types of non-food biomass. Biomass in this context means plant materials and animal waste used especially as a source of fuel.

Second-generation biofuel feedstock is the nonedible byproduct of food crops. For example, wheat straw from wheat production and corn husks from corn cultivation are second-generation feedstock.

Biofuels produced from algae is known as third generation biofuels. Algal fuels have high yields, can be grown with minimal impact on fresh water resources, can be produced using saline water and wastewater, have a high ignition point, and are biodegradable and relatively harmless to the environment if spilled.

Q.209) Consider the following statements regarding World Investment Report 2021

- 1. India's FDI inflows decreased in 2020 along with the shrink in global investment flows.
- 2. The report is released by UN Conference on Trade and Development (UNCTAD)

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

Solution: UN Conference on Trade and Development (UNCTAD) has released its World Investment report 2021

Key findings:

India was 5th biggest recipient: India's FDI rose 27% to \$64 billion in a year when global investment flows shrank 35% to \$1 trillion. This peculiar phenomenon happened due to the following reason:

Mergers and acquisitions (M&A), especially in the technology space due to increased demand for digital products and services.

India saw huge investments from overseas with major deals involving ICT (Implementation of information and Communication Technology), health, infrastructure, and energy.

India, China and Hong Kong were among the countries saw a rise in 2020.

FDI outflows from South Asia fell 12% to USD 12 billion, due to a drop in investment from India.

Q.210) Consider the following statements regarding plantation of Rubber in India:

- 1. There are no plant species in India that can breed with natural rubber.
- 2. Natural rubber is a native of warm humid Amazon forests.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Both statements are correct

Natural rubber is a native of warm humid Amazon forests and is not naturally suited for the colder conditions in the Northeast which is one of the largest producers of rubber in India.

Due to this, the growth of young rubber plants remains suspended during the winter

months. This leads to progressive drying of the soil.

There are no plant species in India that can breed with natural rubber.

Q.211) Cinque Island is located in

a) Sri Lanka

b) Andaman and Nicobar

- c) Lakshadweep
- d) Coast of Gujrat

Solution: The Indian Coast Guard (ICG) rescued nine crew from sinking vessel Ganga-I off Cinque Island on June 23, 2021.

A sanctuary with rare corals and under-water marine life, Cinque Island has fine sandy-beach and sand—bar connecting North and South Cinque Islands and tropical rain-forest.

Resting at a distance of 26 kms from the Port Blair city, this part of the archipelago remains untouched and inhabited.

Located between the Passage and Duncan island towards the north side, this island is further divided into North and South Cinque islands.

These islands also share boundaries with Wandoor Marine National Park, visiting this place is itself a calming experience.

Q.212) Project Seabird is

- a) Conservation project of IUCN dedicated to Seagulls.
- b) Drone monitoring system of Indian Coastguard to check piracy
- c) The largest naval infrastructure project for India, which involves creation of a naval base at Karwar
- d) A mission of CCTNS to keep eye on ransomwares and malwares.

Solution: The largest naval infrastructure project for India, it involves creation of a naval base at Karwar on the west coast of India.

Upon completion, this \$3 billion program and effort will provide the Indian Navy with its largest naval base on the west coast and also the largest naval base east of the Suez Canal.

The new and expanded naval complex will be able to support several major warships and submarines and yard crafts.

A specialised dockyard repair and maintenance facilities (with piers, wharfs, revetments, quay walls, etc.), covered dry berths for ships and submarines, new technologically advanced security and communication systems, a Naval Air Station (including multiple runways, hangars, housing, ordnance handling areas, services, personnel support infrastructure, etc.), various utilities systems as well as housing and residential complexes at multiple locations are some of the other facilities that the base will feature.

Q.213) "Uniform Minimum Corporate Tax" have been frequently seen in news is related to-

- a) G-7
- b) OECD
- c) European Union
- d) ASEAN

Solution: Advanced economies making up the G7 grouping have reached a "historic" deal on taxing multinational companies. Finance ministers meeting in London agreed to counter tax avoidance through measures to make companies pay in the countries where they do business. They also agreed in principle to ratify a global minimum corporate tax rate to counter the possibility of countries undercutting each other to attract investments. The deal announced Saturday involving the US, the UK, Germany, France,

Canada, Italy and Japan, is likely to be put before a G20 meeting in July.

Q.214) Consider the following statements about UN Women:

- 1. In 2010, the United Nations Economic and Social Council created UN Women.
- 2. It is the UN entity dedicated to gender equality and the empowerment of women.

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

Solution: Statement 1 is incorrect.

UN Women

It is the UN entity dedicated to gender equality and the empowerment of women. Gender inequality is pervasive, with women lacking access to decent employment and facing gender wage gaps.

In 2010, the United Nations General Assembly created UN Women, the United Nations Entity for Gender Equality and the Empowerment of Women.

Q.215) Which of the following are examples of Feminist technology (femtech) in use?

- 1. Connecting women to informal job opportunities
- 2. Women safety apps
- 3. Video games
- 4. Dating apps

Select the correct answer from the code below:

a) 1 and 2 only

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

Solution: Feminist technology (femtech) is an approach to technology and innovation that is inclusive, informed and responsive to the entire community with all its diversity.

Most technologies that are available to the layperson are created by men, for men, and do not necessarily meet everyone's requirements.

Feminist technologies are ones that are formed from feminist social relations, but varied definitions and layers of feminism complicate the definition. Deborah Johnson proposes four candidates for feminist technologies:

Technologies that are good for women

Technologies that constitute gender-equitable social relations

Technologies that favor women

Technologies that constitute social relations that are more equitable than those that were constituted by a prior technology or than those that prevail in the wider society.

Q.216) EQUALS was in the news recently. It is an initiative by

- a) IMF
- b) World Bank
- c) UN Women
- d) UNESCO

Solution: The Global Partnership for Gender Equality in the Digital Age (EQUALS) is a multistakeholder initiative implemented by ITU and UN Women to promote awareness; build political commitment, leveraging knowledge,

efforts, and resources for the greatest possible impact to achieve digital gender equality at both the global and national levels. It aims at creating an unstoppable global movement where women and girls are equal participants in the technology revolution.

Q.217) With reference to "Virtual Water analysis", seen sometimes in news, consider the following statements:

- 1. Virtual Water is the water involved in the production and trade of food and non-food commodities and services.
- 2. This can help India in achieving UN's Sustainable Development Goal (SDG) 6 and SDG 11.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Virtual Water (VW) is the water involved in the production and trade of food and non-food commodities and services. It is that "invisible" water that has been consumed throughout the lifecycle of the product or service.

The concept of VW was first conceived in the 1990s to understand how water-stressed countries could provide their people with essential items such as water-intensive products like food, clothing, and shelter, which can define its trade characteristics. For example, a country with limited water resources would rather import water-intensive cotton than use their precious water in cultivating it.

Significance of Virtual Water Analysis:

Better planning and implementation of sustainable agriculture which is crucial for achieving water and food security.

The pressure on the freshwater resources in water parched states can be reduced by diversifying the production areas through the use of VW flows analysis to produce agroclimatically suitable food grains.

It can help India in achieving UN's Sustainable Development Goal (SDG) 12 on ensuring sustainable production patterns and to SDG 6 that aims to increase water use efficiency across all sectors to substantially reduce the number of people suffering from water scarcity by 2030.

Q.218) Presidio Principles, sometimes seen in news, is an initiative of:

- a) International Monetary Fund
- b) World Bank
- c) Asian Development Bank
- d) World Economic Forum

Solution: Presidio Principles: It is an initiative from World Economic Forum's Global Blockchain Council intended to lay out a foundational set of principles for those building with blockchain technology and decentralised infrastructure.

These principles will provide creators of blockchain applications with a baseline for designing systems that preserve the rights of their participants.

Principles aim to preserve following participant rights:

Transparency and accessibility

Agency and interoperability

Privacy and security

Accountability and governance

Q.219) With reference to the delimitation, consider the following statements:

- 1. The orders of the Delimitation Commission have the force of law and can be questioned before any court.
- 2. Assembly seats in J&K were delimited in 1963, 1973 and 1995.

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

Solution: PM Modi backs delimitation exercise and grassroots democracy in J&K.

Delimitation is the act of redrawing boundaries of an Assembly or Lok Sabha seat to represent changes in population over time.

This exercise is carried out by a Delimitation Commission, whose orders have the force of law and cannot be questioned before any court.

The objective is to redraw boundaries (based on the data of the last Census) in a way so that the population of all seats, as far as practicable, be the same throughout the State. Aside from changing the limits of a constituency, the process may result in change in the number of seats in a state.

Delimitation exercises in J&K in the past have been slightly different from those in the rest of the country because of the region's special status — which was scrapped by the Centre in August 2019.

Until then, delimitation of Lok Sabha seats in J&K was governed by the Constitution of India, but the delimitation of the state's Assembly seats was governed by the Jammu and Kashmir Constitution and Jammu and Kashmir Representation of the People Act, 1957.

Assembly seats in J&K were delimited in 1963, 1973 and 1995.

The last exercise was conducted by the Justice (retired) K K Gupta Commission when the state was under President's Rule and was based on the 1981 census, which formed the basis of the state elections in 1996.

Hence only statement 2 is correct.

Q.220) Dawki, often mentioned in news, is located in:

- a) Nagaland
- b) Assam
- c) Sikkim

d) Meghalaya

Solution: The felling of several iconic pine trees for widening a road in Meghalaya capital Shillong has triggered outrage, forcing the State government to intervene.

Green activists said the National Highway Infrastructure Development Corporation Limited (NHIDCL) took advantage of the COVID-19 lockdown to chop the pine trees locals were attached to.

But the government swung into action on June 23 after photos and videos of the logs lying beside the road from the town's Rilbong Bridge to Upper Shillong went viral.

This stretch of the road is part of the 71 km Shillong-Dawki four-lane project estimated to cost ₹1,251 crore.

Dawki, a town in West Jaintia Hills district, Meghalaya, is a trade point on the border with Bangladesh.

Hence, option (d) is the correct answer.

Q.221) Consider following statements about Govt organised Lidar based survey of soil and water.

- 1. It was done by ISRO and department of Science and Technology.
- 2. The LiDAR (light detection and ranging) technology was used to create 3-D images of the project areas to recommend soil and water conservation structures.
- 3. These reports will be used to augment groundwater in forest areas so that animals don't venture out in search of water.

Correct statement is/are

- a) 1 only
- b) 2 only
- c) 1 and 2

d) 2 and 3

Solution: Union Environment Minister Prakash Javadekar Friday released LiDARbased reports mapping out the water requirement within forest areas in 10 states.

These reports will be used to augment groundwater in forest areas so that animals don't venture out in search of water, Javadekar said.

The LiDAR (light detection and ranging) technology was used to create 3-D images of the project areas to recommend soil and water conservation structures.

Union Environment Minister Prakash Javadekar Friday released LiDAR-based reports mapping out the water requirement within forest areas in 10 states.

These reports will be used to augment groundwater in forest areas so that animals don't venture out in search of water, Javadekar said.

Q.222) consider following statements about Kamatpur Movement.

1. It was a demand for separate statehood for the parts of Bengal, Bihar, Assam and Nepal. 2. It was launched by Greater Cooch Behar People's Association (GCPA).

Correct statement is/are

- a) 1 only
- b) 2 only
- c) 1 and 2
- d) None

Solution: This movement came from within the Koch Rajbongshi community, a Scheduled Caste in West Bengal. The proposed state covers seven of North Bengal's eight districts including Cooch Behar, where the movement is centred, as well as Kokrajhar, Bongaigaon, Dhubri and Goalpara districts in Assam; Kishanganj in Bihar; and Jhapa in Nepal.

The demand was first raised in 1995 following the formation of the Kamtapur Liberation Organisation (KLO), an armed militant organisation.

Demand for separate state of Greater Cooch Behar was launched by Greater Cooch Behar People's Association (GCPA) general secretary Bangshi Badan Barman.

Q.223) 'itat-e-dwar' portal is related to

- a) USTAAD scheme to upgrade Skills and Training of minority communities by preservation of traditional ancestral Arts and Crafts
- b) Portal for protection of medieval archives across India
- c) e-filing portal of Income Tax Appellate Tribunal.
- d) A portal to register for tourism circuit which includes places of importance of Mughal era under swadesh darshan scheme.

Solution: Shri Ravi Shankar Prasad, Union Minister for Law & Justice, Communications and Electronics & IT, formally launched the efiling portal of Income Tax Appellate Tribunal (ITAT), 'itat e-dwar'.

He stated that data about more than 18 crore cases are available in the National Judicial Data Grid (NJDG) and he suggested that cases of ITAT should also be integrated in the NJDG.

He pointed out that VC facility has been provided in more than 800 jails so that the undertrials are able to appear before the Courts without the police having to bring them physically to the courts.

He further cautioned that this initiative of ITAT must not be seen as a solitary step. Instead, it should be seen as a larger narrative of transformation that the country is undergoing through digital medium.

Q.224) With reference to the 'Project Seabird', consider the following statements:

- 1. It will be Asia's largest Naval Base and further strengthen the operational readiness of the Armed Forces.
- 2. INS Kadamba is an Indian Navy base located in Kerala.

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

Solution: Raksha Mantri Shri Rajnath Singh visited the Karwar Naval Base in Karnataka on June 24, 2021 to review the progress of ongoing infrastructure development under 'Project Seabird'.

RM says it will be Asia's largest Naval Base and further strengthen the operational readiness of the Armed Forces.

INS Kadamba is an Indian Navy base located near Karwar in Karnataka.

The first phase of construction of the base, code-named Project Seabird, was completed in 2005 and the base was commissioned on 31 May 2005.

Development of Phase II commenced in 2011.

INS Kadamba is currently the third largest Indian naval base, and is expected to become the largest naval base in the eastern hemisphere after completion of expansion Phase IIB.

Hence, option (a) is the correct answer.

Q.225) Vandana Aggarwal committee, recently seen in news, is related to:

- a) examine global best practices in ship financing and leasing, identify opportunities and devise a roadmap to enable such activities from GIFT IFSC.
- b) improvement in the Customer Service at Primary (Urban) Cooperative Banks
- c) analyse the financial condition of the Regional Rural Banks in India
- d) None of the above

Solution: International Financial Services Centres Authority (IFSCA) has constituted a committee to examine global best practices in ship financing and leasing, identify opportunities and devise a roadmap to enable such activities from GIFT IFSC.

This committee will be chaired by Ms.

Vandana Aggarwal, former Senior Economic

Advisor, Government of India.

The committee includes representatives from the Government of India, Gujarat Maritime Board and industry experts possessing domain knowledge.

Objective: IFSCA aims to provide an enabling regulatory framework and facilitative

environment so that GIFT IFSC can become an international hub for Ship Financing & Leasing activities.

Hence, option (a) is the correct answer.

Q.126) With reference to the Pinaka Rocket System, consider the following statements:

- 1. It can destroy targets at distances up to 450 kms.
- 2. It is a multi-barrel rocket launch system that can fire a salvo of 12 rockets in 44 seconds.

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

Solution: DRDO successfully test fired extended range version of indigenously developed Pinaka rocket from a Multi-Barrel Rocket Launcher (MBRL) on 24th and 25th June 2021 at Integrated Test Range (ITR), Chandipur off the coast of Odisha.

The enhanced range version of Pinaka Rocket System can destroy targets at distances up to 45 kms.

The rocket system has been developed jointly by Pune based Armament Research and Development Establishment (ARDE) and High Energy Materials Research Laboratory (HEMRL) with manufacturing support from M/s Economic Explosives Limited, Nagpur.

The Pinaka is a multi-barrel rocket launch system that can fire a salvo of 12 rockets in 44 seconds. The weapon system, mounted on a Tatra truck, is equipped with state-of-the-art guidance kit comprising an advanced navigation and control system.

The Navigation system of the missile is also aided by the Indian Regional Navigation Satellite System (IRNSS).

Hence only statement 2 is correct.

Q.127) Which one of the following is the best description of 'INS Vikrant', that was in the news recently?

- a) First Indigenous Aircraft Carrier (IAC)
- b) Nuclear-powered submarine
- c) Stealth destroyer
- d) Nuclear powered icebreaker

Solution: Raksha Mantri Shri Rajnath Singh reviewed the progress of construction of first Indigenous Aircraft Carrier (IAC) built by M/s Cochin Shipyard Ltd., at Kochi on June 25, 2021.

The IAC would be commissioned as INS Vikrant in the first half of 2022, which would be the most potent sea-based asset. The ship shall operate MiG-29K fighter aircraft, Kamov-31 Air Early Warning Helicopters, the soon to be inducted MH-60R multi-role helicopter and the indigenously manufactured Advanced Light Helicopters.

The motto of the ship is Jayema Sam Yudhi Sprdhah, which is taken from Rigveda 1.8.3 and can be translated as "I defeat those who fight against me".

Hence, option (a) is the correct answer.

Q.128) With reference to the draft Code on Social Security (Employee's Compensation) (central) Rules, 2021, consider the following statements:

1. The Code on Social Security, 2020 amends and consolidates the laws relating to social security to extend social security to employees and workers in the organised as well as unorganised sectors.

2. The draft code provides for the provisions relating to manner of application for claim or settlement and rate of interest for delayed payment of compensation.

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

Solution: Ministry of Labour and Employment has notified the draft rules relating to Employee's Compensation under the Code on Social Security, 2020 for suggestions.

The Code on Social Security, 2020 amends and consolidates the laws relating to social security to extend social security to employees and workers in the organised as well as unorganised sectors.

Chapter VII (Employee's Compensation) of the Social Security Code, 2020 envisages, interalia, provisions relating to employer's liability for compensation in case of fatal accidents, serious bodily injuries or occupational diseases.

The draft Employee's Compensation rules notified by the Central Government provide for the

provisions relating to manner of application for claim or settlement,

rate of interest for delayed payment of compensation,

venue of proceedings and transfer of matters, notice and manner of transmitting money from one competent authority to another and

arrangements with other countries for the transfer of money paid as compensation.

Hence both statements are correct.

Q.129) Consider the following statements.

- 1. Asset reconstruction company (ARC) is a special type of financial institution that buys the debtors of the bank at a mutually agreed value and attempts to recover the debts or associated securities by itself.
- 2. ARCs are regulated under the Insolvency and Bankruptcy Code (IBC).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 & 2
- d) None of the above

Solution: Asset reconstruction company:

It is a special type of financial institution that buys the debtors of the bank at a mutually agreed value and attempts to recover the debts or associated securities by itself.

The asset reconstruction companies or ARCs are registered under the RBI and regulated under the Securitisation and Reconstruction of Financial Assets and Enforcement of Securities Interest Act, 2002 (SARFAESI Act, 2002). Statement 2 is incorrect.

The ARCs take over a portion of the debts of the bank that qualify to be recognised as Non-Performing Assets.

Q.230) Consider the following statements National Asset Reconstruction Company Ltd (NARCL):

- It will house bad loans of ₹500 crore and above.
- The new entity is being created in collaboration with both public sector banks only.

Which of the statements given above is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 & 2
- d) Neither 1 nor 2

Solution: National Asset Reconstruction Company Ltd (NARCL)

The bad bank will absorb the existing stock of non-performing assets (NPAs) of the banks and will attempt resolution through a professional approach.

The plan is to create a bad bank to house bad loans of ₹500 crore and above, in a structure that will contain an asset reconstruction company (ARC) and an asset management company (AMC) to manage and recover dud assets. 1 is correct.

The new entity is being created in collaboration with both public and private sector banks. 2 is incorrect.

The proposed bad bank will have a public sector character and majority ownership is likely to rest with state-owned banks.

Q.231) With reference to a report released by the United Nations Conference on Trade and Development (UNCTAD), consider the following statements:

- 1. India is among the countries that have witnessed a negative growth rate in FDI equity inflows in 2020 as compared to 2019.
- 2. India is the fifth-largest recipient of FDI inflows in the world in the year 2019-20.

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

Solution: According to a report released by the United Nations Conference on Trade and Development (UNCTAD), India is among the countries that have witnessed a positive growth rate in FDI equity inflows in 2020 as compared to 2019.

While major economies like the USA, Singapore, Germany, Brazil, Canada, UAE have seen a negative trend. India has seen a growth of 25 per cent in 2020 as compared to 2019.

India is the fifth-largest recipient of FDI inflows in the world in the year 2019-20. It comes at a time when global FDI inflows have been badly hit by Covid-19, which declined to \$1 trillion in 2020-21 from \$1.5 trillion a year ago.

Despite the disruption caused by the outbreak of the pandemic last year, India attracted the highest ever FDI inflow of \$81.72 billion in the entire financial year 2020-21. The total FDI inflows in 2019-20 stood at \$74.39 billion.

India had attracted a total foreign direct investment (FDI) of \$6.24 billion in April 2021, up 38 per cent year-on-year, according to data released by the Department for Promotion of Industry and Internal Trade (DPIIT).

Hence only statement 2 is correct.

Q.232) With reference to the "Integrated Theatre Commands", consider the following statements:

- 1. Presently, there are two joint services commands in India, the first one is Andaman and Nicobar Command (ANC) and the second, being Strategic Forces Command (SFC).
- 2. Based on the principle of theatre command system, Andaman and Nicobar Command (ANC) is considered to be the only one of its kind in the country that amalgamates the army, navy and air force.

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

Solution: Chief of Defence Staff (CDS) General Bipin Rawat recently chaired a meeting with the Vice Chiefs of the three Services (Indian Army, Indian Navy and Indian Air Force), Chief of Integrated Defence Staff and representatives from the Ministries of Defence, Home and Finance for the creation of "Integrated Theatre Commands".

The three basic components of Indian defence forces are the army, navy and air force, each with its unique fighting profile, separate heads and multiple commands that are vertically split in terms of their command structure.

The Indian Army and Indian Air Force have seven commands each while the Indian Navy has three commands.

These commands are scattered across the nation and don't coincide geographically.

The proposed four theatre commands: air defence, maritime, integrated eastern and integrated western theatre commands, will promote 'jointness' among the three branches of the armed forces.

It will ensure increased coordination to boost the overall fighting capabilities of the Indian armed forces, create capacities to adapt to the requirements of hybrid warfare along with seamless command centres to meet future challenges.

India's Andaman and Nicobar Command (ANC) & Strategic Forces Command (SFC)

Presently, there are two joint services commands in India, the first one is Andaman

and Nicobar Command (ANC) and the second, being Strategic Forces Command (SFC).

Based on the principle of theatre command system, ANC is considered to be the only one of its kind in the country that amalgamates the army, navy and air force as SFC takes care of the nuclear assets of India and is not related to any specific theatre of war.

Set up in 2001, ANC is based in Port Blair and is led by officers of the three services on a rotation basis. The command covers India's strategic interests in Southeast Asia and the Malacca Strait.

Hence both statements are correct.

Q.233) With reference to the SWiFT drone, consider the following statements:

- 1. SWiFT has been powered by an NPO Saturn 36MT turbofan engine, which is manufactured by NPO Saturn Russia, for powering advanced trainers, light attack aircraft, and unmanned aerial vehicles (UAV).
- 2. SWiFt is an advanced technology project, which prepares the Technology Readiness Levels (TRL) which enables consistent, uniform discussions of technical maturity across different types of technology.

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

Solution: DRDO initiates the trials of advanced stealth SWiFT drone

DRDO has initiated the ground trials of SWiFT, 1-ton All Up Weight (AUW) Technological Demonstrator for the Unmanned Aerial Vehicle (Stealth Bomber). The trials will be conducted on the first assembled prototype, which will be involved in a series of a low, medium, and high-speed taxi testing to fathom aircraft's performance and instrumentation by a ground control station to ascertain the functionality of the unmanned vehicle when it reaches a high speed.

SWiFT has been powered by an NPO Saturn 36MT turbofan engine, which is manufactured by NPO Saturn Russia, for powering advanced trainers, light attack aircraft, and unmanned aerial vehicles (UAV) that will be later replaced by Gas Turbine Research Establishment's (GTRE) Small Turbo Fan Engine (STFE).

SWiFt is an advanced technology project, which prepares the Technology Readiness Levels (TRL) which enables consistent, uniform discussions of technical maturity across different types of technology.

Additionally, SWift's validated technologies will be used in India's Ghatak stealth flying wing combat drone-powered.

Hence both statements are correct.

Q.234) The terms "Dragon Man" and "Nesher Ramla Homo" sometimes mentioned in the news recently are related to:

- a) Ancient human
- b) Exoplanets
- c) Ransomware
- d) None of the above

Solution: Researchers from China have claimed to have found an ancient human skull that could belong to an altogether new species of humans.

The researchers note that the cranium (the portion that encloses the brain) could be over 146,000 years old. The skull was found in the

Songhua river in north-east China's Harbin city.

The cranium found in China has been dubbed the "Dragon Man" or Homo longi, a name that has been derived from the Long Jiang or Dragon river in the Heilongjiang province of China where the city of Harbin is located.

Because of the distinctive shape of the skull, which was found almost complete, some members of the team have suggested that it be declared a part of a new species of the genus Homo.

Nesher Ramla Homo

Researchers in Israel, also identified a previously unknown kind of ancient human called "Nesher Ramla Homo" that co-existed with Homo sapiens nearly 100,000 years ago when several species of humans co-existed in Asia, Europe and Africa.

These include Homo sapiens, the Neanderthals, and the Denisovans.

Modern humans are the only human species that exist in the world today. While the exact number of human species is a matter of debate, most scientists believe that there are at least 21 of them.

Homo sapiens, the species to which all existing humans belong, evolved in Africa nearly 300,000 years ago as a result of some dramatic climate change events.

Neanderthals (Homo neanderthalensis) are believed to be the closest extinct human relatives and lived about 400,000-40,000 years ago in Europe and southwestern to central Asia.

Hence, option (a) is the correct answer.

Q.235) With reference to the LGBTQIA+ community, consider the following statements:

- 1. Recently Madras High Court directed the Union Ministry of Social Justice to enlist NGOs that could provide counselling, monetary support, legal assistance and protection to them until a law could be enacted to protect them.
- 2. LGBTQIA+ stands for lesbian, gay, bisexual, transgender, queer, intersex, asexual and such others' (LGBTQIA+) community.

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

Solution: Empathising with the LGBTQIA+ community, the Madras High Court directed the Union Ministry of Social Justice to enlist NGOs that could provide counselling, monetary support, legal assistance and protection to them until a law could be enacted to protect them.

Ministry should upload the details of the NGOs on its website within eight weeks and revise the information periodically. Any person who faced an issue because he/she/they belonged to the LGBTQIA+ community could approach any of the enlisted NGOs for safeguarding their rights.

NGOs should also coordinate with the police with respect to offences committed against them.

Appropriate changes should be made to the existing government short stay homes, anganwadi shelters, Garima Greh (shelter home for transgender persons) for providing accommodation, food, medical care facilities to those from the community in need of such assistance.

Sensitisation programmes could also be conducted for stakeholders, including police and prison authorities, judges, physical and mental health professionals, educational institutions, health workers, public and private workplaces.

LGBTQIA+ stands for lesbian, gay, bisexual, transgender, queer, intersex, asexual and such others' (LGBTQIA+) community.

Hence both statements are correct.

Q.236) Garudeshwar weir is being constructed on which of the following river?

- a) Narmada
- b) Krishna
- c) Godavari
- d) Ganga

Solution: Sardar Sarovar Dam is providing irrigation water in summer for the first time in history.

The Sardar Sarovar Narmada Dam is a terminal dam built on the Narmada river at Kevadia in Gujarat's Narmada district.

According to the 1979 award of the Narmada Water Dispute Tribunal, the power benefits from the project are to be shared in the following ratio: Madhya Pradesh at 57 per cent, Maharashtra at 27 per cent, and Gujarat at 16 per cent.

Garudeshwar Weir

Garudeshwar weir is being constructed on the river Narmada near the Statue of Unity.

The total height of the weir will be 31.75 metre.

It is located at Garudeshwar at a distance of 9 kilometre from Sadhu bet island and 12 kilometre downstream from Sardar Sarovar dam.

Garudeshwar weir will increase visual beauty of both – the Statue of Unity and the Valley of Flowers by creating a small reservoir or lake.

Hydro electricity will be produced through this weir.

The reservoir formed will also provide a navigation channel of 7 kilometre for ferry service from the Shreshtha Bharat Bhawan to the Statue of Unity.

Hence, option (a) is the correct answer.

Q.237) With reference to the Pradhan Mantri Awas Yojana (URBAN), consider the following statements:

- 1. The Mission will be implemented during 2001-2033.
- 2. Credit linked subsidy component will be implemented as a Centrally sponsored Scheme while other three components will be implemented as central sector schemes.
- 3. All statutory towns as per Census 2011 and towns notified subsequently would be eligible for coverage under the Mission.

Which of the statements given above is/are correct?

a) 3 only

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

Solution: The Government approved 708 proposals for construction of 3.61 lakh houses under Pradhan Mantri Awas Yojana – Urban (PMAY-U). With this, as on date, the total number of sanctioned houses under PMAY(U) is now 112.4 of which 48.31 lakh have been completed/delivered.

PMAY- U Awards 2021 - 100 Days Challenge

In addition, 'PMAY- U Awards 2021 - 100 Days Challenge' was also launched by Ministry of Housing & Urban Affairs (MoHUA).

The awards are given to recognize and celebrate the outstanding performances by

States, Union Territories (UTs), Urban Local Bodies (ULBs) and beneficiaries for successful implementation of the Mission.

Pradhan Mantri Awas Yojana (URBAN)

Implementation period: The Mission will be implemented during 2015-2022.

Mission: To achieve the goal of Housing for All in Urban areas by 2022, when the Nation completes 75 years of its Independence.

Features: Under it, central assistance will be provided to Urban Local Bodies (ULBs) and other implementing agencies through States/UTs for:

In-situ Rehabilitation of existing slum dwellers using land as a resource through private participation

Credit Linked Subsidy

Affordable Housing in Partnership

Subsidy for Beneficiary-led individual house construction/enhancement.

Funding: Credit linked subsidy component will be implemented as a Central Sector Scheme while other three components will be implemented as Centrally Sponsored Scheme (CSS).

Eligibility: All statutory towns as per Census 2011 and towns notified subsequently would be eligible for coverage under the Mission.

Hence, option (a) is the correct answer.

Q.238) Consider following statements about dissolved oxygen (DO).

- 1. Water having DO content below 8.0 mg/L may be considered as contaminated.
- 2. A number of factors like surface turbulence, photosynthetic activity, O2 consumption by organisms and decomposition of organic matter are the factors which determine the amount of DO present in water.

3. The higher amounts of waste increase the rates of decomposition and O2 consumption thereby decreases the DO content of water.

Correct statement is/are

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

d) All of the above

Solution: "DO is one of the most important factors for the maintenance of biodiversity in a pond. Our atmosphere has about 20% oxygen or 2,00,000 parts per million (ppm) but only about 1,00,000 ppm gets dissolved in water. DO concentration below 3ppm will kill fish,"

Non-penetration of sunlight due to a layer of algae has also been a factor behind the fish death. "Boating and spanking the water prevents surface algae from accumulating,"

Presence of organic and inorganic wastes in water decreases the dissolved oxygen content of the water.

Water having DO content below 8.0 mg/L may be considered as contaminated.

Water having DO content below. 4.0 mg/L is considered to be highly polluted.

DO content of water is important for the survival of aquatic organisms.

A number of factors like surface turbulence, photosynthetic activity, O2 consumption by organisms and decomposition of organic matter are the factors which determine the amount of DO present in water.

The higher amounts of waste increase the rates of decomposition and O2 consumption thereby decreases the DO content of water.

Q.239) Golden Crescent and Golden Triangle countries are the two sources of over 90% of

world's illicit opium. In this context which of the following countries are part of Golden Triangle:

- 1. Thailand
- 2. Indonesia
- 3. Myanmar
- 4. Laos

Choose the correct answer from the codes given below:

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

Solution: The Golden Triangle is the area where the borders of Thailand, Laos, and Myanmar meet at the confluence of the Ruak and Mekong rivers.

The name "Golden Triangle" was coined by the CIA (Central Intelligence Agency) of United States.

Along with Afghanistan in the Golden Crescent, it has been one of the largest opium-producing areas of the world since the 1950s. Most of the world's heroin came from the Golden Triangle until the early 21st century when Afghanistan became the world's largest producer.

Q.240) Which of the following statements is/are correct with reference to Ambergris, seen recently in news:

- 1. It a naturally occurring rare earth mineral found in deep oceans.
- 2. It is used in perfume market to create fragrance like musk

Choose the correct answer from the codes given below:

a) 1 only

b) 2 only

- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Ambergris, French for grey amber, is generally referred to as whale vomit. It is a solid waxy substance originating in the intestine of the sperm whale. Ambergris is produced only by an estimated 1% of sperm whales.

This excretion is so valuable that it is referred to as floating gold. 1 kg of ambergris is worth Rs 1 crore in the international market.

The reason for its high cost is its use in the perfume market, especially to create fragrances like musk. It is believed to be in high demand in countries like Dubai that have a large perfume market. Ancient Egyptians used it as incense. It is also believed to be used in some traditional medicines.

Since the sperm whale is a protected species, hunting of the whale is not allowed. However, smugglers are known to have illegally targeted the fish in order to obtain the valuable Ambergris from its stomach.

Q.241) With reference to the Agni-P (Prime), consider the following statements:

- 1. It is a canisterised missile.
- 2. The Agni class of missiles also includes the Prithvi short-range ballistic missiles, submarine-launched ballistic missiles and fighter aircraft.

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

Solution: A new-generation nuclear-capable ballistic missile, Agni-P (Prime) was successfully test-fired by the Defence Research and Development Organisation (DRDO) from the Dr. A.P.J. Abdul Kalam island, Balasore, off the coast of Odisha.

The 'Agni Prime' is the advanced version of the 'Agni-1' missile.

The 'Agni Prime' is a short-range ballistic missile that will have a range of 1000 km to 1500 km and will have advanced features in agility and road mobility. It is a surface to a surface missile that can carry a payload of around 1,000 Kg or a nuclear warhead.

The double stage missile will be lighter and much sleeker than its predecessor 'Agni-1'.

It is a canisterised missile. Canisterisation of missiles reduces the time required to launch the missile while improving its storage and mobility.

The Agni class of missiles are the mainstay of India's nuclear launch capability which also includes the Prithvi short-range ballistic missiles, submarine-launched ballistic missiles and fighter aircraft.

Submarine missiles

In the past few years, India has also operationalised its submarine-based nuclear launch capability, completing the nuclear triad.

The DRDO, in January 2020, successfully test-fired a 3,500-km range submarine-launched ballistic missile, K-4, from a submerged pontoon off the Visakhapatnam coast.

Once inducted, these missiles will be the mainstay of the Arihant class of indigenous ballistic missile nuclear submarines (SSBN) and will give India the stand-off capability to launch nuclear weapons submerged in Indian waters.

INS Arihant, the only SSBN in service, is armed with K-15 missiles with a range of 750 km.

Hence both statements are correct.

Q.242) Chumathang, Hanley and Kyungam, recently seen in news, is located in:

- a) Arunachal Pradesh
- b) Sikkim
- c) Nagaland

d) Ladakh

Solution: In a virtual program from Kyungam in Leh district, Defence Minister Rajnath Singh inaugurated 63 bridges built by Border Roads Organization (BRO) in eight states in the country.

He inaugurated a 50-metre-long bridge constructed on the Leh-Loma Road in Ladakh. The Leh-Loma Road, which connects Leh with places such as Chumathang, Hanley and Tso Morori Lake, is vital for access to forward areas in Eastern Ladakh.

In addition, Shri Rajnath Singh virtually inaugurated 62 more bridges – 11 in Ladakh, four in Jammu & Kashmir, three in Himachal Pradesh, six in Uttarakhand, eight in Sikkim, one each in Nagaland and Manipur and 29 in Arunachal Pradesh.

With the inauguration of 63 bridges in one go, BRO has surpassed its own record of 44 bridges launched in 2020.

These 63 bridges, combined with 12 roads dedicated to the nation by Shri Rajnath Singh on June 17, 2021, form a bouquet of 75 infrastructure projects completed by BRO, when the nation is celebrating the 75th anniversary of its Independence.

Hence, option (d) is the correct answer.

Q.243) Consider following statements about Fukuoka prize.

- 1. The Fukuoka Prize is given annually to distinguished people to foster and increase awareness of Asian cultures, and to create a broad framework of exchange and mutual learning among the Asian people.
- 2. Eleven Indians have received the Fukuoka Prize so far.
- 3. It is given by Fukuoka City International Foundation located in South Korea.

Correct statement is/are

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Solution: The Fukuoka Prize is an award established by the city of Fukuoka and the Fukuoka City International Foundation (formerly The Yokatopia Foundation) to honor the outstanding work of individuals or organizations in preserving or creating Asian culture.

There are three prize categories: Grand Prize, Academic Prize, and Arts and Culture Prize.

In 1989, Fukuoka held the Asia-Pacific Exposition (referred to as "Yokatopia") with the concept of interaction between the Asia-Pacific region.

Noted journalist P. Sainath has been selected as one of the three recipients of the Fukuoka Prize for 2021.

The Fukuoka Prize is given annually to distinguished people to foster and increase awareness of Asian cultures, and to create a broad framework of exchange and mutual learning among the Asian people.

The Grand Prize has earlier been awarded to Muhammad Yunus from Bangladesh, historian Romila Thapar, and sarod maestro Amjad Ali Khan. Eleven Indians have received the Fukuoka Prize so far.

Q.244) The Baihetan dam, the world's second-biggest hydroelectric dam recently started its operation. It is located in

- a) Indonesia
- b) Russia
- c) China
- d) Brazil

Solution: The first two generating units of the world's second-biggest hydroelectric dam were officially turned on Monday in southwestern China, the government announced.

The Baihetan Dam on Jinsha river, a tributary of the Yangtze, is part of Chinese efforts to curb surging fossil fuel demand by building more hydropower capacity at a time when dams have fallen out of favour in other countries due to environmental complaints.

The Baihetan Dam is a large hydroelectric dam on the Jinsha River, an upper stretch of the Yangtze River in Sichuan and Yunnan provinces, in the southwest of China.

The dam is a 277 m tall double-curvature arch dam with a crest elevation of 827 m, and a width of 72 m at the base and 13 m at the crest.

It is considered the last large hydropower project in China to be completed since a series of projects starting with the Three Gorges Dam, the third largest dam in China and the fourth in the world, in terms of dam volume.

Q.245) Which of the following best describes the Double coincidence of wants?

- a) A situation where two economic agents have complementary demands for each other's surplus production.
- b) An economic situation where two economic agents have desire for similar goods.

- c) An economic situation in which aggregate demand is assumed to be infinitely elastic.
- d) An economic situation where the total demand in the economy is two times the supply in the economy.

Solution: A scenario in which two economic agents have complementary desire for each other's surplus production is known as a double coincidence of demands.

A coincidence of desires could arise, for example, when a fisherman wants a packet of rice and a farmer needs fish and is prepared to accept fish in return for his rice.

Q.246) Consider the following statements regarding LiDAR technology:

- 1. It uses radio waves in the range for transmission and reception.
- 2. This technology is used to create 3-D images of the project areas to recommend soil and water conservation structures.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: Light Detection and Ranging (LiDAR) is a light-based remote sensing technology. It uses laser light rays for transmission and reception.

It is used to create 3-D images of the project areas to recommend soil and water conservation structures. This can be converted to create slope and sunlight exposure area map. This information can be used to identify the areas which require more water or fertilizer and help the farmers to save on their cost of labor, time and money.

Q.247) Which of the following Protected Areas has been given approval by National Tiger Conservation Authority to be set up as Tiger Reserve?

a) Keoladeo National Park

b) Ramgarh Vishdhari Wildlife Sanctuary

- c) National Chambal Sanctuary
- d) Sajjangarh Wildlife Sanctuary

Solution: Recently, the Ramgarh Vishdhari wildlife sanctuary received a nod from the National Tiger Conservation Authority's (NTCA) technical committee to become the 4th Tiger reserve of Rajasthan. This will be the 52nd Tiger Reserve of India.

Rajasthan has three other tiger reserves with over 90 big cats at Ranthambore Tiger Reserve (RTR) in Sawai Madhopur, Sariska Tiger Reserve (STR) in Alwar, and Mukundra Hills Tiger Reserve (MHTR) in Kota.

Q.248) Consider the following statements regarding Unmanned Aerial Vehicles (UAV)

- 1. UAVs cannot be detected by radar system.
- 2. UAVs are regulated by the Ministry of Defense in India

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: UAVs are generally called attackers delight and defender's nightmare for the following reasons,

UAVs have no restriction on the terrain nor the condition of the environment.

Drones fly low and therefore cannot be detected by any radar system because they

are small and do not have much radar crosssection.

Difficult to detect also means difficult to engage as well.

They do not match the cost of the kill vs the cost of the target. For example, killing the \$1000 UAV with the Million \$ sophisticated missile. So, the defender needs soft kill systems like LASER, Radio Frequency jamming and Electronic Jamming etc.

Director General of Civil Aviation (DGCA) under the civil aviation ministry is regulating the UAVs in India.

Q.249) Consider the following statements regarding Digital Millennium Copyright Act (DMCA)

- 1. It is the world's first law recognising Intellectual Property (IP) on the internet.
- 2. The DMCA oversees the implementation of two 1996 treaties signed by World Intellectual Property Organisation (WIPO) member nations.

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

Solution: Recently, 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).

Digital Millennium Copyright Act:

Digital Millennium Copyright Act or DMCA is a 1998 law passed in the US and is among the

world's first laws recognising intellectual property on the internet.

Purpose: The law oversees the implementation of the two treaties signed and agreed upon by member nations of the World Intellectual Property Organisation(WIPO) in 1996.

Namely the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.

Q.250) Sunil Mehta committee sometimes seen in news is related to?

- a) Resolution of stressed assets
- b) NBFC sector reforms
- c) Rural microfinance Institutions
- d) Long-term food policy

Solution: A committee under Sunil Mehta was set up to give recommendation on formation of an Asset Reconstruction Company for quicker resolution on stressed assets.

Q.251) Recently seen in news, draft national strategy and roadmap for development of rural tourism in India, is an initiative of:

- a) Ministry of Rural Development
- b) NITI Aayog
- c) Ministry of Tourism
- d) Ministry of Home Affairs

Solution: Ministry of tourism invites feedback on the draft national strategy and roadmap for development of rural tourism in India.

The Ministry of Tourism has the main objective of promoting and facilitating tourism both inbound and domestic in India.

Ministry of Tourism has recognized the immense potential of Rural Tourism and has been actively working on promotion and development of this niche area of tourism.

Identification, diversification, development, and promotion of niche tourism products in the country is the initiative of the Ministry to overcome the aspect of 'seasonality' and to promote India as a 365 days' destination, to attract tourists with specific interest, and to ensure repeat visits for the unique products in which India has a comparative advantage.

Hence, option (c) is the correct answer.

Q.252) With reference to the 'sea snot' outbreak, consider the following statements:

- 1. It floats up on the surface of the sea like a brown phlegm.
- 2. Turkey's Sea of Marmara, that connects the Black Sea to the Arabian Sea, has witnessed the largest outbreak of 'sea snot'.

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

Solution: Turkey's Sea of Marmara, that connects the Black Sea to the Aegean Sea, has witnessed the largest outbreak of 'sea snot'.

'Sea snot' is marine mucilage, which floats up on the surface of the sea like a brown phlegm. This thick slimy layer of organic matter looks like a viscous, brown and foamy substance.

It is formed when algae are overloaded with nutrients as a result of water pollution combined with the effects of climate change. The nutrient overload occurs when algae feast on warm weather caused by global warming. Water pollution adds to the problem. Overproduction of phytoplankton caused by climate change/rising temperatures and the uncontrolled dumping of household and industrial waste into the seas has led to the present crisis in turkey.

Impact

The growth of the mucilage is posing a severe threat to the marine ecosystem of the country. It has caused mass deaths among the fish population, and also killed other aquatic organisms such as corals and sponges.

Over a period of time, it could end up poisoning all aquatic life, including fishes, crabs, oysters, mussels and sea stars.

Besides aquatic life, the 'sea snot' outbreak has also affected the livelihoods of fishermen.

Some experts have also warned that the 'sea snot' can cause an outbreak of water-borne

diseases such as cholera in cities like Istanbul.

Hence only statement 1 is correct.

Q.253) Consider following statements about Neutron star.

- 1. A neutron star is about 1.4-2 times the mass of the sun while the other black hole is much more massive.
- 2. Black holes are the densest objects in the Universe followed by neutron stars.
- 3. A neutron star has a surface and black hole does not.

Correct statement is/are

a) 1 only

b) 1 and 3

- c) 3 only
- d) All of the above

Solution: One of the probable evolutionary end-points of high mass stars is neutron stars.

Energy production ceases after the star's core has entirely burnt to iron, and the core quickly collapses, compressing electrons and protons together to produce neutrons and neutrinos. A star supported by neutron degeneracy pressure is known as a 'neutron star', which may be seen as a pulsar if its magnetic field is favourably aligned with its spin axis.

There is huge excitement among scientists with the first confirmed detection of a neutron star-black hole (NS-BH) collision being reported. This ground breaking discovery of gravitational waves from a pair of NS-BH mergers was published in the Astrophysical Journal Letters on Tuesday.

A neutron star is about 1.4-2 times the mass of the sun while the other black hole is much more massive.

Neutron stars are the densest objects in the Universe

Q.254) Consider following statement about Avlanche.

- 1. It is a rapid downslope movement of a large detached mass of snow, ice, and associated debris such as rocks and vegetation.
- 2. Avalanches form as soon as the force of gravity on the snow cover exceeds its mechanical strength.
- 3. The recent disaster in Chamoli district in February 2021 was result of avalanche and not glacial lake outburst.

Correct statement is/are

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

d) All of the above

Solution: This is a huge detached mass of snow, ice, and accompanying debris like as boulders and plants moving rapidly downslope.

Small avalanches, also known as Sluffs, occur often, but massive avalanches, which may

cover slopes of a kilometre or more and contain millions of tonnes of snow, occur seldom but cause the most damage. Sliding snow has presented a hazard to humans for as long as they have lived in hilly areas.

Q.255) Consider the following:

- 1. SFURTI
- 2. DHRUV
- 3. ASPIRE

Which of the above schemes are launched by the Government of India to promote Micro, Small and Medium Enterprises Sector?

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

Solution: SFURTI: The Ministry of Micro Small and Medium Enterprises (MSME) Government of India, launched Scheme of Fund for Regeneration of Traditional Industries (SFURTI) to promote MSME cluster development in the country. Objectives of SFURTI are:

To organize the artisans and traditional industries into clusters for better competitiveness

To provide them support for enhancing employment opportunities and to increase marketability of products of such clusters

To improve the skills of artisans

To make provision for improved tools and equipment for artisans

With the active participation of the stakeholders, strengthening the cluster governance systems

DHRUV: The Pradhan Mantri Innovative Learning Programme – DHRUV has been

started by Ministry of Human Resource
Development, Government of India to identify
and encourage talented children to enrich
their skills and knowledge. In centres of
excellence across the country, gifted children
will be mentored and nurtured by renowned
experts in different areas, so that they can
reach their full potential. The main objective
of the program is to allow students to realize
their complete potential and contribute to the
society.

ASPIRE: Scheme for promotion of innovation, entrepreneurship and Agro-Industry (ASPIRE) is promoted by the Ministry of Micro, Small and Medium Enterprises. The main objectives of the ASPIRE scheme are to:

Create new jobs and reduce unemployment

Promote entrepreneurship culture in India

Grassroots economic development at the district level

Facilitate innovative business solution for unmet social needs

Promote innovation to further strengthen the competitiveness of the MSME sector

Q.256) The Financial Action Task Force (FATF) was founded on an initiative of:

- a) IMF
- b) WTO
- c) WEF
- d) G7

Solution: Financial Action Task Force (on Money Laundering) (FATF), is an intergovernmental organisation founded in 1989 on the initiative of the G7 to develop policies to combat money laundering.

In 2001, its mandate was expanded to include terrorism financing.

The objectives of FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system. FATF is a "policy-making body" that works to generate the necessary political will to bring about national legislative and regulatory reforms in these areas.

FATF monitors progress in implementing its Recommendations through "peer reviews" ("mutual evaluations") of member countries.

Recently, Financial Action Task Force decided to retain Pakistan on "grey list" till next performance review.

Q.257) 'Glacier of the Himalayas: Climate Change, Black Carbon and Resilience' Report is recently released by

a) International Solar Alliance

b) World Bank

- c) World Meteorological Organization
- d) Both A and B

Solution: The report, 'Glaciers of the Himalayas: Climate Change, Black Carbon and Regional Resilience', states that along with rising temperatures and changing rainfall patterns, black carbon deposits—air-borne particles generated by incomplete combustion from brick kilns, diesel exhaust, and the burning of biomass—are speeding up glacier and snowmelt in these ranges. (option B is the correct answer)

"Rising temperature has already been contributing to faster melting of glaciers in the mountain. Even various studies have shown the global temperature rise will be much higher in the Himalayan region," Arun Prakash Bhatta, an undersecretary with the Ministry of Forests and Environment, told the Post. "Besides, black carbon, which absorbs

radiation and converts to heat, as shown by the study.

Q.258) Consider the following statements:

- The Five Eyes alliance is an intelligencesharing arrangement between five Englishspeaking democracies.
- 2. New Zealand is also a member of it.

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

Solution: Both statements are correct.

The Five Eyes alliance

It is an intelligence-sharing arrangement between five English-speaking democracies: the US, UK, Canada, Australia and New Zealand.

It evolved during the Cold War as a mechanism for monitoring the Soviet Union and sharing classified intelligence.

It is often described as the world's most successful intelligence alliance.

Q.259) Sea Guardian often seen in the news is related to which of the following?

- a) Nuclear-powered submarine
- b) An Unmanned Aerial Vehicle
- c) Advanced Research Vessel
- d) Stealth guided missile destroyer

Solution: Sea Guardian, is the maritime variant of the Predator MQ-9 Unmanned Aerial Vehicle (UAV) of USA.

Q.260) The term 'TENG', sometimes seen in news is related to which of the following?

- a) A nanogenerator device
- b) Gene-editing tool
- c) Night-Vision amplifier
- d) A super capacitor

Solution: A triboelectric nanogenerator (TENG) is a self-powered device that makes use of mechanical energy in the form of vibrations present everywhere in different forms to generate electricity.