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I. ECONOMY

(Q) India-EU Broad Based Trade and Investment Agreement (BTIA) negotiations cover:

1. Trade in Goods and Service
2. Sanitary and Phytosanitary Measures
3. Government Procurement
4. Sustainable Development

Select the correct code:

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

Solution: d)

On 28th June 2007, India and the EU began negotiations on a broad-based Bilateral Trade and Investment Agreement (BTIA) in Brussels, Belgium.

The negotiations cover Trade in Goods, Trade in Services, Investment, Sanitary and Phytosanitary Measures, Technical Barriers to Trade, Trade Remedies, Rules of Origin, Customs and Trade Facilitation, Competition, Trade Defence, Government Procurement, Dispute Settlement, Intellectual Property Rights & Geographical Indications, Sustainable Development.

Source: [http://commerce.gov.in/international_nextDetail_WTO.aspx?LinkID=32&idwto=34](http://commerce.gov.in/international_nextDetail_WTO.aspx?LinkID=32&idwto=34)

(Q) Consider the following statements about prepaid payment instruments:

1. Prepaid payment instruments are those which facilitate purchase of both goods and services against the value stored on such instruments.
2. Inter-personal remittance transactions is not possible.
3. These payment instruments are licensed and regulated by the Ministry of Finance.

Which of the above statements is/are incorrect?

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

Solution: c)

Prepaid payment instruments are those which facilitate purchase of goods and services against the value stored on such instruments. Value stored on them is paid by the holder using a medium (cash, debit card, credit card etc).

- These are generally issued in the form of smart cards, mobile wallets, paper vouchers, internet accounts/wallets.
- Prepaid payment instruments (PPIs) come with a pre-loaded value and in some cases a pre-defined purpose of payment. They facilitate the purchase of goods and services as well as inter-personal remittance transactions such as sending money to a friend or a family member.
These payment instruments are licensed and regulated by the Reserve Bank of India.

Source: https://www.livemint.com/Money/Wq5AT6vx1IklC0lRSMbnSI/What-are-prepaid-payment-instruments.html

(Q) Consider the following statements about Prompt Corrective Action (PCA) of RBI.

1. PCA norms allow the regulator to place certain restrictions on the Banks.
2. Curbs on lending and deposit by the banks are mandatory restrictions.
3. If PCA is triggered banks are allowed to renew or access costly deposits.

Which of the above statements is/are incorrect?

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

Solution: b)

PCA norms allow the regulator to place certain restrictions such as halting branch expansion and stopping dividend payment. It can even cap a bank's lending limit to one entity or sector. Other corrective action that can be imposed on banks include special audit, restructuring operations and activation of recovery plan. Banks' promoters can be asked to bring in new management, too. The RBI can also supersede the bank's board, under PCA.

There are two type of restrictions, mandatory and discretionary. Restrictions on dividend, branch expansion, directors compensation, are mandatory while discretionary restrictions could include curbs on lending and deposit.

Banks are not allowed to renew or access costly deposits or take steps to increase their fee-based income. Banks will also have to launch a special drive to reduce the stock of NPAs and contain generation of fresh NPAs. They will also not be allowed to enter into new lines of business. RBI will also impose restrictions on the bank on borrowings from interbank market.

Source: https://www.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1065

(Q) Consider the following statements about National Investment and Infrastructure Fund (NIIF)

1. It is also called as National Investment Fund.
2. It aims at infrastructure development in commercially viable projects, both Greenfield and brownfield, including stalled projects.
3. The NIIF is established as Alternate Investment Funds (AIF) under the SEBI Regulations.

Which of the above statements is/are correct?

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

Solution: b)

National Investment and Infrastructure Fund (NIIF) is a fund created by the Government of India for enhancing infrastructure financing in the country.

- This is different from the National Investment Fund.
• NIIF is envisaged as a fund of funds with the ability to make direct investments as required. As a fund of fund it may invest in other SEBI registered funds.

• The objective of NIIF would be to maximize economic impact mainly through infrastructure development in commercially viable projects, both Greenfield and brownfield, including stalled projects. It could also consider other nationally important projects, for example, in manufacturing, if commercially viable.

• As per the operational framework approved on 20 August 2015 NIIF is not a single entity. There can be more than one fund. The NIIF will be established as one or more Alternate Investment Funds (AIF) under the SEBI Regulations.

Source: [http://arthapedia.in/index.php%3Ftitle%3DNational_Investment_and_Infrastructure_Fund_(NIIF)](http://arthapedia.in/index.php%3Ftitle%3DNational_Investment_and_Infrastructure_Fund_(NIIF))

(Q) Consider the following statements about Insolvency and Bankruptcy Code (IBC), 2016.
1. IBC seeks for insolvency resolution of corporate persons, partnership firms and individuals.
2. Debt Recovery Tribunal is the adjudicating authority for corporate insolvency.
3. There are also provisions to deal with cross border insolvency.

Which of the above statements is/are correct?

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

Solution: c)
IBC, 2016 is an Act to consolidate and amend the laws relating to reorganisation and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner.

Insolvency and Bankruptcy Code (IBC), 2016:

• Override other existing laws on matters pertaining to Insolvency and Bankruptcy.
• Resolve insolvencies within 180 days. (Extendable upto 270 days) for the Company.
• Debt Recovery Tribunal – Adjudicating authority for individuals and partnerships.
• National Company Law Tribunal – Adjudicating authority for corporate insolvency (for Companies and Limited Liability Partnership firms).
• Insolvency and Bankruptcy Board of India to exercise regulatory oversight over insolvency professionals, insolvency professional agencies and information utilities.
• Insolvency and Bankruptcy Board of India is under the Ministry of Corporate Affairs (MCA).
• Enabling provisions to deal with cross border insolvency.

(Q) Consider the following statements about domestic systemically important bank (D-SIB).
1. RBI declares only Public Sector Banks as domestic systemically important bank.
2. Banks become systemically important due to their size, cross-jurisdictional activities and interconnection.
3. Banks whose assets exceed 2% of GDP are considered part of this group.

Which of the above statements is/are correct?

a) 1, 2
b) 2 only
c) 2, 3
d) 1, 2, 3
Solution: c)
SBI, ICICI and HDFC remain **Systemically Important Banks**.

**D-SIB** means that the **bank is too big to fail**. According to the RBI, some banks become systemically important due to their size, cross-jurisdictional activities, complexity and lack of substitute and interconnection. Banks whose **assets exceed 2% of GDP** are considered part of this group. The RBI stated that should such a bank fail, there would be significant disruption to the essential services they provide to the banking system and the overall economy.

Source: [https://m.rbi.org.in/scripts/bs_viewcontent.aspx?id=2861](https://m.rbi.org.in/scripts/bs_viewcontent.aspx?id=2861)

(Q) **Y M Deosthalee** committee is associated with
   a) Corporate Social Responsibility
   b) Electoral Reforms
   c) Digital Payments
   d) Public Credit Registry

**Solution: d)**
The Reserve Bank of India (**RBI**) had formed a high-level task force on **public credit registry (PCR)** for India. The task force was chaired by **Y M Deosthalee**.

- The task force has suggested the registry should capture all loan information and borrowers be able to access their own history. Data is to be made available to stakeholders such as banks, on a need-to-know basis. Data privacy will be protected.

(Q) Consider the following statements about the Gold Reserves with RBI.
1. RBI buys gold every year from the International Monetary Fund.
2. RBI Act permits RBI to trade in gold.
3. Gold reserves are held as backing for Currency Notes issued by the RBI and also as an asset.

Which of the above statements is/are correct?
   a) 1, 2
   b) 1, 3
   c) 2, 3
   d) 1, 2, 3

**Solution: c)**
Banking regulator RBI has bought eight tonnes of gold after almost nine years. The RBI last bought 200 tonnes of gold from the International Monetary Fund in November 2009.

Of the 566 tonnes gold reserves, 292 tonnes is held as backing for Notes issued and the balance 274 tonnes (265.49 tonnes) is treated as an asset of the Banking Department.

The RBI’s decision to buy gold is significant because unlike many other central banks such as the People’s Bank of China, RBI does not regularly trade in gold, although the RBI Act permits it to do so.

(Q) Consider the following statements about Internal Ombudsman Scheme, 2018 introduced by the RBI

1. All Scheduled Commercial Banks having more than ten branches, including Regional Rural Banks, are required to appoint Internal Ombudsman.
2. The senior employee in the bank acts as the Internal Ombudsman for that bank.
3. The scheme will be monitored by the bank's internal audit mechanism.

Which of the above statements is/are incorrect?

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

Solution: a)

As a part of this customer-centric approach, to enhance the independence of the IO while simultaneously strengthening the monitoring system over functioning of the IO mechanism, RBI has reviewed the arrangement and issued revised directions under Section 35 A of the Banking Regulation Act, 1949 in the form of ‘Internal Ombudsman Scheme, 2018’. The Scheme covers, inter-alia, appointment / tenure, roles and responsibilities, procedural guidelines and oversight mechanism for the IO.

- All Scheduled Commercial Banks in India having more than ten banking outlets (excluding Regional Rural Banks), are required to appoint IO in their banks.
- RBI said that bank ombudsmen have to be appointed for a fixed tenure, directly reporting to the bank’s customer service committee and they must be people from outside the bank, giving this post an independent standing in a bank hierarchy.
- An ombudsman is a person officially charged with investigating and addressing public complaints or violation of rights.
- The implementation of IO Scheme, 2018 will be monitored by the bank's internal audit mechanism apart from regulatory oversight by RBI.


(Q) Consider the following statements about Angel Tax.

1. The tax was introduced in the 2017 Union Budget to arrest laundering of funds.
2. It is the indirect income tax payable on capital raised by unlisted companies via issue of shares where the share price is seen in excess of the fair market value of the shares sold.
3. It is called angel tax since it largely impacts angel investments in startups.

Which of the above statements is/are correct?

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

Solution: b)

The government has notified changes to Section 56 of the Income Tax Act, in a move that brings relief to start-up founders and investors dealing with the issue of “Angel Tax”. (It is a direct tax).
Angel Tax is a 30% tax that is levied on the funding received by startups from an external investor. However, this 30% tax is levied when startups receive angel funding at a valuation higher than its ‘fair market value’. It is counted as income to the company and is taxed.

The tax, under section 56(2)(viib), was introduced by in 2012 to fight money laundering. The stated rationale was that bribes and commissions could be disguised as angel investments to escape taxes. But given the possibility of this section being used to harass genuine startups, it was rarely invoked.

Why is Angel tax problematic?

- There is no definitive or objective way to measure the ‘fair market value’ of a startup. Investors pay a premium for the idea and the business potential at the angel funding stage. However, tax officials seem to be assessing the value of the startups based on their net asset value at one point. Several startups say that they find it difficult to justify the higher valuation to tax officials.

(Q) Consider the following statements about the recent changes to National Housing Bank

1. The Finance Bill 2018 amended the National Housing Bank Act, 1987 to transfer RBI’s stake in the NHB to the government.
2. The amendment was in accordance with the recommendations of the Narasimhan Committee.

Which of the above statements is/are correct?

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

Solution: c)

The Union Cabinet approved Rs 1,450 crore for the share capital of Reserve Bank of India in the National Housing Bank (NHB). The authorized capital of NHB stood at Rs 2000 crore of which Rs 1450 crore was subscribed by RBI.

The Finance Bill 2018 amended the National Housing Bank Act, 1987 to transfer RBI’s stake in the NHB to the government. The amendment was in accordance with the recommendations of the Narasimhan Committee. The committee had recommended the transfer of RBI’s stake in State Bank of India, NABARD and NHB to the government to differentiate the central bank's role as the owner of banks and the sector regulator.


(Q) Consider the following statements about Real Estate investment Trusts (REITs)

1. REITs are mutual fund like institutions that enable investments mainly in completed and revenue generating real estate assets.
2. REITs are regulated by the securities market regulator in India.
3. A REIT can be launched as an initial public offer (IPO).

Which of the above statements is/are correct?

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

Solution: d)
REITs are similar to mutual funds. While mutual funds provide for an opportunity to invest in equity stocks, REITs allow one to invest in income-generating real estate assets.

- They are collective investment vehicles that operate and manage property portfolios and give returns to investors. Securities and Exchange Board of India (Sebi) mandated that all REITS be listed on exchanges and make an initial public offer to raise money.
- REITs can reduce the risk related to your property investments as 80 per cent of the value of the REIT should be in completed and rent-generating assets. They are required to be run by professional managements with specified years of experience notified by SEBI.
- A REIT can be launched as an initial public offer (IPO). An investor can apply for investment in the REIT through his demat account, either online or by filling up the IPO form and indicating demat account details. After the issue is closed, the REIT will allot units to eligible investors.


(Q) Consider the following statements about Voluntary retention route for foreign portfolio investors.

1. It is to attract long-term and stable FPI investments into debt markets.
2. There is no limit on the money that an FPI can invest through this route.
3. Investments under this route are allowed only in government securities.

Which of the above statements is/are incorrect?

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

Solution: b)

It is a new channel of investment available to FPIs to encourage them to invest in debt markets in India over and above their investments through the regular route. The objective is to attract long-term and stable FPI investments into debt markets while providing FPIs with operational flexibility to manage their investments. Investments under this route as of now shall be capped at Rs 40,000 crore for VRR-GOVT and 35,000 crore per annum for VRR-COPR. But the limit could be changed from time to time based on macro-prudential considerations and assessment of investment demand. There will be separate limits for investment in government securities and investment in corporate debt.


(Q) Consider the following statements about Ponzi scheme.

1. Investors are paid from the profit earned by the entity operating such a scheme.
2. The entities operating such a scheme is registered as a Non-Banking Financial Company.

Which of the above statements is/are correct?

a) 1 only
b) 2 only
c) Both
d) None
**Solution: d)**

A typical *ponzi* scheme involves the operator collecting a large amount of money from investors and paying them returns from their own money or the money collected from subsequent investors, rather than from profit earned by the person or the entity operating such a scheme.

- The people or firms who are engaged in a ponzi scheme always try to attract new clients to make investments. The basic premise of the scheme is to gain continuous flow of money by attracting new clients. The scheme falls when this flow of money is stopped.

The Union Cabinet recently approved promulgating an ordinance with regard to the **Banning of Unregulated Deposit Schemes Bill**, to protect gullible investors from Ponzi schemes.

II. GEOGRAPHY & ENVIRONMENT

(Q) Consider the following statements about Laboratory for the Conservation of Endangered Species (LaCONES).

1. It is India’s only facility for conservation of endangered species.
2. It is a facility of CSIR’s Centre for Cellular and Molecular Biology (CCMB).
3. It has helped to increase the population of mouse deer in Telangana forests.

Which of the above statements is/are correct?

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

Solution: d)
The Laboratory for the Conservation of Endangered Species (LaCONES), a dedicated facility of CSIR’s Centre for Cellular and Molecular Biology (CCMB) in Hyderabad uses modern biotechnologies for conservation of endangered wildlife. India’s only facility for conservation of endangered species.

Achievements of Laboratory for the Conservation of Endangered Species (LaCONES):

- LaCONES has helped the Mouse Deer Conservation Breeding Centre at Nehru Zoological Park to increase the population of mouse deer in Telangana forests. Amrabad forest, for instance, ran out of mouse deer and through the efforts of LaCONES, the animal is now reintroduced in Amrabad Tiger Reserve.
- Earlier, LaCONES has developed universal DNA based marker for identification of wild animals from parts and remains. It has a DNA banking of more than 250 species of mammals, birds and reptiles.

(Q) Deopahar was notified as a ‘Proposed Reserved Forest’. It is located in which state?

a) Arunachal Pradesh  
b) Sikkim  
c) Assam  
d) Tripura

Solution: c)
The Supreme Court on 18 January ordered a public oil refinery in Assam to entirely remove a controversial wall built on one of the state’s major elephant migration corridors in Deopahar Reserve Forest, adjacent to the Kaziranga National Park and Tiger Reserve in Golaghat, Assam.


(Q) ‘Momentum for Change’ is an initiative of

a) UN Climate Change secretariat  
b) UNEP  
c) World Bank  
d) UNICEF
Solution: a)

*Momentum for Change* is an initiative spearheaded by the UN Climate Change secretariat to shine a light on the enormous groundswell of activities underway across the globe that are moving the world toward a highly resilient, low-carbon future. Momentum for Change recognizes innovative and transformative solutions that address both climate change and wider economic, social and environmental challenges.

Source: [https://unfccc.int/climate-action/momentum-for-change](https://unfccc.int/climate-action/momentum-for-change)

(Q) Consider the following statements about the recently launched programme ‘PARIVESH’.

1. It is a web-based single-window system for environmental clearances from Central and State level authorities only.
2. It seeks to get Environment, Forests, Wildlife clearances and not CRZ clearances.
3. It is under the Ministry of Environment, Forest and Climate Change.

Which of the above statements is/are incorrect?

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

Solution: d)

*PARIVESH* is a web based, role based workflow application which has been developed for online submission and monitoring of the proposals submitted by the proponents for seeking Environment, Forest, Wildlife and CRZ Clearances from Central, State and district level authorities. It automates the entire tracking of proposals which includes online submission of a new proposal, editing/updating the details of proposals and displays status of the proposals at each stage of the workflow.

Source: [https://parivesh.nic.in/](https://parivesh.nic.in/)

(Q) Consider the following statements about World Air Quality Report 2018.

1. It was released by World Health Organisation (WHO).
2. The main objective behind the report was to measure the presence of Particulate Matter (PM) 2.5.
3. India has progressed in controlling air pollution and of the 10 cities with highest pollution only 2 are in India.

Which of the above statements is/are correct?

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

Solution: b)

IQAir AirVisual and Greenpeace have released *World Air Quality Report 2018*.

- The main objective behind the report was to measure the presence of fine particulate matter known as Particulate Matter (PM) 2.5, which has been recorded in real-time in 2018.
- Of the 10 cities with highest pollution, seven are in India, while one is in China and two are in Pakistan.
India’s Gurugram led the list of most polluted cities in the world in 2018, followed by Ghaziabad, Faridabad, Noida, and Bhiwadi in the top six worst-affected cities.

(Q) Consider the following statements about Great Indian bustard

2. It has been identified as one of the species for the recovery programme under the Integrated Development of Wildlife Habitats.
3. Project Great Indian Bustard was initiated by the state of Gujarat on World Environment Day 2013.

Which of the above statements is/are incorrect?

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

Solution: c)


Source: https://www.wwfindia.org/about_wwf/priority_species/threatened_species/great_indian_bustard/

(Q) Consider the following statements about the recently launched India Cooling Action Plan.

1. India is the second country after China to develop such a document.
2. The plan aims at reducing emissions and providing thermal comfort to citizens.
3. Recognizes “cooling and related areas” as a thrust area of research under the national S&T Programme.

Which of the above statements is/are correct?

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

Solution: b)

- India is the first country in the world to develop such a document (ICAP), which addresses cooling requirement across sectors and lists out actions which can help reduce the cooling demand.
- The overarching goal is to provide sustainable cooling and thermal comfort for all while securing environmental and socio-economic benefits for the society.

The India Cooling Action seeks to recognize "cooling and related areas" as a thrust area of research under national S&T Programme.

Source: http://pib.nic.in/PressReleaseFrame.aspx?PRID=1568328
(Q) Consider the following statements about United Nations Environment Assembly.

1. The United Nations Environment Assembly was created in 1992 at the Earth Summit in Rio de Janeiro.
2. The United Nations Environment Assembly is the world’s highest-level decision-making body on the environment.
3. The Assembly meets annually to set priorities for global environmental policies and develop international environmental law.

Which of the above statements is/are incorrect?

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

Solution: c)

The United Nations Environment Assembly was created in June 2012, when world leaders called for UN Environment to be strengthened and upgraded during the United Nations Conference on Sustainable Development, also referred to as Rio+20.

- The United Nations Environment Assembly is the world’s highest-level decision-making body on the environment. It addresses the critical environmental challenges facing the world today. Understanding these challenges and preserving and rehabilitating our environment is at the heart of the 2030 Agenda for Sustainable Development.
- The Environment Assembly meets biennially to set priorities for global environmental policies and develop international environmental law. Through its resolutions and calls to action, the Assembly provides leadership and catalyses intergovernmental action on the environment.


(Q) Consider the following statements about Polar vortex.

1. The polar vortex is a large area of high pressure and cold air surrounding the Earth’s North and South poles.
2. The polar vortex spins in the stratosphere.
3. During winter in the Northern Hemisphere, the polar vortex will become less stable, sending cold Arctic air southward over the United States.

Which of the above statements is/are correct?

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

Solution: b)

The polar vortex is a large area of low pressure and cold air surrounding the Earth’s North and South poles. The term vortex refers to the counter-clockwise flow of air that helps keep the colder air close to the poles.

- The polar vortex spins in the stratosphere, a layer of the atmosphere 10-48 km above the ground and above the troposphere, where most familiar weather patterns develop.
- Often during winter in the Northern Hemisphere, the polar vortex will become less stable and expand, sending cold Arctic air southward over the United States.
(Q) Consider the following statements about Network for Certification and Conservation of Forests (NCCF)

1. It is an attached office of Ministry of Environment, Forest and Climate Change (MoEFCC).
2. It aims to set standards for certifying India’s forests, their products and their sustainable management.
3. The council of Programme for Endorsement of Forest Certification (PEFC) has decided to endorse the Certification Standard for Sustainable Forest Management (SFM) developed by Network for Certification and Conservation of Forests (NCCF).

Which of the above statements is/are correct?

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

Solution: b)

The council of Programme for Endorsement of Forest Certification (PEFC), a Geneva-based non-profit, has decided to endorse the Certification Standard for Sustainable Forest Management (SFM) developed by Network for Certification and Conservation of Forests (NCCF), an Indian non-profit.

- PEFC provides independent third-party certification for sustainable forest management.
- Network for Certification and Conservation of Forests (NCCF) came into existence in January 2015 as a non-profit organisation, registered as a Society, to have a globally aligned certification program developed within India and addressing the concerns for sustainable management of forests and the plantations, while at the same time making the Indian wood and forest fiber based industry competent globally.
- The NCCF has got support from the key forest-based stakeholders such as the Ministry of Environment, Forest and Climate Change (MoEFCC).

Source: http://www.nccfin/aboutus.html

(Q) Consider the following statements about Geothermal Energy.

1. India is in Low Geothermal Potential Region.
2. The National Building Code 2016 has included geo-thermal cooling and heating as one of the energy efficient options.
3. Philippines, Turkey, and New Zealand are some of the leading countries availing commercial exploitation of Geothermal Energy.

Which of the above statements is/are correct?

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

Solution: d)
Geothermal Energy is heat stored in earth crust and being used for electric generation and also for direct heat application worldwide since beginning of last century. USA, Philippines, Indonesia, Turkey, and New Zealand are leading countries availing commercial exploitation.

Geothermal electricity generation is site and technology specific and India is in Low Geothermal Potential Region with low/medium heat enthalpy.

The National Building Code 2016 has included new and energy efficient options of air conditioning, heating and mechanical ventilation, such as variable refrigerant flow system, inverter technology, district cooling system, hybrid central plant using chilled beams, radiant floor components, and geo-thermal cooling and heating.

Source: https://mnre.gov.in/geo-thermal
III. GOVERNMENT SCHEMES AND PROGRAMMES

(Q) Consider the following statements about Pradhan Mantri Kisan Samman Nidhi Yojana (PM KISAN).

1. Rs 6,000 will be given per year to small and marginal farmer families having combined land holding of up to 2 acres.
2. PM KISAN is a Centrally Sponsored Schemes (CSS) with equal contribution from Central and State Governments.
3. The Scheme becomes effective from Feb 01, 2019 for transfer of benefit to eligible beneficiaries.

Which of the above statements is/are incorrect?

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

Solution: d)

The Pradhan Mantri Kisan Samman Nidhi Yojana (PM-KISAN) was announced in the interim Budget 2019-20 on February 1, 2019.

- Under the Scheme, Rs 6,000 will be given per year to small and marginal farmer families having combined land holding/ownership of up to 2 hectares.
- The amount will be given in three installments of Rs.2000 each.
- The amount will be transferred directly to the bank account of beneficiaries through Direct Benefit Transfer. DBT will ensure transparency in the entire process and will save time for the farmers.
- The Scheme was introduced to augment the income of the Small and Marginal Farmers (SMFs). It is estimated to benefit more than 12 crore small and marginal farmers.
- The PM-KISAN scheme aims to supplement the financial needs of the SMFs in procuring various inputs to ensure proper crop health and appropriate yields, commensurate with the anticipated farm income at the end of the each crop cycle.
- PM KISAN is a Central Sector scheme with 100% funding from Government of India. The Scheme becomes effective from 1.12.2018 for transfer of benefit to eligible beneficiaries.
- State Government and UT Administration will identify the farmer families which are eligible for support as per scheme guidelines.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=188901

(Q) IPrism an initiative of CIPAM is related to

a) Boost IPR culture in India’s indigenous defence industry.
b) Creating ecosystems for encouraging innovations for Start-ups.
c) Strengthening existing mechanism in areas like the Internet of Things (IoT), Artificial Intelligence (AI) and Machine Learning (ML).
d) Competition that aims to foster culture of innovation in younger generation.
Solution: d)

The Cell for IPR Promotion and Management (CIPAM), Department for Promotion of Industry and Internal Trade, in collaboration with ASSOCHAM and ERICSSON India, has launched the second edition of ‘IPrism’, an Intellectual Property (IP) competition for students of schools, polytechnic institutes, colleges and universities.

Aiming to foster a culture of innovation and creativity in the younger generation, the competition will provide young creators an opportunity to see their creations recognized on a national platform.


(Q) Consider the following statements about Repurpose Used Cooking Oil (RUCO) programme.

1. It is an initiative that will enable collection and conversion of used cooking oil to bio-diesel.
2. It was launched by Council of Scientific & Industrial Research (CSIR).

Which of the above statements is/are correct?

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

Solution: a)

- The Food Safety and Standards Authority of India (FSSAI) had launched RUCO (Repurpose Used Cooking Oil), an initiative that will enable collection and conversion of used cooking oil to bio-diesel.
- Under this initiative, 64 companies at 101 locations have been identified to enable collection of used cooking oil.


(Q) Consider the following statements about Telecom Disputes Settlement & Appellate Tribunal (TDSAT).

1. It was created by an executive order.
2. The decision of TDSAT is final and no further appeal is allowed to any court.
3. The jurisdiction of TDSAT stands extended to matters that lay before the Cyber Appellate Tribunal and also the Airport Economic Regulatory Authority Appellate Tribunal.

Which of the above statements are correct?

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

Solution: b)

- The TRAI Act of 1997 was amended in the year 2000 and TDSAT was set up to adjudicate disputes and dispose of appeals with a view to protect the interests of service providers and consumers of the telecom sector.
- The decision of TDSAT is appealed to Supreme Court of India.
- The jurisdiction of TDSAT stands extended to matters that lay before the Cyber Appellate Tribunal and also the Airport Economic Regulatory Authority Appellate Tribunal.
(Q) Minimum Support Price (MSP) for Minor Forest Produce (MFP) scheme
1. MSP for MFP scheme was started in 2016 to ensure fair and remunerative prices to MFP gatherers.
2. The scheme is applicable in all States.
3. Ministry of Tribal Affairs is the Nodal Ministry for implementation of the scheme.

Which of the above statements is/are correct?

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

**Solution: c)**

The **MSP for MFP scheme** was started by the Centre in 2013 to ensure fair and remunerative prices to MFP gatherers. From November 2016, the scheme is applicable in all States.

Ministry of Tribal Affairs, Government of India is the Nodal Ministry for implementation of the scheme which will announce Minimum Support Price (MSP) for the selected MFPs with the technical support from TRIFED.

- TRIFED will act as the Central Nodal Agency for implementation and monitoring of the scheme through State level implementing agencies.
- State designated agencies will undertake procurement of notified MFPs directly from MFP gatherers (individual or collectives) at haats notified procurement centers at grass root level at prefixed Minimum Support Price and ensure full & timely on the spot payment to MFP gatherers.

Source: [http://vikaspedia.in/agriculture/ market-information/ minimum-support-price-for-minor-forest-produce](http://vikaspedia.in/agriculture/market-information/minimum-support-price-for-minor-forest-produce)

(Q) National Mission on Government e-Marketplace (GeM) was launched by

a) Ministry of Finance
b) Ministry of Consumer Affairs
c) Ministry of Science and Technology
d) Ministry of Commerce & Industry

**Solution: d)**

The **Ministry of Commerce & Industry** launched **National Mission on GeM (NMG)** on 5th September 2018. The objective of the Mission was to accelerate the adoption and use of Procurement by Major Central Ministries, States and UTs and their agencies (including CPSUs/PSUs, Local Bodies) on the GeM platform.


(Q) Consider the following statements about Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM)

1. PM-SYM is a voluntary and contributory pension scheme.
2. It was launched by Union Ministry of Finance.
3. The unorganised sector workers, with income of less than Rs 20,000 per month are eligible for the scheme.
4. If the subscriber dies during the receipt of pension, his or her spouse will be entitled to receive 100 percent of the pension.
Which of the above statements is/are incorrect?

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

Solution: b)

The **Union Ministry of Labour and Employment** has launched the Pradhan Mantri Shram Yogi Maan-dhan Yojana (PM-SYM), a mega pension scheme for unorganised sector. The scheme was announced in the Interim Budget 2019.

**PM-SYM is a voluntary and contributory pension scheme** that will engage as many as 42 crore workers in the **unorganised sector**.

**Eligibility:**

- The unorganised sector workers, with income of less than Rs 15,000 per month and who belong to the entry age group of 18-40 years, will be eligible for the scheme.
- Those workers should not be covered under New Pension Scheme (NPS), Employees’ State Insurance Corporation (ESIC) scheme or Employees’ Provident Fund Organisation (EPFO).
- He or she should not be an income tax payer.

**Benefits:**

- Minimum Assured Pension: Each subscriber under the scheme will receive minimum assured pension of Rs 3000 per month after attaining the age of 60 years.
- In case of death during receipt of pension: If the subscriber dies during the receipt of pension, his or her spouse will be entitled to receive 50 percent of the pension as family pension. This family pension is applicable only to spouse.
- In case of death before the age of 60 years: If a beneficiary has given regular contribution and dies before attaining the age of 60 years, his or her spouse will be entitled to continue the scheme subsequently by payment of regular contribution or may even exit the scheme.

**Contribution:**

- Contribution by the Subscriber: The subscriber is required to contribute the prescribed contribution amount from the age of joining the scheme till the age of 60 years.
- Medium of contribution: The subscriber can contribute to the PM-SYM through ‘auto-debit’ facility from his or her savings bank account or from his or her Jan-Dhan account.
- Equal contribution by the Central Government: Under the PM-SYM, the prescribed age-specific contribution by the beneficiary and the matching contribution by the Central Government will be made on a ‘50:50 basis’.


**Q** Consider the following statements about National Mineral Policy, 2019

1. It addresses the issues of project affected persons especially those residing in tribal areas.
2. It proposes to grant status of industry to mining activity.
3. Creation of dedicated mineral corridors to boost private sector mining areas.

Which of the above statements is/are correct?

a) 1, 2  
b) 2, 3  
c) 1, 3  
d) 1, 2, 3
Solution: d)
The Union Cabinet, has approved National Mineral Policy 2019.

Benefits:
The New National Mineral Policy will ensure more effective regulation. It will lead to sustainable mining sector development in future while addressing the issues of project affected persons especially those residing in tribal areas.

- The **National Mineral Policy 2019** includes provisions which will give boost to mining sector such as
  - introduction of Right of First Refusal for RP/PL holders,
  - encouraging the private sector to take up exploration,
  - auctioning in virgin areas for composite RP cum PL cum ML on revenue share basis,
  - encouragement of merger and acquisition of mining entities and
  - transfer of mining leases and creation of dedicated mineral corridors to boost private sector mining areas.

- The 2019 Policy proposes to grant status of industry to mining activity to boost financing of mining for private sector and for acquisitions of mineral assets in other countries by private sector

- It also mentions that **Long term import export policy** for mineral will help private sector in better planning and stability in business

- The Policy also mentions rationalize reserved areas given to PSUs which have not been used and to put these areas to auction, which will give more opportunity to private sector for participation

- The Policy also mentions to make efforts to harmonize taxes, levies & royalty with world benchmarks to help private sector

(Q) The government’s plan to setup National Medical Devices Promotion Council, comes under which Ministry

a) Ministry of Science and Technology  
b) Ministry of Health and Family Welfare  
c) Ministry of Commerce & Industry  
d) Both a and b

Solution: c)
The government is planning to set up a National Medical Devices Promotion Council under the **Department of Industrial Policy and Promotion (DIPP)** in the Ministry of Commerce and Industry.

(Q) Consider the following statements about Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP).

1. PMBJP is a campaign launched by Department of Health & Family Welfare.  
2. It is to provide quality medicines at affordable prices to the masses.  
3. Bureau of Pharma PSUs of India (BPPI) is the implementation agency.

Which of the above statements is/are correct ?

a) 1, 2  
b) 2, 3  
c) 1, 3  
d) 1, 2, 3
Solution: b)

**Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)** is a campaign launched by the Department of Pharmaceuticals to provide quality medicines at affordable prices to the masses. PMBJP stores have been set up to provide generic drugs. Bureau of Pharma PSUs of India (BPPI) is the implementation agency for PMBJP.

**Mission**

1. Create awareness among the public regarding generic medicines.
2. Create demand for generic medicines through medical practitioners.
3. Create awareness through education and awareness program that high price need not be synonymous with high quality.
4. Provide all the commonly used generic medicines covering all the therapeutic groups.
5. Provide all the related health care products too under the scheme.

Source: [http://vikaspedia.in/health/health-campaigns/jan-aushadhi](http://vikaspedia.in/health/health-campaigns/jan-aushadhi)

(Q) Consider the following statements about Hazardous and Other Wastes (Management& Transboundary Movement) Amendment Rules, 2019.

1. Ministry of Environment, Forest and Climate Change has amended the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2010.
2. Under the Amendment Rules, 2019, Solid plastic waste import into the country is allowed only from few developing and least developed countries.
3. Electrical and electronic assemblies and components manufactured in and exported from India, if found defective can now be imported back into the country.

Which of the above statements is/are correct?

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

Solution: c)

Some of the salient features of the Hazardous and Other Wastes (Management& Transboundary Movement) Amendment Rules, 2019 are as follows:

- Solid plastic waste has been prohibited from import into the country including in Special Economic Zones (SEZ) and by Export Oriented Units (EOU).
- Exporters of silk waste have now been given exemption from requiring permission from the Ministry of Environment, Forest and Climate Change.
- Electrical and electronic assemblies and components manufactured in and exported from India, if found defective can now be imported back into the country, within a year of export, without obtaining permission from the Ministry of Environment, Forest and Climate Change.
- Industries which do not require consent under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981, are now exempted from requiring authorization also under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, provided that hazardous and other wastes generated by such industries are handed over to the authorized actual users, waste collectors or disposal facilities.

(Q) “Web- Wonder Women” Campaign recently seen in news is related to
a) Recognising the achievements made by women led start-ups.
   b) Acknowledge the efforts of women doctors serving in rural areas.
   c) Making women as brand ambassadors for schemes related to women.
   d) Celebrating women who have impacted society through social media.

Solution: d)
The Campaign has been launched by the Ministry of Women and Child Development, Government of India in association with the NGO Breakthrough and Twitter India.

- Through the campaign, the Ministry aims to recognize the fortitude of Indian women stalwarts from across the globe who have used the power of social media to run positive & niche campaigns to steer a change in society.
- The Campaign is aimed at encouraging, recognizing and acknowledging the efforts of these meritorious Women.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=187372

(Q) Consider the following statements about Official Secrets Act.
   1. The Official Secrets Act was first enacted in 1923 and was retained after Independence.
   2. The law is applicable to government servants only and not to citizens.
   3. Public servants could deny any information terming it a “secret” when asked under the RTI Act.

Which of the above statements is/are correct?
   a) 1, 2
   b) 3 only
   c) 1, 3
   d) 1, 2, 3

Solution: c)
The Official Secrets Act was first enacted in 1923 and was retained after Independence. The law, applicable to government servants and citizens, provides the framework for dealing with espionage, sedition, and other potential threats to the integrity of the nation. The law makes spying, sharing ‘secret’ information, unauthorised use of uniforms, withholding information, interference with the armed forces in prohibited/restricted areas, among others, punishable offences. If guilty, a person may get up to 14 years’ imprisonment, a fine, or both.

- The information could be any reference to a place belonging to or occupied by the government, documents, photographs, sketches, maps, plans, models, official codes or passwords.
- The OSA does not define "secret" or "official secrets". Public servants could deny any information terming it a “secret” when asked under the RTI Act.


(Q) Consider the following statements about BEE Star Ratings.
   1. The Ministry of Power recently announced that microwave ovens and Induction Cook-top will now be assigned star ratings.
   2. BEE Star Rating is solely based on the appliance’s power consumption.
   3. Appliances with the highest energy consumption are given more star rating.

www.insightsactivelearn.com

www.insightsonindia.com
Which of the above statements is/are incorrect?

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

Solution: d)

The Ministry of Power has announced that two more electrical appliances microwave ovens and washing machines will now be assigned star ratings based on their energy efficiency metrics.

- The programme of star rating of Microwave Ovens and Washing Machines will be implemented on a voluntary basis and will be valid up to December 31, 2020.
- Star ratings are provided to all the major kind of appliances in the form of labels. These star ratings are given out of 5 and they provide a basic sense of how energy efficient each product is, just in a single glance.

The manufacturers are officially required to put these labels as per the Standards and Labelling Program introduced in 2006.

- One of the most common myths about the BEE Star Rating is that it is solely based on the appliance's power consumption. A lot of factors contribute into formulating the final star rating on the product.
- The appliances with the lowest energy consumption in a product category are given the most stars and those with the highest energy consumption are given the least.


(Q) Consider the following statements about Agriculture Export Policy, 2018

1. The policy aims to double agricultural exports by 2022.
2. Establishment of Monitoring Framework at Centre with Department of Agriculture as the nodal Department.
3. Promote indigenous, organic, ethnic, traditional and non-traditional Agri products exports.

Which of the above statements is/are correct?

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

Solution: c)

The Cabinet has approved the proposal for establishment of Monitoring Framework at Centre with Commerce as the nodal Department with representation from various line Ministries/Departments and Agencies and representatives of concerned State Governments, to oversee the implementation of Agriculture Export Policy.

Objectives of the Agriculture Export Policy are as under:

- To double agricultural exports from present ~US$ 30+ Billion to ~US$ 60+ Billion by 2022 and reach US$ 100 Billion in the next few years thereafter, with a stable trade policy regime.
- To diversify our export basket, destinations and boost high value and value added agricultural exports including focus on perishables.
- To promote novel, indigenous, organic, ethnic, traditional and non-traditional Agri products exports.
• To provide an institutional mechanism for pursuing market access, tackling barriers and deal with sanitary and phyto-sanitary issues.
• To strive to double India's share in world agri exports by integrating with global value chain at the earliest.
• Enable farmers to get benefit of export opportunities in overseas market.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=186182

(Q) Consider the following statements about National Knowledge Network (NKN).

1. It aims to connect all universities, research institutions, libraries and agricultural institutions across the country.
2. Agencies in the fields of nuclear, space and defence research are also part of NKN.
3. Its goal is to facilitate distance education in engineering, science and medicine.

Which of the above statements is/are correct?

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

Solution: d)

In India, NKN with its multi-gigabit capability aims to connect all universities, research institutions, libraries, laboratories, healthcare and agricultural institutions across the country to address such paradigm shift. The leading mission oriented agencies in the fields of nuclear, space and defence research are also part of NKN. By facilitating the flow of information and knowledge, the network addresses the critical issue of access and creates a new paradigm of collaboration to enrich the research efforts in the country.

Role of NKN:

Establishing a high-speed backbone connectivity which will enable knowledge and information sharing amongst NKN connected institutes

• Enabling collaborative research, development and innovation amongst NKN connected institutes
• Facilitating advanced distance education in specialized fields like engineering, science, medicine etc.
• Facilitating an ultra-high speed e-governance backbone
• Facilitating connection between different sectoral networks in the field of research.

(Q) The recently launched scheme SHREYAS is related to.

a) Scale up an ecosystem of entrepreneurship for youngsters.
b) Portal for effective implementation of the National Child Labour Project (NCLP)
c) Equipping all teachers across the nation with advanced digital technology.
d) Providing industry apprenticeship opportunities to the general graduates

Solution: d)

Union HRD Minister launches the Scheme for Higher Education Youth in Apprenticeship and Skills (SHREYAS) for providing industry apprenticeship opportunities to the general graduates exiting in April 2019 through the National Apprenticeship Promotional Scheme (NAPS).

The program aims to enhance the employability of Indian youth by providing ‘on the job work exposure’ and earning of stipend.
(Q) Consider the following statements about Consumer Protection Act, 1986

1. It makes provision for the establishment of consumer councils and other authorities for the settlement of consumers’ disputes.
2. It protects the consumers against marketing of hazardous goods and services.
3. Wherever possible it assures access to goods and services at competitive prices
4. Seek redressal on account of unscrupulous exploitation of consumers

Which of the above statements is/are correct?

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

Solution: d)
The objectives of the Central Consumer Protection Council is to promote and to protect the rights of the consumers such as:

1. The right to be protected against the marketing of goods and services which are hazardous to life and property.
2. The right to be informed about the quality, quantity, potency, purity, standard and price of goods or services, as the case may be so as to protect the consumer against unfair trade practices;
3. The right to be assured, wherever possible, access to a variety of goods and services at competitive prices;
4. The right to be heard and to be assured that consumer’s interest will receive due consideration at appropriate forums;
5. The right to seek redressal against unfair trade practices or restrictive trade practices or unscrupulous exploitation of consumers; and
6. The right to consumer education.

(Q) Consider the following statements about KRISHI (Knowledge based Resources Information Systems Hub for Innovations) initiative.

1. It is an initiative of Indian Council of Agricultural Research (ICAR).
2. It is developed as a centralized data repository system consisting Data generated through Experiments, Surveys, Geo-spatial data and Publications.

Which of the above statements is/are correct?

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

Solution: c)
KRISHI – Knowledge based Resources Information Systems Hub for Innovations in agriculture, is an initiative of Indian Council of Agricultural Research (ICAR) to bring its knowledge resources to all stakeholders at one place. The portal is being developed as a centralized data repository system of ICAR.
consisting of Technology, Data generated through Experiments/ Surveys/ Observational studies, Geo-spatial data, Publications, Learning Resources etc.

Source: https://krishi.icar.gov.in/

(Q) Consider the following statements about Central Drugs Standard Control Organisation (CDSCO)

1. The Central Drugs Standard Control Organisation (CDSCO) is under Directorate General of Health Services, Ministry of Health & Family Welfare.
2. The Drugs & Cosmetics Act, 1940 and rules 1945 have entrusted various responsibilities to central & state regulators for regulation of drugs & cosmetics.
3. The regulation of manufacture, sale and distribution of Drugs is primarily the concern of the Central Authorities.

Which of the above statements is/are correct?

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

Solution: b)

The Central Drugs Standard Control Organisation (CDSCO) under Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India is the National Regulatory Authority (NRA) of India.

- The Drugs & Cosmetics Act, 1940 and rules 1945 have entrusted various responsibilities to central & state regulators for regulation of drugs & cosmetics.
- The regulation of manufacture, sale and distribution of Drugs is primarily the concern of the State authorities while the Central Authorities are responsible for approval of New Drugs, Clinical Trials in the country, laying down the standards for Drugs, control over the quality of imported Drugs, coordination of the activities of State Drug Control Organisations and providing expert advice with a view of bring about the uniformity in the enforcement of the Drugs and Cosmetics Act.

Source: https://cdsco.gov.in/opencms/opencms/en/About-us/Functions/

(Q) Consider the following statements about National Supercomputing Mission.

1. The mission is jointly steered by Department of Science and Technology and Department of Electronics and Information Technology (DeitY).
2. The mission envisages installing vast supercomputing grid comprising of over 70 high-performance computing facilities spread across the country.
3. These supercomputers will also be networked on the National Supercomputing grid over the National Knowledge Network (NKN).

Which of the above statements is/are correct?

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

Solution: d)
National Supercomputing Mission, approved in 2016, is being implemented and steered jointly by the Department of Science and Technology (DST) and Department of Electronics and Information Technology (DeitY).

- The Mission envisages empowering national academic and R&D institutions spread over the country by installing a vast supercomputing grid comprising of more than 70 high-performance computing facilities.
- These supercomputers will also be networked on the National Supercomputing grid over the National Knowledge Network (NKN).
- The Mission includes development of highly professional High Performance Computing (HPC) aware human resource for meeting challenges of development of these applications.

Source: [https://www.cdac.in/index.aspx?id=pk_itn_spot948](https://www.cdac.in/index.aspx?id=pk_itn_spot948)

(Q) Consider the following statements about Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM) scheme.

1. It provides financial and water security to farmers.
2. Individual farmers will be supported to install standalone solar pumps.
3. The scheme will have 100% central financial assistance.

Which of the above statements is/are correct?

a) 1, 3  

b) 2 only  

c) 1, 2  

d) 1, 2, 3

Solution: c)

The Cabinet Committee on Economic Affairs has approved launch of Kisan Urja Suraksha evam Utthaan Mahabhiyan with the objective of providing financial and water security to farmers.

The components of the scheme include building 10,000 MW solar plants on barren lands and providing sops to DISCOMS to purchase the electricity produced, ‘solarising’ existing pumps of 7250 MW as well as government tube wells with a capacity of 8250 MW and distributing 17.5 lakh solar pumps (individual farmers will be supported to install standalone solar pumps).

The 60% subsidy on the solar pumps provided to farmers will be shared between the Centre and the States while 30% would be provided through bank loans. The balance cost has to be borne by the farmers.

(Q) Consider the following statements about Chiller star labelling program.

1. Ministry of New and Renewable Energy (MNRE) launched the Chiller star labelling program to encourage the deployment of Energy Efficient chiller systems in the country.
2. It has been formulated by Energy Efficiency Services Limited (EESL).
3. The programme is mandatory for all domestic and commercial buildings.

Which of the above statements is/are incorrect?

a) 1, 2  

b) 2, 3  

c) 1, 3  

d) 1, 2, 3

Solution: d)

Ministry of Power, Government of India launched an ambitious program to encourage the deployment of Energy Efficient chiller systems in the country. The Chiller Star Labelling Program has been formulated...
by Bureau of Energy Efficiency (BEE). The program envisages providing star rating in terms of its energy performance. Initially, the program is launched on voluntary basis and will be valid up to 31st December 2020.

- This initiative will promote advancement technology for central HVAC (Heating, ventilation, and air conditioning) systems and will also facilitate energy efficient solutions for the large commercial and industrial applications.

- **Chillers** are used extensively for space conditioning of buildings and for industrial process cooling applications.


(Q) Consider the following statements.

1. National Institute of Solar Energy is the apex National R&D institution in the field of Solar Energy.

2. Indian Renewable Energy Development Agency Limited (IREDA) is a Non-Banking Financial Institution engaged in extending financial assistance for setting up projects relating to new and renewable sources of energy.

3. Solar Energy Corporation of India is the only CPSU dedicated to the solar energy sector.

Which of the above statements is/are incorrect?

a) 1 only

b) 2 only

c) 3 only

d) None

Solution: d)

**National Institute of Solar Energy**, an autonomous institution of Ministry of New and Renewable (MNRE), is the apex National R&D institution in the field Solar Energy.

Indian Renewable Energy Development Agency Limited (IREDA) is a **Mini Ratna** (Category – 1) Government of India Enterprise under the administrative control of Ministry of New and Renewable Energy (MNRE). IREDA is a Public Limited Government Company established as a Non-Banking Financial Institution in 1987 engaged in promoting, developing and extending financial assistance for setting up projects relating to new and renewable sources of energy and energy efficiency/conservation with the motto: “ENERGY FOR EVER”

"**Solar Energy Corporation of India ltd**" (SECI) is a CPSU under the administrative control of the Ministry of New and Renewable Energy (MNRE), set up on 20th Sept, 2011. It is the only CPSU dedicated to the solar energy sector. It is responsible for implementation of a number of schemes of MNRE, major ones being the VGF schemes for large-scale grid-connected projects under JNNSM, solar park scheme and grid-connected solar rooftop scheme, along with a host of other specialised schemes such as defence scheme, canal-top scheme, Indo-Pak border scheme etc.

Source: [https://mnre.gov.in/geothermal](https://mnre.gov.in/geothermal)
IV. SCIENCE AND TECHNOLOGY

(Q) Consider the following statements about Glyphosate.

1. It is an Insecticide used to target Cotton bollworm.
2. Recently Kerala government banned the sale and distribution of Glyphosate.

Which of the above statements is/are correct?

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

Solution: b)

Glyphosate is an herbicide. It is applied to the leaves of plants to kill both broadleaf plants and grasses.

The Kerala government has banned the sale and distribution of the weed-killer Glyphosate and all products containing it citing its harmful effects on human health and the environment. Glyphosate tops the sales charts among weedicides sold in the State.

Source: https://www.thehindu.com/news/national/kerala/weedicide-glyphosate-banned/article26176536.ece

(Q) NASA’s ICESat-2 mission aims to

a) To explore the presence of ice on Mars
b) Mapping melting ice sheets in Greenland and Antarctica
c) Understanding the sea level rise across the globe
d) Both b and c

Solution: d)

NASA’s ICESat-2 — has mapped melting ice sheets in Antarctica and the resulting sea level rise across the globe, which could help improve climate forecasts.


(Q) Ultima Thule recently is news is related to

a) Commercial Resupply Service mission to the International Space Station.
b) New planet discovered by NASA.
c) NASA’s new Mars lander.
d) Trans-Neptunian object located in the Kuiper belt

Solution: d)

NASA’s New Horizons spacecraft, the same craft that made humanity's first-ever visit to Pluto in 2015, is approaching its next target, a Kuiper Belt object a billion miles beyond Pluto, nicknamed Ultima Thule.

• Ultima Thule is located in the Kuiper belt in the outermost regions of the Solar System, beyond the orbit of Neptune.
• It measures approximately 30 km in diameter, and is irregularly shaped.
• Ultima Thule has a reddish color, probably caused by exposure of hydrocarbons to sunlight over billions of years.
• Ultima Thule belongs to a class of Kuiper belt objects called the “cold classicals”, which have nearly circular orbits with low inclinations to the solar plane.

Source: https://www.thehindu.com/sci-tech/science/nasa-spaceship-zooms-toward-farthest-world-ever-photographed/article25874213.ece

(Q) Consider the following statements about GSAT-7A
1. GSAT-7A is a communication satellite designed specifically for military operations.
2. GSAT-7A is similar to Indian navy’s GSAT-7 and the Indian Air Force will be the sole operator of the satellite.
3. It is the 50th Indian communication satellite.

Which of the above statements is/are correct?

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

Solution: a)
GSAT 7A is the 35th Indian communication satellite. GSAT-7A is an advanced military communications satellite meant exclusively for the Indian Air Force. GSAT-7A is similar to Indian navy’s GSAT-7 and the Indian Air Force will be the sole operator of the satellite. The satellite will enhance Network-centric warfare capabilities of the Indian Air Force and therefore enhance its global operations.

Source: https://www.thehindu.com/sci-tech/science/isros-gsat-7a-to-add-more-heft-to-air-force/article25758707.ece

(Q) Consider the following statements about Oxytocin.
1. Oxytocin has been dubbed as the hug hormone due to its effects on behaviour.
2. Oxytocin is a hormone that is made in the brain, in the hypothalamus.
3. WHO has come up with Carbetocin as a safe and effective alternative to the drug oxytocin.
4. It does not have any effect on female reproductive functions.

Which of the above statements is/are correct?

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

Solution: b)
Oxytocin has also been dubbed the hug hormone, cuddle chemical, moral molecule, and the bliss hormone due to its effects on behaviour, including its role in love and in female reproductive biological functions in reproduction.
• Oxytocin is a hormone that is made in the brain, in the hypothalamus. It is transported to, and secreted by, the pituitary gland, which is located at the base of the brain.
• It acts both as a hormone and as a brain neurotransmitter.
• The release of oxytocin by the pituitary gland acts to regulate two female reproductive functions: Childbirth and Breast-feeding.

**Carbetocin:** The World Health Organization (WHO) has come up with a safe and effective alternative to the controversial drug oxytocin.

(Q) Consider the following statements about Measles.
1. Measles is a highly contagious bacterial disease.
2. It remains an important cause of death among young children.
3. India, along with ten WHO South-East Asia Region member countries, plans to eliminate measles by 2030.

Which of the above statements is/are **incorrect**?

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

**Solution: a)**

Measles is a highly contagious *viral* disease. It remains an important cause of death among young children globally, despite the availability of a safe and effective vaccine.

India, along with ten WHO South-East Asia Region member countries, plans to eliminate measles and control rubella/ congenital rubella syndrome (CRS) by 2020.

Source: [https://www.who.int/immunization/diseases/measles/en/](https://www.who.int/immunization/diseases/measles/en/)

(Q) Consider the following statements about Ethanol.
1. In India, ethanol is produced from sugarcane only.
2. It allows the engine to more completely combust the fuel.
3. Ethanol is considered as non-renewable fuel.

Which of the above statements is/are correct?

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

**Solution: b)**

Ethanol, an anhydrous ethyl alcohol having chemical formula of C₂H₅OH, can be *produced from sugarcane, maize, wheat*, etc which are having *high starch content*. In India, ethanol is mainly produced from sugarcane molasses by *fermentation process*. Ethanol can be *mixed with gasoline* to form different blends. As the ethanol molecule contains oxygen, it allows the engine to more *completely combust the fuel*, resulting in *fewer emissions* and thereby reducing the occurrence of environmental pollution. Since ethanol is produced from plants that harness the power of the sun, ethanol is also considered as *renewable fuel*.

(Q) Consider the following statements about Kyasanur Forest disease (KFD).
1. It is a tick-borne viral haemorrhagic fever endemic to South India.
2. Viruses related to KFDV have been identified in China and Saudi Arabia.
3. There is widespread person to person transmission of the disease.
4. A vaccine for KFD is not yet available.

Which of the above statements is/are correct?
   a) 1, 2
   b) 1, 2, 3
   c) 2, 3, 4
   d) 1, 3, 4

Solution: a)

**Kyasanur forest disease (KFD)** is a tick-borne viral haemorrhagic fever endemic to South India. The disease is caused by a virus belonging to the family Flaviviridae, which also includes yellow fever and dengue fever.

- Viruses related to KFDV have been identified in China and Saudi Arabia.
- Transmission to humans may occur after a tick bite or contact with an infected animal, most importantly a sick or recently dead monkey. No person-to-person transmission has been described.
- A vaccine does exist for KFD and is used in endemic areas of India. Additional preventative measures include insect repellents and wearing protective clothing in areas where ticks are endemic.

(Q) Consider the following statements about Chang’e-4 mission.
1. It is the first probe ever to explore the dark side of the Moon.
2. The mission in China’s first lunar mission.
3. The mission aims to deliver samples of Moon rock and soil to Earth.

Which of the above statements is/are correct?
   a) 1, 2
   b)2, 3
   c) 1, 3
   d) 1, 2, 3

Solution: c)

**China** has launched Chang’e-4, a first probe ever to achieve soft-landing on the far side of the Moon. Chang’e 4 is the fourth mission in the country’s lunar mission series which is being named after the Chinese moon goddess.

- The tasks of the Chang’e-4 probe include low-frequency radio astronomical observation, surveying the terrain and landforms, detecting the mineral composition, and measuring the neutron radiation and neutral atoms to study the environment on the far side of the moon.
- The mission aims to deliver samples of Moon rock and soil to Earth.

Source: [https://en.wikipedia.org/wiki/Chang%27e_4](https://en.wikipedia.org/wiki/Chang%27e_4)
Recently Canine Distemper Virus (CDV) caused the death of five Asiatic lions in Gir forest, Gujarat. Consider the following statements about Canine Distemper Virus (CDV).

1. CDV causes a highly contagious and life-threatening disease in dogs.
2. CDV can only be spread through direct contact.
3. The virus infects the respiratory, gastrointestinal, and central nervous systems.

Which of the above statements is/are correct?

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

Solution: b)

CDV causes a highly contagious and life-threatening disease in dogs. CDV also affects other wild carnivores, including wolves, foxes, raccoons, red pandas, ferrets, hyenas, tigers, and lions.

- CDV spreads through aerosol droplets and through contact with infected bodily fluids, including nasal and ocular secretions, feces, and urine.
- The virus then enters the bloodstream and infects the respiratory, gastrointestinal, urogenital, epithelial, and central nervous systems, and optic nerves.


Consider the following statements about InSight Mission of NASA.

1. InSight mission is a robotic lander designed to study the deep interior of the planet Mars.
2. It seeks to gather information about the presence of life on Mars.
3. This is the first time a robotic lander dug this deep into the martian crust.

Which of the above statements is/are correct?

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

Solution: c)

InSight mission is a robotic lander designed to study the deep interior of the planet Mars. The InSight mission placed a single stationary lander on Mars to study its deep interior and address a fundamental issue of planetary and Solar System science.

- This is the first time a robotic lander dug this deep into the martian crust.

Statement 2 is wrong.

Source: [https://en.wikipedia.org/wiki/InSight](https://en.wikipedia.org/wiki/InSight)

Consider the following statements about Poliomyelitis.

1. It is a highly infectious viral disease, which mainly affects young children.
2. The virus is transmitted by person-to-person and spread through contaminated water or food.
3. With latest developments in medicine, Polio disease can be cured.
4. India became the first country globally to introduce fractional doses of IPV in childhood immunisation programme.

Which of the above statements is/are correct?

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

Solution: d)

**Poliomyelitis** (polio) is a highly infectious *viral* disease, which mainly affects young children. The virus is transmitted by person-to-person spread mainly through the faecal-oral route or, less frequently, by a common vehicle (e.g. contaminated water or food) and multiplies in the intestine, from where it can invade the nervous system and can cause paralysis.

Initial symptoms of polio include fever, fatigue, headache, vomiting, stiffness in the neck, and pain in the limbs. In a small proportion of cases, the disease causes paralysis, which is often permanent. There is no cure for polio, it can only be prevented by immunization.

Source: [https://www.who.int/topics/poliomyelitis/en/](https://www.who.int/topics/poliomyelitis/en/)

(Q) Consider the following statements about ASTROSAT.

1. It is NASA’s first dedicated multi wavelength space observatory.
2. It enables simultaneous multi-wavelength observations of various astronomical objects with a single satellite.

Which of the above statements is/are correct?

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

Solution: b)

**ASTROSAT** is India’s first dedicated multi wavelength space observatory. This scientific satellite mission endeavours for a more detailed understanding of our universe. One of the unique features of ASTROSAT mission is that enables the simultaneous multi-wavelength observations of various astronomical objects with a single satellite.

- **ASTROSAT** is designed to observe the universe in the Visible, Ultraviolet, low and high energy X-ray regions of the electromagnetic spectrum simultaneously with the help of its five payloads.
- This mission has put ISRO in a very exclusive club of nations that have space-based observatories. Only the United States, European Space Agency, Japan and Russia have such observatories in space.

Source: [https://www.isro.gov.in/Spacecraft/astrosat](https://www.isro.gov.in/Spacecraft/astrosat)

(Q) Quantum Experiments at Space Scaler (QUESS) satellite was launched by

a) USA
b) Russia
c) India
d) China
Solution: d)

Quantum Experiments at Space Scale (QUESS) is an international research project in the field of quantum physics. China launched the world's first quantum satellite known as Quantum Experiments at Space Scale (QUESS) satellite. The satellite will help China to establish hack-proof communications system by transmitting uncrackable keys from space to the ground.

(Q) Consider the following statements about Graphene

1. Graphene is an allotrope of carbon
2. It conducts heat and electricity efficiently, and is non-transparent.
3. Graphene supercapacitors can charge faster and has longer life span than traditional electrolytic batteries.

Which of the above statements is/are correct?

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

Solution: c)

Graphene is an allotrope (form) of carbon consisting of a single layer of carbon atoms arranged in a hexagonal lattice. Graphene is one atom thick. It conducts heat and electricity efficiently, and is transparent.

Graphene is widely used in making solar cells, light-emitting diodes, touch panels and smart windows. Graphene supercapacitors serve as energy storage devices with a capacity for faster charging and longer life span than traditional electrolytic batteries.

Other potential applications of graphene include water filtration and purification, renewable energy, sensors, personalised healthcare and medicine, to name a few.

(Q) WHO’s REPLACE campaign is related to

a) Replace all petrol and diesel vehicles to Electric Vehicles by 2030.
b) Replace all cooling systems in government buildings with energy efficient cooling system.
c) Provide protein rich food to children in the government schools.
d) Eliminate industrially produced trans-fatty acids from the global food supply.

Solution: d)

WHO released REPLACE, a step-by-step guide for the elimination of industrially-produced trans-fatty acids from the global food supply.


(Q) Consider the following statements about Trans-fats.

1. Trans-fat is a type of unsaturated fat.
2. Trans fats also occur naturally.
3. Trans fats give food a desirable taste and texture.
Which of the above statements is/are correct?

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

Solution: d)

**Trans fat**, also called **trans-unsaturated fatty acids** or trans fatty acids, is a type of unsaturated fat that occurs in small amounts in nature, but became widely produced industrially from vegetable fats starting in the 1950s for use in margarine, snack food, packaged baked goods, and for frying fast food.

- **Naturally-occurring trans fats** are produced in the gut of some animals and foods made from these animals (e.g., milk and meat products) may contain small quantities of these fats. Artificial trans fats (or trans fatty acids) are created in an industrial process that adds hydrogen to liquid vegetable oils to make them more solid.
- Trans fats are easy to use, inexpensive to produce and last a long time. Trans fats give foods a desirable taste and texture.

Source: https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/fats/trans-fat

(Q) Researchers from Indian Institute of Technology Madras (IITM) developed “Shakti” is related to

a) Climate vulnerability maps developed for Himalayan states
b) Utilising black carbon soot for treating industrial waste
c) Microprocessor
d) Magnetic Graphene

Solution: c)

India’s **first and indigenous** microprocessor “**Shakti**” developed by Indian Institute of Technology Madras (IITM).


(Q) Zearalenone recently seen in news is related to

a) Viral infection which typically spread by mosquitoes.
b) Newly identified population of ultraviolet stars.
c) A chronic neurodegenerative disease.
d) A fungal toxin infesting cereals.

Solution: d)

**Zearalenone** is a **fungal** toxin infesting **cereals** such as wheat, maize and barley. It attacks crops while they are growing, but can also develop when cereals are stored without being dried fully.

While numerous studies document this toxin in cereals across the world, no data existed for India until now. Recently a Journal of Food Science study detected zearalenone in wheat, rice, corn and oats from markets in Uttar Pradesh.
(Q) Consider the following statements about Soil-Transmitted Helminths (STH)

1. STH infections can lead to malnutrition, impaired mental and physical & cognitive development.
2. STH Infections can be prevented by Wearing slippers and shoes.
3. National Deworming Day is observed to deworm all preschool and school-age children between the ages of 1-19 years through schools and Anganwadi Centers.

Which of the above statements is/are correct?

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

Solution: d)

**Helminths** (worms) which are transmitted through soil contaminated with faecal matter are called soil-transmitted helminths (Intestinal parasitic worms).

STH infections can lead to anemia, malnutrition, impaired mental and physical & cognitive development, and reduced school participation.

**STH Infections can be prevented by:**

1. Using sanitary toilets, not defecating outside
2. Hand-washing, particularly before eating and after using toilets
3. Wearing slippers and shoes
4. Washing fruits and vegetables in safe and clean water
5. Eating properly cooked food

**Objective of National Deworming Day:**

- The objective of National Deworming Day is to deworm all preschool and school-age children (enrolled and non-enrolled) between the ages of 1-19 years through the platform of schools and Anganwadi Centers in order to improve their overall health, nutritional status, access to education and quality of life.
- The Ministry of Health & Family Welfare, Government of India is the nodal agency for providing all States/UTs with guidelines related to National Deworming Day (NDD) implementation at all levels.

Source: [https://www.nhp.gov.in/national-deworming-day_pg](https://www.nhp.gov.in/national-deworming-day_pg)

**(Q)** Consider the following statements about West Nile Virus.

1. Mosquitoes are the natural hosts of West Nile virus.
2. West Nile virus is mainly transmitted to people through the bites of infected mosquitoes.
3. Human infections occur through organ transplant, blood transfusions and breast milk.

Which of the above statements is/are correct?

a) 1, 2  
b) 2, 3  
c) 1, 3  
d) 1, 2, 3
Solution: b)

**West Nile Virus (WNV)** is a member of the flavivirus genus and belongs to the Japanese encephalitis antigenic complex of the family Flaviviridae.

- WNV is commonly found in Africa, Europe, the Middle East, North America and West Asia. WNV is maintained in nature in a cycle involving transmission between birds and mosquitoes. Humans, horses and other mammals can be infected.
- The virus may also be transmitted through contact with other infected animals, their blood, or other tissues.
- A very small proportion of human infections have occurred through organ transplant, blood transfusions and breast milk.

**Key Facts:**
1. West Nile virus is mainly transmitted to people through the bites of infected mosquitoes.
2. Birds are the natural hosts of West Nile virus.
3. Vaccines are available for use in horses but not yet available for people.
4. The virus can cause severe disease and death in horses.
5. Infection with WNV is either asymptomatic (no symptoms) in around 80% of infected people, or can lead to West Nile fever or severe West Nile disease.
6. About 20% of people who become infected with WNV will develop West Nile fever. Symptoms include fever, headache, tiredness, and body aches, nausea, vomiting, occasionally with a skin rash (on the trunk of the body) and swollen lymph glands.

Source: [https://www.who.int/news-room/fact-sheets/detail/west-nile-virus](https://www.who.int/news-room/fact-sheets/detail/west-nile-virus)

(Q) Consider the following statements about Hepatitis C

1. Hepatitis C is a liver disease.
2. The most common modes of infection are through exposure to small quantities of blood.
3. Hepatitis C also spreads through breast milk, food and water.
4. People with HIV infection are at increased risk of Hepatitis C virus infection.

Which of the above statements is/are correct?

a) 1, 2, 4  

b) 1, 3, 4  

c) 2, 3, 4  

d) 1, 2, 3, 4

Solution: a)

**Hepatitis C** is a **liver disease** caused by the hepatitis C virus: the virus can cause both acute and chronic hepatitis, ranging in severity from a mild illness lasting a few weeks to a serious, lifelong illness.

The **hepatitis C virus (HCV)** is a **bloodborne virus** and the most common modes of infection are through exposure to small quantities of blood. This may happen through injection drug use, unsafe injection practices, unsafe health care, and the transfusion of unscreened blood and blood products.

There is currently **no vaccine** for hepatitis C; however research in this area is ongoing.

- HCV can also be transmitted sexually and can be passed from an infected mother to her baby; however these modes of transmission are much less common.
- Hepatitis C is not spread through breast milk, food, water or by casual contact such as hugging, kissing and sharing food or drinks with an infected person.
Populations at increased risk of HCV infection include:

- people who inject drugs;
- people who use intranasal drugs;
- recipients of infected blood products or invasive procedures in health-care facilities with inadequate infection control practices;
- children born to mothers infected with HCV;
- people with sexual partners who are HCV-infected;
- people with HIV infection;
- prisoners or previously incarcerated persons; and
- people who have had tattoos or piercings.

Source: https://www.who.int/news-room/fact-sheets/detail/hepatitis-c

(Q) Consider the following statements about Gaganyaan

1. ISRO and NASA have agreed to work together for India’s first manned space mission Gaganyaan.
2. India is planning to send three humans (Gaganyatris) into space i.e. in low earth orbit (LEO) by 2022.
3. This mission will make India fourth nation in the world after USA, Russia and China to launch human spaceflight mission.

Which of the above statements is/are correct?

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

Solution: c)

Indian Space Research Organisation (ISRO) and Russia's federal space agency Roscosmos State Corporation for Space Activities (ROSCOSMOS) have agreed to work together for first manned space mission Gaganyaan. It is India’s first manned space mission. This mission will make India fourth nation in the world after USA, Russia and China to launch human spaceflight mission.

India is planning to send three humans (Gaganyatris) into space i.e. in low earth orbit (LEO) by 2022 i.e. by 75th Independence Day.

Source: https://www.financialexpress.com/defence/isro-roscosmos-to-work-together-for-first-indian-manned-mission/1338872/

(Q) Consider the following statements about Tuberculosis (TB).

1. Tuberculosis (TB) is a viral disease.
2. Tuberculosis is curable and preventable.
3. People living with HIV are more likely to develop active TB disease than people without HIV.
4. In India, ministry of health and family welfare announced a new National Strategic Plan (NSP) to eliminate TB by 2030 in line with Sustainable Development Goals.

Which of the above statements is/are correct?

a) 1, 2, 3
b) 2, 3
(Q) The world’s first floating nuclear power plant (FNPP) is located in which country?

a) China  
b) Japan  
c) USA  
d) Russia  

Solution: d)

Russia’s Akademik Lomonosov, the world’s first floating nuclear power plant (FNPP) has become operational. It has been started and brought to 10 per cent of its capacity.


(Q) Hongyun project recently seen in news is related to

a) Longest railway bridge construction in China  
b) Discovery of a new exotic planet outside our solar system  
c) Space-based communications network to provide broadband internet connectivity  
d) Surveying the surface of Mars

Solution: c)

China has launched its first communication satellite to provide broadband internet services worldwide. The satellite is the first in the Hongyun project planned by China Aerospace Science and Industry Corp (CASIC).
The **Hongyun project**, started in September 2016, aims to build a space-based communications network to provide broadband internet connectivity to users around the world, especially those in the underserved regions.

Source: [https://www.thehindu.com/sci-tech/science/china-launches-first-satellite-for-space-based-broadband-project/article25806057.ece](https://www.thehindu.com/sci-tech/science/china-launches-first-satellite-for-space-based-broadband-project/article25806057.ece)

(Q) Consider the following statements about Low Earth Orbit (LEO).

1. It is an Earth-centered orbit with an altitude of 2,000 km or less.
2. The International Space Station conducts operations in LEO.
3. Major disadvantage of low Earth orbit is that it requires high amount of energy for satellite placement.
4. Spy satellites cannot use LEO.

Which of the above statements is/are incorrect?

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

**Solution: c)**

**Low earth orbit** refers to an altitude up to **2,000 km or less**. A satellite in the LEO can **monitor activities** on the **ground and water surfaces**.

- A low Earth orbit requires **the lowest amount of energy for satellite placement**. It provides **high bandwidth and low communication latency**. Satellites and space stations in LEO are more accessible for crew and servicing.

- **Earth observation satellites** and **spy satellites** use LEO as they are able to see the surface of the Earth clearly by being close to it.

- The **International Space Station** is in a LEO about 330 km to 420 km above Earth’s surface.

Source: [https://en.wikipedia.org/wiki/Low_Earth_orbit](https://en.wikipedia.org/wiki/Low_Earth_orbit)
V. INTERNATIONAL RELATIONS AND ORGANIZATIONS

(Q) Consider the following statements about Global Digital Health Partnership Summit

1. The 4th Global Digital Health Partnership Summit was held in India.
2. It was hosted by Ministry of External Affairs in collaboration with the World Health Organization (WHO).
3. Global Digital Health Partnership (GDHP) is an international collaboration of governments and multinational organisations dedicated to improving the health and well-being of their citizens.

Which of the above statements is/are correct?

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

Solution: c)
The 4th Global Digital Health Partnership Summit was held in New Delhi. It was hosted by the Ministry of Health and Family Welfare in collaboration with World Health Organization (WHO) and the Global Digital Health Partnership (GDHP).

Global Digital Health Partnership (GDHP) is an international collaboration of governments, government agencies and multinational organisations dedicated to improving the health and well-being of their citizens through the best use of evidence-based digital technologies.


(Q) The organisation which approved India’s proposal to observe an International Year of Millets in 2023

a) United Nations General Assembly
b) United Nations World Food Program (WFP)
c) Food and Agriculture Organization (FAO) Council
d) International Fund for Agricultural Development (IFAD)

Solution: c)
The 160th session of the Food and Agriculture Organization (FAO) Council approved India’s proposal to observe an International Year of Millets in 2023.


(Q) Yellow vests movement recently seen in news took place in

a) United Kingdom
b) France
c) Germany
d) Turkey
**Solution: b)**

**Yellow vests movement** is a populist, **grassroots political movement for economic justice** that began in France in November 2018. The movement is motivated by rising fuel prices, high cost of living, and claims that a disproportionate burden of the government’s tax reforms were falling on the working and middle classes, especially in rural and peri-urban areas.


(Q) Consider the following statements about Indo-Pacific Regional Dialogue (IPRD).

1. It was conceptualised by United States in 2017 as part of Quadrilateral Security Dialogue.
2. The theme of this annual dialogue is a review of India’s opportunities and challenges in the Indo-Pacific region.

Which of the above statements is/are correct?

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

**Solution: b)**

In continuation of the process of engaging the global strategic community in an annual review of India's opportunities and challenges in the Indo-Pacific region, the second edition of **Indo-Pacific Regional Dialogue (IPRD) – 2019** was held in New Delhi.

- The idea of an Indo-Pacific Regional Dialogue (IPRD) was first conceptualised and conducted in 2018, as the apex level conference of the Indian Navy, organised by the National Maritime Foundation as the Navy's Knowledge Partner.
- The permanent theme of this annual dialogue is a review of India’s opportunities and challenges in the Indo-Pacific region.
- The aim is to focus attention on the Indo-Pacific, as a maritime geographical-entity, while deliberating aspects of great relevance to regional geopolitics.


(Q) Consider the following statements about Swift (Society for Worldwide Interbank Financial Telecommunications) messaging system.

1. It is a messaging network that financial institutions use to securely transmit information and instructions through a standardized system of codes.
2. SWIFT facilitate funds transfer and sends payment orders.
3. SWIFT India is a consortium of all Indian public sector banks.

Which of the above statements is/are correct?

a) 1 only  
b) 1, 2  
c) 1, 3  
d) 1, 2, 3
Solution: a)

It is a messaging network that financial institutions use to securely transmit information and instructions through a standardized system of codes. Under SWIFT, each financial organization has a unique code which is used to send and receive payments.

- SWIFT does not facilitate funds transfer: rather, it sends payment orders, which must be settled by correspondent accounts that the institutions have with each other.
- The SWIFT is a secure financial message carrier — in other words, it transports messages from one bank to its intended bank recipient.

**SWIFT India** is a joint venture of top Indian public and private sector banks and SWIFT (Society for Worldwide Interbank Financial Telecommunication). The company was created to deliver high quality domestic financial messaging services to the Indian financial community.


(Q) Consider the following statements about South-East Asia Regulatory Network (SEARN).

1. It promotes timely access to affordable medical products of assured quality in countries of the South-East Asia region and beyond.
2. SEARN includes all ASEAN countries.
3. Information Sharing Platform Gateway for South-East Asia Regulatory Network (SEARN) is developed by Centre for Development of Advanced Computing.

Which of the above statements is/are correct?

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

Solution: d)

Information Sharing Platform Gateway for South-East Asia Regulatory Network (SEARN) developed by Centre for Development of Advanced Computing has been launched. It will promote regulatory and health collaboration among the countries of the South-East Asia Region.

- The South East Asia Research Network (SEARN), based at the London School of Hygiene & Tropical Medicine, is a platform to facilitate research collaboration.
- It provides a forum to support the communication and dissemination of research findings, highlight research areas and a network connecting people and collaborators outside with an interest in South East Asia.

**Vision:** Healthy populations with timely access to affordable medical products of assured quality, safety and efficacy in all countries of the South-East Asia region and beyond.

**SEARN includes all ASEAN countries.**


(Q) Consider the following statements about Globally Important Agricultural Heritage Systems (GIAHS).

1. They are the landscapes of aesthetic beauty that combine agricultural biodiversity, resilient ecosystems and a cultural heritage.
2. Kuttanad region is designated as GIAHS.
3. GIAHS is the initiative of UNEP.

www.insightsactivelearn.com  44  www.insightsonindia.com
Which of the above statements is/are correct?

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

Solution: c)

**Globally Important Agricultural Heritage Systems (GIAHS)** are outstanding landscapes of aesthetic beauty that combine agricultural biodiversity, resilient ecosystems and a valuable cultural heritage. It is designated by **FAO**.

- Located in specific sites around the world, they sustainably provide multiple goods and services, food and livelihood security for millions of small-scale farmers.
- Unfortunately, these agricultural systems are threatened by many factors including climate change and increased competition for natural resources. They are also dealing with migration due to low economic viability, which has resulted in traditional farming practices being abandoned and endemic species and breeds being lost.
- These ancestral agricultural systems constitute the foundation for contemporary and future agricultural innovations and technologies.

At present **3 sites in India** are designated as GIAHS. They are: Kuttanad Below Sea Level Farming System, Koraput Traditional Agriculture and Saffron Heritage of Kashmir


(Q) Consider the following statements about International Finance Corporation (IFC)

1. It is a sister organization of the IMF.
2. It is the largest global development institution focused exclusively on the private sector in developing countries.
3. Its goals are to increase sustainable agriculture opportunities, improve healthcare and education.

Which of the above statements is/are correct?

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

Solution: c)

**IFC**—a sister organization of the **World Bank** and member of the World Bank Group—is the largest global development institution **focused exclusively on the private sector** in **developing** countries. The Bank Group has set two goals for the world to achieve by 2030: end extreme poverty and promote shared prosperity in every country.

- The IFC is owned and governed by its member countries, but has its own executive leadership and staff that conduct its normal business operations.
- It is a corporation whose shareholders are member governments that provide paid-in capital and which have the right to vote on its matters.
Functions:

- It offers an array of debt and equity financing services and helps companies face their risk exposures, while refraining from participating in a management capacity.
- The corporation also offers advice to companies on making decisions, evaluating their impact on the environment and society, and being responsible.
- It advises governments on building infrastructure and partnerships to further support private sector development.

Since 2009, the IFC has focused on a set of development goals that its projects are expected to target. Its goals are to increase sustainable agriculture opportunities, improve healthcare and education, increase access to financing for microfinance and business clients, advance infrastructure, help small businesses grow revenues, and invest in climate health.


(Q) Consider the following statements about International Telecommunication Union (ITU)

1. It is a United Nations specialized agency for information and communication technologies.
2. India was recently elected as a Member of ITU Council.
3. ITU allocates global radio spectrum and satellite orbits.

Which of the above statements is/are correct?

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

Solution: d)

ITU is the United Nations specialized agency for information and communication technologies – ICTs.

- Founded in 1865 to facilitate international connectivity in communications networks, they allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.
- ITU is committed to connecting all the world’s people – wherever they live and whatever their means.
- ITU embodies principles of public-private partnership, with its current membership of 193 countries and over 800 private-sector entities and academic institutions.
- ITU membership represents a cross-section of the global ICT sector, from the world’s largest vendors, manufacturers and telecom operators to small, innovative players and SMEs working with new and emerging technologies, along with leading R&D institutions and academia.
- Founded on the principle of international cooperation between governments (Member States) and the private sector (Sector Members, Associates and Academia), ITU is the premier global forum through which parties work towards consensus on a wide range of issues affecting the future direction of the ICT industry.
- India has been elected as a Member of the International Telecommunications Union (ITU) Council for another 4-year term (2019-2022).
- By securing 165 votes, India ranked third among the 13 countries elected to the Council from the Asia-Australasia region, and eighth among the 48 countries elected to the Council globally.

(Q) Consider the following statements about United Nations Office for Disaster Risk Reduction (UNISDR).

1. UNISDR was established as a secretariat to facilitate the implementation of the International Strategy for Disaster Reduction (ISDR).
2. It supports the implementation, follow-up and review of the Sendai Framework for Disaster Risk Reduction.
3. It focuses on Investing in disaster risk reduction for resilience.

Which of the above statements is/are correct?

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

Solution: d)

The **United Nations Office for Disaster Risk Reduction (UNISDR)**, created in December 1999, is the successor to the secretariat of the International Decade for Natural Disaster Reduction.

- It was established to ensure the implementation of the International Strategy for Disaster Reduction.
- It is part of the United Nations Secretariat and its functions span the social, economic, environmental as well as humanitarian fields.

**Functions:** UNISDR supports the implementation, follow-up and review of the Sendai Framework for Disaster Risk Reduction adopted by the Third UN World Conference on Disaster Risk Reduction on 18 March 2015 in Sendai, Japan.

UNISDR’s vision is anchored on the four priorities for action set out in the Sendai Framework:

1. Understanding disaster risk.
2. Strengthening disaster risk governance to manage disaster risk.
3. Investing in disaster risk reduction for resilience.
4. Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Source: [https://www.unisdr.org/who-we-are/mandate](https://www.unisdr.org/who-we-are/mandate)

(Q) Consider the following statements about International Whaling Commission (IWC)

1. It is an organ of United Nations
2. It provides for proper conservation of whale stocks and orderly development of the whaling industry.
3. India is not a member of IWC.

Which of the above statements is/are incorrect?

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

Solution: c)
It is an international body set up under **International Convention for the Regulation of Whaling (ICRW)**. ICRW governs the commercial, scientific, and aboriginal subsistence whaling practices of its member nations. India is a member of IWC.

**Objectives:**
- To provide for the proper conservation of whale stocks.
- For orderly development of the whaling industry.

Japan has announced its decision to withdraw from the International Whaling Commission (IWC). The withdrawal would enable Japan to resume commercial whaling activities.

Source: [https://iwc.int/home](https://iwc.int/home)

(Q) Consider the following statements about United Nations Global Counter-Terrorism Coordination Compact.

1. The framework is an agreement between the UN chief, 36 organisational entities, the International Criminal Police Organisation (INTERPOL) and the World Customs Organisation.
2. The agreement is non-binding in nature.
3. The Coordination Committee of the United Nations will oversee the implementation of the framework.

Which of the above statements is/are correct?

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

**Solution: d)**

The **United Nations** has launched a new framework titled ‘**UN Global Counter-Terrorism Coordination Compact**’ to combat international terrorism and coordinate efforts across the peace and security, humanitarian, human rights and sustainable development sectors.

- The framework is an agreement between the UN chief, 36 organisational entities, the International Criminal Police Organisation (INTERPOL) and the **World Customs Organisation** to better serve the needs of member states when it comes to tackling the scourge of international terrorism.
- The agreement is non-binding in nature. The UN Global counter terrorism coordination compact is also termed as **Global compact**.
- The **Coordination Committee of the United Nations** will oversee the implementation of the framework and monitor its implementation. The committee will be chaired by **UN Under-Secretary-General for counter-terrorism**.


(Q) India is a member country of which of the following organizations?

1. East Asia Summit  
2. ASEAN + 3  
3. Asia-Pacific Economic Cooperation (APEC)
Select the correct answer using the codes below.

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

Solution: a)

Statement 1: 16 countries in the East Asian, Southeast Asian, South Asian regions (Including India), USA and Russia are its members. Trade is an important focus for the summit.

Statement 2: ASEAN+3 includes the 10 members of the Association of Southeast Asian Nations (Brunei Darussalam, Cambodia, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and VietNam) plus China, Japan, and South Korea. It excludes India.

Statement 3: China has consistently blocked India’s bid to APEC membership.

(Q) Recently Caspian Sea Breakthrough Treaty was signed. Which of the following countries are parties to the treaty?

1. Kazakhstan
2. Russia
3. Iran
4. Iraq
5. Turkmenistan
6. Azerbaijan

Select the correct code:

a) 1, 2, 3, 4
b) 1, 2, 3, 5, 6
c) 2, 3, 4, 5
d) 2, 3, 4, 5, 6

Solution: b)

Five Caspian Sea states (Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan) reached a breakthrough agreement on sovereign rights to the sea, paving the way for new oil and gas extraction — and pipelines.

The treaty ends a spat over whether the Caspian is a sea or a lake, granting it special legal status and clarifying the maritime boundaries of each surrounding country.


(Q) Consider the following statements about World Food Programme (WFP).

1. It is the world’s largest humanitarian organization addressing hunger and promoting food security.
2. The WFP operations are majorly funded by Food and Agriculture Organization (FAO).
3. Zero hunger is the priority of the World Food Programme.

Which of the above statements is/are correct?

a) 1, 2  b) 1, 3  c) 2, 3  d) 1, 2, 3
Solution: b)

The World Food Programme (WFP) is the food assistance branch of the United Nations and the world's largest humanitarian organization addressing hunger and promoting food security.

- The WFP strives to eradicate hunger and malnutrition, with the ultimate goal in mind of eliminating the need for food aid itself.
- It is a member of the United Nations Development Group and part of its Executive Committee.
- The WFP operations are funded by voluntary donations from world governments, corporations and private donors. WFP food aid is also directed to fight micronutrient deficiencies, reduce child mortality, improve maternal health, and combat disease, including HIV and AIDS.
- In 2015 the global community adopted the 17 Global Goals for Sustainable Development to improve people's lives by 2030. Goal 2 – Zero Hunger – pledges to end hunger, achieve food security, improve nutrition and promote sustainable agriculture, and is the priority of the World Food Programme.

(Q) Consider the following statements about Transports Internationaux Routiers (TIR) Convention

1. It is under the auspices of World Trade Organisation (WTO).
2. The TIR system only covers customs transit by road.
3. India has ratified the convention.

Which of the above statements is/are correct?

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

Solution: b)

The Convention on International Transport of Goods Under Cover of TIR Convention is a multilateral treaty that was concluded at Geneva on 14 November 1975 to simplify and harmonise the administrative formalities of international road transport.

1. The 1975 convention replaced the TIR Convention of 1959, which itself replaced the 1949 TIR Agreement between a number of European countries.
2. The conventions were adopted under the auspices of the United Nations Economic Commission for Europe (UNECE).
3. India became the 71st country to ratify the convention.
4. The ratification is a part of India's multi-modal transport strategy that aims to integrate the economy with global and regional production networks through better connectivity.

Significance of this convention:

- TIR is the only global customs transit system that provides easy and smooth movement of goods across borders in sealed compartments or containers under customs control from the customs office of departure to the customs office of destination.
- It plays an important role in boosting regional connectivity and facilitating cross-border trade flows, according to connectivity experts.
- The TIR system has a globally accepted electronic control system for integrated transit operations.
- The TIR system not only covers customs transit by road but a combination is possible with other modes of transport (e.g., rail, inland waterway, and even maritime transport), as long as at least one part of the total transport is made by road.
The first shipment under the United Nations ‘Transports Internationaux Routiers’ (TIR) convention arrived in India from Afghanistan through Chabahar Port of Iran.

Source: https://www.thehindu.com/business/india-gets-first-tir-shipment-via-chabahar-port-from-afghanistan/article26525062.ece

(Q) Consider the following statements about International Energy Agency (IEA).

1. It is an autonomous intergovernmental organization established in the framework of OPEC.
2. India is a member country.
3. World Energy Outlook (WEO) is published by IEA.

Which of the above statements is/are correct?

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

Solution: c)

IEA is a Paris-based autonomous intergovernmental organization established in the framework of the Organisation for Economic Co-operation and Development (OECD) in 1974 in the wake of the 1973 oil crisis.

In March 2017, India joined the IEA as an Association country.

Reports:

- World Energy Outlook.
- Energy Technology Perspectives.

Source: https://en.wikipedia.org/wiki/International_Energy_Agency
VI. POLITY

~NIL~
VII. HISTORY, ART & CULTURE

(Q) Consider the following statements about ‘Adopt A Heritage’ project.

1. It is a collaborative effort by NITI Aayog, Ministry of Culture and Archaeological Survey of India (ASI).
2. It envisages development and maintenance of tourist amenities at heritage sites.
3. The funding is from the Ministry of Culture.
4. Jantar Mantar and Qutub Minar are adopted under the project.

Which of the above statements is/are correct?

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

Solution: b)

The ‘Adopt A Heritage: Apni Dharohar, Apni Pehchaan’, scheme launched on 27th September, 2017 is a collaborative effort by Ministry of Tourism, Ministry of Culture and Archaeological Survey of India (ASI), State/UTs Governments and envisages development and maintenance of tourist amenities at heritage sites and making them tourist friendly, to enhance tourism potential and cultural importance in a planned and phased manner.

- The project primarily focuses on providing basic amenities that include cleanliness, public conveniences, safe drinking water, ease of access for tourists, signages, illumination, Wi-fi etc.
- No fund is given by Ministry of Tourism. The Project envisages involvement of Private/Public Companies / Organizations and Individuals to adopt Monuments, Natural Heritage Sites and other Tourist Sites in the country, primarily under CSR.

10 ADOPTED HERITAGE MONUMENTS include

1. Red Fort (Delhi)
2. Gandikota Fort (Andhra Pradesh)
3. Area surrounding Gangotri Temple and Trail to Gaumukh (Uttarakhand)
4. Mount Stok Kangri Trek (Ladakh)
5. Hazara Rama Temple (Hampi, Karnataka)
6. Qutub Minar (Delhi)
7. Ajanta Caves (Maharashtra)
8. Leh Palace (Leh, Jammu & Kashmir)
9. Jantar Mantar (Delhi)
10. Surajkund (Haryana)

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=186491

(Q) Which of the following are the Intangible cultural heritage (ICH) elements from India that have been inscribed on the UNESCO’s Representative List of the Intangible Cultural Heritage of Humanity.

1. Kutiyattam
2. Ramlila
3. Kalbelia folk dance
4. Mudiyettu
Select the correct code:

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

Solution: d)

From India the Intangible Cultural Heritages added into this list include:

1. Tradition of Vedic chanting
2. **Ramlila**, the traditional performance of the Ramayana
3. **Kutiyattam**, Sanskrit theatre
5. **Mudiyettu**, ritual theatre and dance drama of Kerala
6. **Kalbelia** folk songs and dances of Rajasthan
7. **Chhau** dance
9. **Sankirtana**, ritual singing, drumming and dancing of Manipur
10. Traditional brass and copper craft of utensil making among the **Thathras** of Jandiala Guru, Punjab
11. **Yoga**
12. **Nawrouz**
13. **Kumbh Mela**

(Q) Consider the following statements about Aadi Mahotsav.

1. It is a National Tribal Festival organized by the Ministry of Tribal Affairs and TRIFED.
2. The Mahotsav comprises of display and sale of items of tribal art and craft and display of tribal folk performance.

Which of the above statements is/are correct?

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

Solution: c)

"Aadi Mahotsav" a National Tribal Festival to celebrate, cherish and promote the spirit of tribal craft, culture, cuisine and commerce. The Mahotsav has been organized by the Ministry of Tribal Affairs and TRIFED.

The Mahotsav comprises of display and sale of items of tribal art and craft, tribal medicine & healers, tribal cuisine and display of tribal folk performance.

VIII. STATES

~NIL~
IX. DEFENCE & SECURITY

(Q) Consider the following statements about Comprehensive Convention on International Terrorism.

1. It is a treaty which intends to criminalize all forms of international terrorism and deny terrorists, their financiers and supporters access to funds, arms, and safe havens.
2. All the BRICS countries have ratified the treaty.
3. It was proposed by India in 2008 after Mumbai terror attacks.

Which of the above statements is/are correct?

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

Solution: b)

- The Comprehensive Convention on International Terrorism is a proposed treaty which intends to criminalize all forms of international terrorism and deny terrorists, their financiers and supporters access to funds, arms, and safe havens. The negotiations for this treaty are currently (May 2018) under way has been under negotiation at the United Nations General Assembly’s Ad Hoc Committee.

- Currently, the negotiations of the Comprehensive Terrorism Convention are deadlocked because of differences over the definition of terrorism.

- India proposed this convention in 1996 and has since demanded consistently, especially in the wake of the 2008 Mumbai attacks. The issue was once again pushed by the Indian Prime Minister, Narendra Modi in his address at the 69th Session of the UN General Assembly held in September 2014. India further pressed for the adoption of CCIT following the July 2016 Dhaka attack.


(Q) Recently PM inaugurated the manufacturing facility for K9 Vajra self-propelled Howitzer guns. In this context, consider the following statements.

1. The Armoured Systems Complex (ASC) is developed by Larsen & Toubro (L&T) at Hazira, Gujarat.
2. This Armoured Systems Complex (ASC) is the country’s first private facility where the K9 Vajra self-propelled Howitzer guns will be manufactured.
3. The K9 Vajra is a variant of the South-Korean-made K9 self-propelled howitzer.

Which of the above statements is/are correct?

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

Solution: d)

- Prime Minister Narendra Modi inaugurated the Armoured Systems Complex (ASC), developed by Larsen & Toubro (L&T) at Hazira near Surat in Gujarat. This is the country’s first private facility where the K9 Vajra self-propelled Howitzer guns will be manufactured.
• K9-Vajra-T is a variant of the South Korean K9-Thunder, which is considered to be the world’s best 155mm/52 calibre self-propelled Howitzer.

Source:  https://www.livemint.com/Politics/GbduGa7KeMloqDrUfMksGI/PM-Modi-inaugurates-countrys-first-private-Howitzer-plant.html

(Q) Consider the following statements about Strategic Policy Group (SPG) constituted by the government.

1. It is headed by the Prime Minister.
2. It assists the National Security Council (NSC) to strategise on matters dealing with internal and economic security.
3. It will act as a mechanism for inter-ministerial coordination in the formulation of national security policies.

Which of the above statements is/are correct?

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

Solution: c)

The Strategic Policy Group (SPG), formed to assist the National Security Council (NSC), was reconstituted with National Security Advisor Ajit Doval as its chief to strategise on matters dealing with internal and economic security. Mr. Doval replaced the Cabinet Secretary, who was earlier Chairperson of SPG, a mechanism first notified in 1999.

• The SPG shall be the principal mechanism for inter-ministerial coordination and integration of relevant inputs in the formulation of national security policies.

• The other members are Vice Chairman of NITI Ayog, Cabinet Secretary, three services chiefs, RBI Governor, Secretaries of External Affairs, Home, Defence, Finance, Defence Production, Revenue, Atomic Energy, Space and National Security Council Secretariat besides Scientific Advisor to Defence Minister, Secretary (R) in Cabinet Secretariat and the Intelligence Bureau chief.

• The Cabinet Secretary will coordinate the implementation of SPG decisions by the Union Ministries and departments and State governments.


(Q) The joint exercise ‘Sary-Arka-Antiterror 2019’ to be held this year is by which of the following grouping.

a) BRICS (Brazil, Russia, India, China and South Africa)
b) ASEAN (Association of Southeast Asian Nations)
c) BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation)
d) Shanghai Cooperation Organization (SCO)

Solution: d)

The Shanghai Cooperation Organization’s (SCO) member states will hold a joint anti-terrorism exercise “Sary-Arka-Antiterror 2019.” The decision to hold a joint exercise was announced during the 34th meeting of the RATS council held in Tashkent, Uzbekistan.
(Q) The indigenously developed Pinaka that was successfully test fired is a
a) supersonic cruise missile
b) Surface-to-Surface Battle field Missile
c) Quick Reaction Surface to Air Missile
d) Multi-Barrel Rocket System

Solution: d)
Multi-Barrel Rocket System PINAKA, an area weapon system to supplement the existing artillery gun at ranges beyond 30 kms, having quick reaction time and high rate of fire. The indigenously developed Pinaka guided rocket system was successfully test fired at Pokhran desert in Rajasthan, in a boost to artillery capability of the Army.

Source: https://www.drdo.gov.in/drdo/English/index.jsp?pg=Pinaka.jsp

(Q) Consider the following statements about Defence Acquisition Council
1. It is headed by the Prime Minister.
2. It clears all defence acquisitions, which includes both imported and those produced indigenously.

Which of the above statements is/are correct?

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

Solution: b)
To counter corruption and speed up decision- making in military procurement, the government of India in 2001 decided to set up an integrated DAC. It is headed by the Defence Minister. The DAC is responsible to give policy guidelines to acquisitions, based on long-term procurement plans. It also clears all acquisitions, which includes both imported and those produced indigenously or under a foreign license.

(Q) Abhedya related to Indian Navy, recently in news is related to
a) Annual Theatre Level Readiness and Operational Exercise
b) Nuclear-powered attack submarine.
c) Sea Vigil exercise
d) Indian Navy’s Nuclear, Biological and Chemical Training Facility.

Solution: d)
- It is Indian Navy’s state of the art Nuclear, Biological and Chemical Training Facility (NBCTF) which was inaugurated recently at INS Shivaji, Lonavala.
• The new facility is expected to help train personnel of naval ships fitted with nuclear, biological and chemical detection and protection systems.

• The nuclear training facility will help Indian Navy in providing realistic simulation of Nuclear, Chemical and Biological warfare to its personnel during their NBC damage control training, which was till now largely limited to theoretical training.


(Q) Consider the following statements about INS Arihant

1. INS Arihant is India’s first indigenously-designed, developed and manufactured nuclear-powered ballistic missile submarine.
2. Its design is based on the Russian Akula-1 class submarine.
3. It can carry Sagarika and Shaurya Missiles
4. The deployment of INS Arihant led to the completion of India’s nuclear triad.

Which of the above statements is/are correct ?

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

Solution: c)

India’s first indigenous nuclear submarine INS Arihant has successfully completed its first deterrence patrol. With this, India completed its survivable nuclear triad by adding maritime strike capability to land and air-based delivery platforms for nuclear weapons.

INS Arihant is India’s first indigenously-designed, developed and manufactured nuclear-powered ballistic missile submarine. Its design is based on the Russian Akula-1 class submarine. It can carry **12 Sagarika K 15 submarine launched ballistic missiles (SLBMs)** having range of over 700 km.

The Shaurya missile is a canister launched **hypersonic surface-to-surface tactical missile** developed by the Indian Defence Research and Development Organisation (DRDO). The Shaurya missile is speculated to be the land version of the under-water Sagarika K-15 missile.

(Q) Consider the following statements about National Cyber Coordination Centre (NCCC).

1. NCCC scans internet traffic coming into the country to detect real-time cyber threat.
2. It will be implemented by Indian Computer Emergency Response Team (CERT-In).

Which of the above statements is/are correct ?

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

Solution: d)

The first phase of National Cyber Coordination Centre, set up to scan the country’s web traffic to **detect cyber security threats**, has been made operational. NCCC scans internet traffic coming into the country to detect real-time cyber threat and alert various organisations as well as internet service providers for timely action.
NCCC will be implemented by Indian Computer Emergency Response Team (CERT-In) at Ministry of Electronics and Information Technology. The Centre derives necessary powers as per provisions of section 69B of the Information Technology Act, 2000.

Source: https://indianexpress.com/article/india/cyber-coordination-centre-made-operational-it-ministry-4789272/

(Q) The government recently launched ‘e-Sahaj’ portal. It is related to

a) To offer Insurance Coverage To Dairy Farmers
b) For security clearances in certain sensitive sectors
c) For MSME Sector to access market/ credit
d) To assist Startups in getting cheaper loans

Solution: b)

The government launched an online ‘e-Sahaj portal for grant of Security Clearance. The objective of national security clearance is to evaluate potential security threats, including economic threats, and provide risk assessment before clearing investment and project proposals in key sectors.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=183549
X. REPORTS & INDICES

(Q) Consider the following statements about Global Gender Gap Index 2018.

1. It is released annually by World Bank.
2. It measures economic opportunity, political empowerment, educational attainment and health and survival.
3. India has fully closed its tertiary education gender gap for the first time.

Which of the above statements is/are correct?

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

Solution: c)

Global Gender Gap report is published annually by the world economic forum since 2006. Global gender gap index is a part of this which measures gender equality across four pillars– they are economic opportunity, political empowerment, educational attainment and health and survival.

- India has recorded improvement in wage equality for similar work and has fully closed its tertiary education gender gap for the first time.

Source: https://www.thehindu.com/society/gender-equality-at-work-more-than-200-years-off-wef/article25769759.ece

(Q) Consider the following statements about Global Environment Outlook (GEO) Report.

1. It is referred to as UN Environment’s flagship environmental assessment, released annually.
2. It provides an integrated analysis of social, economic and environmental trends that have shaped the environment.

Which of the above statements is/are correct?

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

Solution: b)

Global Environment Outlook report has been released. The report is the sixth and is the UN’s most comprehensive report on the state of the global environment since the fifth edition in 2012.

- The GEO is often referred to as UN Environment’s flagship environmental assessment.
- The first publication was in 1997 and was originally requested by Member States.
- GEO global assessments provide an integrated analysis (e.g. social, economic, environmental) of major trends that have shaped the environment. These reports provide world leaders with policy options to take immediate action to address environmental issues by turning environmental discussions into practice.

Source: https://www.unenvironment.org/resources/global-environment-outlook
(Q) Global Peace Index is released by
a) United Nations Security Council
b) Global Peace Foundation
c) Human Rights Watch
d) Institute for Economics and Peace

Solution: d)  
India has moved one notch higher to 136th position in the 2018 Global Peace Index prepared by the international think-tank Institute for Economics and Peace (IEP), which was topped by Iceland.

(Q) Consider the following statements about Index of Industrial Production (IIP) and the Manufacturing Purchasing Managers’ Index (PMI).

1. Both are gauged by the government.
2. Both are based on surveys and hence, represent only a sample of the entire formal manufacturing sector.

Which of the above statements is/are correct?

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

Solution: b)  
There are two key parameters that the government and private sector analysts use to gauge the level of activity in the manufacturing sector — the Index of Industrial Production (IIP) and the Manufacturing Purchasing Managers’ Index (PMI).

What is manufacturing PMI?

There are two main points of difference between the PMI and the IIP. The first is that the PMI is a private sector survey while the IIP is gauged by the government. The second difference is in what is being measured. While the IIP is a measure of output, PMI, as the name suggests, measures activity at the purchasing or input stage.

- Together the two indices provide a composite and reasonably comprehensive information about the formal manufacturing sector. As with the IIP, the PMI suffers from the lacuna of not measuring informal sector activity.
- Both the PMI and the IIP are based on surveys and hence, represent only a sample of the entire formal manufacturing sector.

Source: https://www.thehindu.com/business/Industry/a-measure-of-manufacturing/article23286966.ece

(Q) Consider the following statements about SDG India Index

1. The index looks into social, economic and environmental status of the country.
2. The Index has been constructed spanning across 17 SDGs.
3. The SDG India Index was developed by NITI Ayog in collaboration with the Ministry of Statistics & Programme Implementation (MoSPI), Global Green Growth Institute and United Nations in India.
Which of the above statements is/are correct?

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

Solution: b)
The NITI Aayog released the **Baseline Report of the Sustainable Development Goals (SDG) India Index**, which comprehensively documents the progress made by India’s States and Union Territories towards implementing the **2030 SDG targets**.

- The **SDG India Index**, was developed in collaboration with the Ministry of Statistics & Programme Implementation (MoSPI), Global Green Growth Institute and United Nations in India.
- The Index spans 13 out of 17 SDGs. Progress on SDGs 12, 13 & 14 could not be measured as relevant State/UT level data were not available and SDG 17 was left out as it focuses on international partnerships.


(Q) The World Happiness Report, a landmark survey of the state of global happiness, is released by

a) World Health Organisation
b) UNESCO
c) Amnesty International
d) Sustainable Development Solutions Network

Solution: d)
The **World Happiness Report** is a landmark survey of the state of global happiness that ranks **156** countries by how happy their citizens perceive themselves to be. It is released by the Sustainable Development Solutions Network for the United Nations by the UN General Assembly.


(Q) Global Energy Transition Index 2019 is released by

a) International Atomic Energy Agency
b) Organization of the Petroleum Exporting Countries (OPEC)
c) World Economic Forum (WEF)
d) International Energy Agency (IEA)

Solution: c)
- **World Economic Forum** has released its global **Energy Transition index**. The annual list ranks 115 economies on their ability to balance energy security and access with environmental sustainability and affordability.
- The index considers both the current state of the countries’ energy system and their structural readiness to adapt to future energy needs.
• Sweden retained its top spot on the list, followed by Switzerland and Norway in the second and third positions respectively.

• India has moved up two places to rank 76th on a global energy transition index. WEF said India is amongst the countries with high pollution levels and has a relatively high CO₂ intensity in its energy system.
XI. MAPS/ PLACES

(Q) Chagos Islands in the Indian Ocean is a colonized territory by
   a) France
   b) Russia
   c) United States
   d) United Kingdom

Solution: d)
The UK should end its control of the Chagos Islands in the Indian Ocean "as rapidly as possible", the UN's highest court has said.
Source: https://en.wikipedia.org/wiki/Chagos_Archipelago

(Q) Miyako strait is located between
   a) Scarborough Shoal and Spratly Islands
   b) Paracel Islands and Okinawa Island
   c) Miyako Island and Paracel Islands,
   d) Miyako Island and Okinawa Island

Solution: d)
The Miyako Strait is a waterway which lies between Miyako Island and Okinawa Island. It has become a bone of contention between Japan and China recently.

(Q) Anak Krakatoa is located between
   a) Borneo and Sulawesi
   b) Singapore and Peninsular Malaysia
   c) Singapore and Sumatra
   d) Sumatra and Java Islands

Solution: d)
Anak Krakatoa is an island in a caldera in the Sunda Strait situated between the islands of Java and Sumatra in the Indonesia.

(Q) Nalbana Bird Sanctuary is located in
   a) Andhra Pradesh
   b) Tamil Nadu
   c) Telangana
   d) Odisha
Solution: d)
Nalbana Bird Sanctuary is the core area of the Ramsar designated wetlands of Chilika Lake, Odisha. The Bombay Natural History Society (BNHS) started operating its first regional centre on the campus of Wetland Research and Training Centre near Chilika Lake. The avifauna observatory will carry out research on avian disease by collecting samples and monitor Nalabana Bird Sanctuary.

(Q) Betla National Park recently seen in news is located in
   a) Odisha
   b) Madhya Pradesh
   c) Jharkhand
   d) Telangana

Solution: c)
The Betla National Park is located in Palamu district of Jharkhand state. The North Koyal River and its tributaries flow through the northern portion of the park, producing grasslands.

(Q) Consider the following statements about Singphan wildlife sanctuary.
   1. It is situated in Manipur.
   2. It has been declared as the Elephant Reserve.
Which of the above statements is/are correct?
   a) 1 only
   b) 2 only
   c) Both
   d) None

Solution: b)
Government of Nagaland has declared Singphan Wildlife Sanctuary as “Singphan Elephant Reserve” with the approval of Government of India on 16th August 2018. The Singphan Elephant Reserve is the 30th Elephant reserve in the country.

(Q) Consider the following statements about Megamalai Wildlife Sanctuary.
   1. It is located in Kerala.
   2. A species of wood snake is a ‘point endemic’ here.
Which of the above statements is/are correct?
   a) 1 only
   b) 2 only
   c) Both
   d) None
Solution: b)
A species of wood snake that wasn't seen for 140 years has resurfaced in a survey conducted by scientists in the Meghamalai Wildlife Sanctuary. "The snake is a 'point endemic' (found only in Meghamalai).

Meghamalai is a mountain range situated in the Western Ghats in Theni district, Tamil Nadu.


(Q) Aves island recently seen in news is located in
a) Indonesia
b) Lakshadweep
c) Maldives
d) Andaman and Nicobar

Solution: d)
The Environment Ministry has amended laws that now allow a proposed tourism project in the Aves island, of the Andaman and Nicobar island (A&N) territory.


(Q) Consider the following statements.
1. It is located on the north bank of the Brahmaputra River.
2. It is the only stronghold of rhinoceros on the north bank of the Brahmaputra river.
3. It is also known as ‘Mini Kaziranga National Park’.

The above statements refer to.
a) Manas National Park
b) Nameri National Park
c) Orang National Park
d) Dibru-Saikhowa National Park

Solution: c)
The Orang National Park is located on the north bank of the Brahmaputra River in the Darrang and Sonitpur districts of Assam.

The park has a rich flora and fauna, including great Indian one-horned rhinoceros, pygmy hog, elephants, wild buffalo and tigers. It is the only stronghold of rhinoceros on the north bank of the Brahmaputra river.

The Orang National Park is popularly known as the “mini Kaziranga.” The reason behind this is that both the parks have the same kind of climate and ecology.

(Q) Sepahijala Wildlife Sanctuary is located in
a) Mizoram
b) Nagaland
c) Tripura
d) Meghalaya
Solution: c)

**Sepahijala Wildlife Sanctuary** is a wildlife sanctuary in **Tripura**. It is a **woodland** with an **artificial lake** and natural botanical and zoological gardens. It is famous for its **clouded leopard** enclosures. The sanctuary contains a variety of birds, primates, and other animals.

Source: [https://sepahijala.nic.in/tourist-place/sepahijala-wildlife-santuary/](https://sepahijala.nic.in/tourist-place/sepahijala-wildlife-santuary/)

(Q) Mt.Makalu recently seen in news is located in

a) Aravalli Range  
b) Alps  
c) Hindu Kush  
d) Eastern Himalayas range

Solution: d)

First Indian Army Mountaineering Expedition to Mt Makalu (8485m) flagged off.

**About Mt Makalu**: Among the eight mountains in Nepal above 8000m, Mt. Makalu is the fourth tallest in Nepal and fifth highest Peak on the Earth with its height 8,463m. Mt. Makalu resides in the eastern Himalayas range just 19Km southeast of the giant Mt. Everest in the border of Nepal and China.


(Q) Greater Bay Area recently seen in news is related to which country ?

a) Canada  
b) Germany  
c) India  
d) China

Solution: d)

The "Greater Bay Area" refers to the **Chinese government’s scheme** to link the cities of Hong Kong, Macau, Guangzhou, Shenzhen, Zhuhai, Foshan, Zhongshan, Dongguan, Huizhou, Jiangmen and Zhaoqing into an integrated economic and business hub.
(Q) Consider the following statements about Skoch Awards sometimes seen in news:
   1. The Skoch Awards celebrate human excellence and agents of change in Indian society.
   2. They are the highest independently instituted civilian honours in India.
   3. These awards have become a benchmark of best practices in India in the fields of governance, infrastructure, finance, banking, technology, corporate citizenship, economics and inclusive growth.

Select the correct code:
   a) 1, 2
   b) 1, 3
   c) 2, 3
   d) 1, 2, 3

Solution: d)
The Skoch Awards celebrate human excellence and agents of change in Indian society. The Awards are based on the philosophy of spearheading positive socio-economic changes through recognising persons who have contributed immensely to salutary transformations in society and governance by displaying exemplary leadership abilities.

They are the highest independently instituted civilian honours in India. Since 2003, when these were instituted, the Skoch Awards have become the only independent benchmark of best practices in India in the fields of governance, finance, banking, technology, corporate citizenship, economics and inclusive growth.

Source: http://events.skoch.in/about.php

(Q) Consider the following statements about Champions of the Earth Award, recently seen in news.
   1. It is the highest environmental honour of the United Nations.
   2. It is awarded exclusively to the Head of the states whose actions have made a transformative impact on the environment.
   3. PM Narendra Modi was awarded 2018 ‘Champion of the Earth’ award for his leadership in promotion of solar energy.

Which of the above statements is/are correct?
   a) 1, 2
   b) 1, 3
   c) 2, 3
   d) 1, 2, 3

Solution: b)
Champions of the Earth, the UN’s highest environmental honour, celebrates outstanding figures from the public and private sectors and from civil society whose actions have had a transformative positive impact on the environment.

- Launched in 2005, Champions of the Earth has recognized dozens of exemplary individuals and organizations. Through their extraordinary achievements – whether through political leadership, grassroots action, scientific innovation, or entrepreneurial vision – each of these Champions has inspired critical action on behalf of the global environment.
• United Nations Environment has bestowed Prime Minister Narendra Modi and French president Emmanuel Macron with the 2018 'Champion of the Earth' award for their leadership in promotion of solar energy.


(Q) Medecins Sans Frontieres (MSF), often in news is
   a) An international independent medical humanitarian organisation
   b) A group of NGOs working on non-communicable diseases
   c) UN organ working for medical assistance for African Nations
   d) Evaluation of Border Entry Screening for Infectious Diseases in Humans

Solution: a)
Medecins Sans Frontieres (MSF) is an international, independent medical humanitarian organisation. It provides medical assistance to people affected by conflict, epidemics, disasters, or exclusion from healthcare. The teams are made up of tens of thousands of health professionals, logistic and administrative staff – most of them hired locally. The actions are guided by medical ethics and the principles of impartiality, independence and neutrality.

Source: https://msf-seasia.org/4818

(Q) “Subhash Chandra Bose Aapda Prabandhan Puraskar” is instituted by the Centre to recognise the work in the field of
   a) Border Security
   b) Cyber Security
   c) Disaster management
   d) Specific act of bravery or special service by the citizens

Solution: c)
These are annual awards instituted recently by the Centre to recognise the excellent work done by individuals and institutions in the country in the field of disaster management.

For the year 2019, 8th Battalion of National Disaster Response Force (NDRF) located at Ghaziabad has been selected for the Subhash Chandra Bose Aapda Prabandhan Puraskar for its commendable work in Disaster Management. The Award recipient will receive a certificate and a cash prize of Rs. 51 lakh.

Source: http://pib.nic.in/newssite/PrintRelease.aspx?relid=187690