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I. ECONOMY

(Q) Consider the following statements about Investor Education and Protection Fund Authority.

1. It is set up under the Ministry of Finance as a statutory body.
2. It aims to administer the Investor Education and Protection Fund with the objective of promoting Investor's Education, Awareness and Protection.

Which of the above statements is/are correct?

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

Solution: b)

IEPF Authority is set up under the Ministry of Corporate Affairs, Government of India as a statutory body under Companies Act 2013.

• It aims to administer the Investor Education and Protection Fund with the objective of promoting Investor's Education, Awareness and Protection.
• The Authority takes various initiatives to fulfil its objectives through Investor Awareness Programmes and various other mediums like Print, Electronic, Social Media, and Community Radio etc.
• Composition: Secretary Ministry of Corporate Affairs is the Chairperson of the Authority. Joint Secretary Ministry of Corporate Affairs is the Chief Executive Officer of the Authority.

Source: http://www.iepf.gov.in/IEPF/about_us.html

(Q) Consider the following statements about National Housing Bank (NHB).

1. Reserve Bank of India (RBI) is the majority shareholder in NHB.
2. It is the principal agency to promote housing finance institutions both at local and regional levels.
3. It encourages augmentation of supply of buildable land and also building materials for housing.

Which of the above statements is/are correct?

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

Solution: c)

The Reserve Bank of India (RBI) has sold its entire stakes in National Housing Bank. The government now holds a 100 per cent stake in NHB.

• NHB is an All India Financial Institution (AIFI), set up in 1988, under the National Housing Bank Act, 1987.
• It is an apex agency established to operate as a principal agency to promote housing finance institutions both at local and regional levels and to provide financial and other support incidental to such institutions and for matters connected therewith.

**NHB has been established to achieve, inter-Alia, the following objectives –**

1. To promote a sound, healthy, viable and cost-effective housing finance system to cater to all segments of the population and to integrate the housing finance system with the overall financial system.
2. To promote a network of dedicated housing finance institutions to adequately serve various regions and different income groups.
3. To augment resources for the sector and channelise them for housing.
4. To make housing credit more affordable.
5. To regulate the activities of housing finance companies based on regulatory and supervisory authority derived under the Act.
6. To encourage augmentation of supply of buildable land and also building materials for housing and to upgrade the housing stock in the country.
7. To encourage public agencies to emerge as facilitators and suppliers of serviced land, for housing.


(Q) Consider the following statements about National Bank for Agriculture & Rural Development (NABARD).

1. NABARD Serves as an apex financing agency for the institutions providing investment and production credit for promoting the various developmental activities in rural areas.
2. It was established based on the recommendations of the Committee set up by the Reserve Bank of India (RBI) under the chairmanship of Narasimham.
3. International associates of NABARD include World Bank-affiliated organisations and global developmental agencies working in the field of agriculture and rural development.

Which of the above statements is/are correct?

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

**Solution: b)**

The Reserve Bank of India (RBI) has sold its entire stakes in the National Bank for Agriculture & Rural Development (NABARD). The decision to divest its entire stake was taken based on the recommendations of the second Narasimham Committee.

• The **government now holds a 100 per cent stake in NABARD.**

NABARD is an apex development and specialized bank established on 12 July 1982 by an act by the parliament of India.

1. Its main focus is to uplift rural India by increasing the credit flow for elevation of agriculture & rural non-farm sector.
2. It was established based on the recommendations of the Committee set up by the Reserve Bank of India (RBI) under the chairmanship of Shri B. Shivaraman.
3. It replaced the Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of Reserve Bank of India, and Agricultural Refinance and Development Corporation (ARDC).
4. It has been accredited with “matters concerning policy, planning and operations in the field of credit for agriculture and other economic activities in rural areas in India”.

5. NABARD is active in developing financial inclusion policy.

6. Serves as an apex financing agency for the institutions providing investment and production credit for promoting the various developmental activities in rural areas

7. International associates of NABARD include World Bank-affiliated organisations and global developmental agencies working in the field of agriculture and rural development. These organizations help NABARD by advising and giving monetary aid for the upliftment of the people in the rural areas and optimising the agricultural process.

Source: https://www.nabard.org/content.aspx?id=2

(Q) Which of the following indicates “the extent of funds a bank has kept aside to cover loan losses”

a) Statutory Liquidity Ratio (SLR)

b) Cash Reserve Ratio (CLR)

c) Provisional coverage ratio (PCR)

d) None

Solution: c)

Provisional Coverage Ratio (PCR) is the ratio of provisioning to gross non-performing assets, and indicates the extent of funds a bank has kept aside to cover loan losses.

- The provision coverage ratio (PCR) gives an indication of the provision made against bad loans from the profit generated. **Higher the PCR, lower is the unexposed part of the bad debts.**

- **Consistent rise in PCR** also indicates the adoption of discipline for making adequate provisions for NPAs.

DIVERGENCE: Divergence takes place when the Reserve Bank of India (RBI) finds that a lender has under-reported (or not reported at all) bad loans in a particular year and hence asks the lender to make disclosures if under-reporting is more than 10% of bad loans or the provisioning.

(Q) The ‘Social and Labor Convergence Programme (SLCP),’ an initiative

(a) that brings all labor unions on a common platform

(b) to help improve living standards of labor around the world

(c) to have a standard-neutral, converged assessment framework for the textile and clothing industry

(d) None

Solution: c)

(Q) “Currency Monitoring List” is seen in news, related to the affairs of
a) UK  
b) France  
c) USA  
d) Russia  

Solution: c)  
The **U.S. removed India from its currency monitoring list of major trading partners**, citing steps being taken by New Delhi that addressed some of the Donald Trump administration's major concerns.  
India for the first time was placed by the US in its currency monitoring list of countries with potentially questionable foreign exchange policies in **May 2018** along with five other countries - China, Germany, Japan, South Korea and Switzerland.  
Source:  

(Q) T.N. Manoharan taskforce is related to  
a) merger of Banks  
b) digital payment structure  
c) development of secondary market for corporate loans  
d) regulation of crypto currencies  

Solution: c)  
The **Reserve Bank of India (RBI)** constituted a task force on the **development of secondary market for corporate loans**.  
The task force would be headed by **T.N. Manoharan**, chairman of Canara Bank.  
In India, banks sell their stressed loans to the asset reconstruction companies, but has practically no other alternatives. However, globally, there is a healthy corporate loan market where banks can offload their stressed assets and those get traded. **Credit Default Swaps (CDS)** against these loans also get developed as a result.  
A **vibrant, deep and liquid secondary market for debt** would go a long way in **increasing the efficiencies of the debt market in general** and would **aid in resolution of stressed assets** in particular. A well-developed secondary market for debt would also aid in transparent price discovery of the inherent riskiness of the debt being traded.  
The terms of the committee, which should submit its report by end of August, would be to suggest required **policies for facilitating development of secondary market in corporate loans**, including loan transaction platform for stressed assets, **creation of a loan contract registry**, its ownership structure and related protocols such as standardization of loan information, independent validation and data access.  
The taskforce would **design the market structure for loan sales/auctions**, including online platforms and the related trading and transaction reporting infrastructure, and will suggest about the need for, and role of, third party intermediaries, such as servicers, arrangers, market makers, etc. It would suggest how participation can be enhanced in the market.  
Source:  
(Q) Harsh Vardhan panel is related to
   a) devolution of finances between centre and states
   b) home finance securitization
   c) restructuring of bad loans
   d) None

Solution: b)
The Reserve Bank of India (RBI) announced the setting-up of a committee to work for the development of housing finance securitisation market in the country under the chairmanship of Harsh Vardhan, Senior Advisor with Bain & Co.

The committee would review the existing state of mortgage-backed securitisation in India, including the current regulations, and would make specific recommendations on aligning the same with international norms.

The six-member panel would also identify the steps required for standardisation of mortgage-backed securitisation practices such as conforming mortgages, mortgage documentation standards, digital registry for ease of due diligence and verification by investors.

II. GEOGRAPHY & ENVIRONMENT

(Q) Consider the following statements with respect to migratory waterbirds.

1. The routes that migratory waterbirds traverse on an annual basis are known as ‘flyways’.
2. During migration, waterbirds rely on wetlands to rest and feed, building up sufficient energy to fuel the next phase of their journey.
3. Recently east Asian birds stopped at Andaman and Nicobar Islands for a few week rest before they can fly further.

Which of the above statements is/are correct?

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

Solution: d)

- In a first, east Asian birds make Andaman stopover. These birds also use Andaman and Nicobar Islands for a few week rest before they can fly along the East Asian-Australasian Flyway (EAAF).

Key facts:

- The routes that migratory waterbirds traverse on an annual basis are known as ‘flyways’. There are nine major flyway around the world.
- The East Asian – Australasian Flyway (EAAF) stretches from the Russian Far East and Alaska, southwards through East Asia and South-east Asia, to Australia and New Zealand and encompasses 22 countries.
- During migration, waterbirds rely on a system of highly productive wetlands to rest and feed, building up sufficient energy to fuel the next phase of their journey.


(Q) Sharm El Sheikh Declaration, 2018, recently in news is related to

a) Peace treaty
b) Nuclear Disarmament
c) Biological Diversity
d) Ending Child Labour

Solution: c)

The 14th Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 14) was held in Sharm El Sheikh, Egypt.

COP 14 Ministerial High-Level Segment (HLS)

- Theme: "Mainstreaming of biodiversity in the energy and mining; processing industry; infrastructure and health sectors"
- Declaration: “Sharm El Sheikh Declaration”.

Source: https://www.cop14-egypt.com/
(Q) Consider the following statements about National Clean Air Programme (NCAP).

1. This is the first ever effort in the country to frame a national framework for air quality management with a time-bound reduction target.
2. The NCAP will be a five-year action plan with 2019 as the first year.
3. City specific action plans are being formulated for 102 non-attainment cities identified for implementing mitigation actions.

Which of the above statements is/are correct?

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

Solution: d)

India's recently released, National Clean Air Program (NCAP) provides a roadmap to prevent, control, and reduce unhealthy air pollution.

Overall objective of the NCAP is comprehensive mitigation actions for prevention, control and abatement of air pollution besides augmenting the air quality monitoring network across the country and strengthening the awareness and capacity building activities.

The NCAP will be a mid-term, five-year action plan with 2019 as the first year.

The NCAP will be institutionalized by respective ministries and will be organized through inter-sectoral groups, which include, Ministry of Road Transport and Highway, Ministry of Petroleum and Natural Gas, Ministry of New and Renewable Energy, Ministry of Heavy Industry, Ministry of Housing and Urban Affairs, Ministry of Agriculture, Ministry of Health, NITI Aayog, CPCB, experts from the industry, academia, and civil society. The program will partner with multilateral and bilateral international organizations, and philanthropic foundations and leading technical institutions to achieve its outcomes.

City specific action plans are being formulated for 102 non-attainment cities identified for implementing mitigation actions under NCAP.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=187400

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

1. It is an Inter-governmental Organisation whose purpose is the conservation of whales and the management of whaling.
2. It was established in 1946, making it one of the first pieces of international environmental legislation.
3. Japan has announced its decision to withdraw from the International Whaling Commission (IWC).
4. India is not the member of IWC.

Which of the above statements is/are correct?

a) 1, 2, 4
b) 1, 2, 3
c) 2, 3, 4
d) 1, 2, 3, 4
Solution: b)
The **International Whaling Commission** is an **Inter-governmental Organisation** whose purpose is the conservation of whales and the management of whaling. The legal framework of the IWC is the **International Convention for the Regulation of Whaling**. This Convention was established in **1946**, making it one of the first pieces of international environmental legislation. All member countries of the IWC are signatories to this Convention. The IWC has a current membership of **89** Governments from countries all over the world.

Membership of the IWC is open to any country in the world that formally adheres to the 1946 Convention.

- **India joined the commission in 1981.**

**Japan** has announced its decision to **withdraw** from the International Whaling Commission (IWC). The withdrawal would enable Japan to **resume commercial whaling activities**. Japan has said that it would undertake commercial whaling from July 2019 limited to **Japan's territorial waters and exclusive economic zones**.

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

(Q) Consider the following statements about Hangul, Kashmir’s iconic wildlife species.

1. It is placed under Schedule I of the Indian Wildlife (Protection) Act, 1972.
2. It is listed under the Species Recovery Programme of the Wildlife Institute of India (WII) and the Environmental Information System (ENVIS) of the MoEFCC.
3. The state of Jammu & Kashmir, along with the IUCN and the WWF prepared a project for the protection of these animals, which was known as Project Hangul.

Which of the above statements is/are correct?

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

Solution: d)

A massive decline in the population of Kashmir’s iconic wildlife species, the **Hangul** (Cervus hanglu hanglu), also known as the **Kashmir stag**, continues to be a big concern.

- It is the **state animal** of Jammu & Kashmir.
- It is found in **dense riverine forests** in the high valleys and mountains of the Kashmir Valley and northern Chamba district in Himachal Pradesh. In Kashmir, it’s found in the **Dachigam National Park**.
- The Hangul was once widely distributed in the mountains of Kashmir and parts of Chamba district in neighbouring Himachal Pradesh.
- The IUCN’s Red List has classified it as **Critically Endangered** and is similarly listed under the Species Recovery Programme of the Wildlife Institute of India (WII) and the Environmental Information System (ENVIS) of the MoEFCC.
- The state of Jammu & Kashmir, along with the **IUCN** and the **WWF** prepared a project for the protection of these animals, which was known as **Project Hangul**.

(Q) Consider the following statements about Mission Innovation (MI)

1. Mission Innovation is to accelerate global clean energy innovation with the objective to make clean energy widely affordable.
2. MI was announced at COP24 Katowice 2018.
3. The members have committed to seek to double public investment in clean energy RD&D.

Which of the above statements is/are correct?

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

Solution: b)

Mission Innovation (MI) is a global initiative of 23 countries and the European Commission (on behalf of the European Union) working to reinvigorate and accelerate global clean energy innovation with the objective to make clean energy widely affordable.

- MI was announced at COP21 on November 30, 2015, as world leaders came together in Paris to commit to ambitious efforts to combat climate change.
- These 24 members have committed to seek to double public investment in clean energy RD&D and are engaging with the private sector, fostering international collaboration and celebrating innovators.

Source: http://mission-innovation.net/about-mi/overview/

(Q) Consider the following statements regarding doubling of Tiger population.

1. China is set to become the first country to double their wild tiger population.
2. The tiger range governments committed to double the number of wild tigers by 2022.
3. India, Indonesia, Myanmar, Sri Lanka and Russia are some of the Tiger Range countries.

Which of the above statements is/are incorrect?

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

Solution: c)

There are currently 13 tiger range countries: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand and Viet Nam.

- Tiger range governments came together for the first time and decided that business-as-usual approaches were not working. All 13 tiger range governments committed to the most ambitious conservation goal set for a single species – to double the number of wild tigers by 2022.
- Nepal is set to become the first country to double their wild tiger population.

Source: http://tigers.panda.org/tx2/
(Q) Which of the following constitutes highest human source of Methane?
   a) Livestock Farming
   b) Fossil fuel production and use
   c) Biomass burning
   d) Rice agriculture

Solution: b)

There are both natural and human sources of methane emissions. The main natural sources include wetlands, termites and the oceans. Natural sources create 36% of methane emissions. Human sources include landfills and livestock farming. But the most important source being the production, transportation and use of fossil fuels. Human-related sources create the majority of methane emissions, accounting for 64% of the total. Methane levels have more than doubled over the last 150 years. This is because of human activities like fossil fuel use and intensive farming.

Since the Industrial Revolution, human sources of methane emissions have been growing. Fossil fuel production and intensive livestock farming have caused the current increase methane levels. Together these two sources are responsible for 60% of all human methane emissions. Other sources include landfills and waste (16%), biomass burning (11%), rice agriculture (9%) as well as biofuels (4%)

Source: https://whatsyourimpact.org/greenhouse-gases/methane-emissions

(Q) Consider the following statements about Fall Armyworm.
   1. It is an insect that is native to tropical and subtropical regions of the Americas.
   2. Fall Armyworm primarily affects maize, but also rice and sorghum as well as cotton and some vegetables
   3. Till now there are no reports of Fall Armyworm attack on crops in India.

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

Solution: c)
Fall Armyworm is an insect native to tropical and subtropical regions of the Americas. It was first detected in Central and Western Africa in early 2016 and has now spread across Sub-Saharan Africa and recently reached Yemen and India.

- In the larval stage, the insect causes damage to crops, feeding on more than 80 plant species.
- FAW primarily affects maize, but also rice and sorghum as well as cotton and some vegetables.
- The moth can fly up to 100 km per night and the female moth can lay up to a total of 1000 eggs in her lifetime.
- Fall Armyworm (Spodoptera frugiperda) has caused extensive damage to maize crops in Tiruchi, Karur, Perambalur and several other districts in Tamil Nadu.


(Q) Consider the following statements about Hornbills

1. They swallow the fruit as a whole causing no damage to the seed, hence best fruit handlers among frugivores.
2. They are known to disperse seeds far away from the parent plant, up to 100 km.
3. Population of Hornbills directly effects regeneration of seed plants in their ecosystem.

Which of the above statement is/are incorrect?

a) 1 and 3 Only  
b) 3 Only  
c) 2 Only  
d) None

Solution: c)

Among the different bird species, hornbills were found to be the most effective seed dispersers. They were found to swallow and disperse most of the fruits they handled. They also remove maximum number of fruits — and therefore seeds — in every visit to a fruiting tree.

They swallow the fruit as a whole causing no damage to the seed. They are known to disperse seeds far away from the parent plant, up to 13 km.

Though bulbuls visited small and medium-sized seed trees in large numbers, they did not handle the seed well. They often peck on the pulp and/or drop the seed under the parent plant. But even for large, medium and small-seeded plants, hornbills swallowed as a whole and thus were the best fruit-handlers among the frugivores.

Studies noted that when the number of hornbills decreased in an area, the regeneration of large-seeded plants that were primarily dispersed from them was also affected.

Seeds that fall under the parent tree face heavy competition, predation by rodents and insects and fungal infections. So their chances of survival are very low. Plants depend on frugivore birds to disperse the seeds at favourable sites, which have low competition and predation pressures, to expand their geographic range. And so the decline of frugivores could severely affect the ecosystem.

(Q) *Kattuyanam* often seen in news refers to

- a) a invasive plant species in Kerala
- b) a paddy variety which is both drought resistant and flood tolerant
- c) a fruit variety found in Andamans
- d) a tribal harvest festival in South India

**Solution: b)**

A **paddy variety** in Tamil Nadu called “*Kattuyanam*” is **flood tolerant and drought resistant**.


(Q) Consider the following statements:

1. CFC-11 is one of a class of compounds of chlorofluorocarbons that destroy atmospheric ozone and also potent greenhouse gases that contribute to atmospheric warming.
2. Chlorofluorocarbons were outlawed for almost all uses by the Montreal Protocol.

Which of the above statement is/are correct?

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

**Solution: c)**


(Q) *Kappaphycus alvarezii* is a

- a) invasive seaweed
- b) invasive pest
- c) keystone species
- d) None

**Solution: a)**

The invasive *Kappaphycus alvarezii* seaweed, which smothers and kills coral reefs, has spread its wings to coral reef areas in Valai island in the Gulf of Mannar (GoM) and set to invade new coral colonies in the marine national park.

(Q) *Kudakrumia rangnekari* is

a) a new wasp species  

b) an extinct human species  

c) a plant used for biodiesel  

d) a disease-causing bacterium

**Solution: a)**

A new species of wasp named *Kudakrumia rangnekari* has been recently identified by scientists in Goa, in the forests of Western Ghats.

III. GOVERNMENT PROGRAMMES & INSTITUTIONS

(Q) National Disaster Management Authority will involve in which of the following disasters?

1. Urban Floods
2. Heat Wave
3. Nuclear and Radiological Disaster
4. Chemical and Biological threat

Select the correct code:

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

Solution: d)

On 23 December 2005, the Government of India enacted the Disaster Management Act, which envisaged the creation of the National Disaster Management Authority (NDMA), headed by the Prime Minister, and State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers, to spearhead and implement a holistic and integrated approach to Disaster Management in India.

It involves in the following disasters

**Natural Disaster:**
- Earthquakes
- Floods
- Landslides
- Cyclones
- Tsunamis
- Urban Floods
- Heat Wave

**Man-Made Disasters:**
- Nuclear and Radiological Disaster
- Chemical Disaster
- Biological Disaster

(Q) Consider the following statements regarding malaria elimination in India.

1. The Indian Council of Medical Research has launched the ‘Malaria Elimination Research Alliance (MERA) India’ to eliminate the disease from India by 2030.
2. Over the past decade malaria deaths have increased substantially in India.
3. National Vector Borne Diseases Control Program (NVBDCP) aims to achieve “Malaria free India by 2030”.

Which of the above statements is/are correct?

a) 1, 2  
b) 1, 3  
c) 2, 3  
d) 1, 2, 3
The Indian Council of Medical Research has launched the ‘Malaria Elimination Research Alliance (MERA) India’ – a conglomeration of partners working on malaria control – in order to prioritise, plan and scale up research to eliminate the disease from India by 2030.

- Over the past two decades, India has made impressive progress in malaria control. The malaria burden has declined by over 80 per cent, 2.03 million cases in 2000 to 0.39 million in 2018, and malaria deaths by over 90 per cent, 932 deaths in 2000 to 85 in 2018.
- This success has provided a strong foundation for the commitment from the leadership of the government of India to eliminate malaria from India by 2030.
- National Vector Borne Diseases Control Program (NVBDCP) of India has developed a comprehensive framework to achieve the overarching vision of "Malaria free India by 2030".
- NVBDCP’s National Strategic Plan clearly recognises the critical role of research to support and guide malaria elimination efforts.

(Q) Consider the following statements about Yuva Sahakar-Cooperative Enterprise Support and Innovation Scheme.

1. It is a scheme for attracting youth to cooperative business ventures.
2. The scheme is linked to Rs 1000 crore ‘Cooperative Start-up and Innovation Fund (CSIF)’ created by National Cooperative Development Corporation (NCDC).
3. It is an initiative of Ministry of Commerce and Industry.

Which of the above statements is/are correct?

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

Solution: a)

Union Agriculture Minister launches National Cooperative Development Corporation (NCDC)’s new scheme to promote young entrepreneurs in cooperatives.

The scheme is linked to Rs 1000 crore ‘Cooperative Start-up and Innovation Fund (CSIF)’ created by the NCDC. It would have more incentives for cooperatives of North Eastern region, Aspirational Districts and cooperatives with women or SC or ST or PwD members.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=184744

(Q) Consider the following statements about Pradhan Mantri Jan-Dhan Yojana (PMJDY).

1. PMJDY is a National Mission on Financial Inclusion.
2. It provides RuPay Debit card having inbuilt life insurance cover of ₹ 1 lakh.
3. Overdraft facility is available in only one account per household.

Which of the above statements is/are correct?

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

**Pradhan Mantri Jan-Dhan Yojana (PMJDY)** is National Mission for Financial Inclusion to ensure access to financial services, namely, Banking/ Savings & Deposit Accounts, Remittance, Credit, Insurance, Pension in an affordable manner. In addition, the beneficiaries would get RuPay Debit card having inbuilt accident insurance cover of ₹1 lakh. The scheme provides life cover of Rs. 30,000/- payable on death of the beneficiary, subject to fulfillment of the eligibility condition.

The plan also envisages channeling all Government benefits (from Centre / State / Local Body) to the beneficiaries accounts and pushing the Direct Benefits Transfer (DBT) scheme of the Union Government.

**Overdraft facility upto Rs.5000/-** is available in only one account per household, preferably lady of the household.

Source: [https://pmjdy.gov.in/scheme](https://pmjdy.gov.in/scheme)

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**Q** Consider the following statements about Pradhan Mantri Vaya Vandana Yojana (PMVVY).

1. PMVVY is a Pension Scheme exclusively for the senior women citizens aged 60 years and above.
2. Scheme provides an assured return of 8% p.a. for 10 years.
3. The scheme also allows for premature exit for the treatment of any critical/terminal illness of self or spouse.

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 Vaya Vandana Yojana (PMVVY),** is a pension scheme exclusively for senior citizens aged 60 years and above.

- The Scheme can be purchased **offline** as well as **online** through Life Insurance Corporation (LIC) of India which has been given the sole privilege to operate this Scheme.
- Scheme provides an assured return of **8% p.a. for 10 years.**
- Pension is payable as per the frequency of monthly/ quarterly/ half-yearly/ yearly as chosen by the pensioner at the time of purchase.
- The scheme is **exempted** from Service Tax/ GST.
- On survival of the pensioner to the end of the policy term of 10 years, Purchase price along with final pension instalment shall be payable.
- Loan upto 75% of Purchase Price shall be allowed after 3 policy years (to meet the liquidity needs). Loan interest shall be recovered from the pension instalments and loan to be recovered from claim proceeds.
- The scheme also allows for premature exit for the treatment of any critical/terminal illness of self or spouse. On such premature exit, 98% of the Purchase Price shall be refunded.
- On death of the pensioner during the policy term of 10 years, the Purchase Price shall be paid to the beneficiary.

(Q) Consider the following statements about National Automotive Testing and R&D Infrastructure Project (NATRiP)

1. It is the largest initiative in Automotive sector and a joint initiative between the Government of India, a number of State Governments and Indian Automotive Industry.

2. The Project aims at creating core global competencies in Automotive sector in India and facilitate integration of Indian Automotive industry with the world.

Which of the following statements is/are correct?

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

Solution: c)

National Automotive Testing and R&D Infrastructure Project (NATRiP), the largest and one of the most significant initiatives in Automotive sector so far, represents a unique joining of hands between the Government of India, a number of State Governments and Indian Automotive Industry to create a state of the art Testing, Validation and R&D infrastructure in the country.

The Project aims at creating core global competencies in Automotive sector in India and facilitate seamless integration of Indian Automotive industry with the world as also to position the country prominently on the global automotive map.

Source: https://www.natrip.in/

(Q) Consider the following statements about Serious Fraud Investigation Office (SFIO).

1. SFIO is a multi-disciplinary organization for detecting and prosecuting white-collar crimes/frauds.

2. It functions under Ministry of Home Affairs.

Which of the above statements is/are correct?

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

Solution: a)

SFIO is a multi-disciplinary organization under Ministry of Corporate Affairs, consisting of experts in the field of accountancy, forensic auditing, law, information technology, investigation, company law, capital market and taxation for detecting and prosecuting or recommending for prosecution white-collar crimes/frauds.

Source: https://sfio.nic.in/AboutSFIO.aspx
Consider the following statements about AGMARK Certification Scheme.

1. Directorate of Marketing & Inspection (DMI) is implementing the scheme.
2. The Scheme is mandatory for all agricultural commodities.
3. Consumers not satisfied with the quality of agricultural produce certified under Agmark, can make a complaint to the Consumer Disputes Redressal Commission.

Which of the above statements is/are correct?

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

**Solution: b)**

Directorate of Marketing & Inspection (DMI) in the Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture, Cooperation & Farmers Welfare is implementing the provisions of **Agricultural Produce (Grading & Marking) Act, 1937.** Standards notified as per the provisions of the Act are popularly called AGMARK Standards. These standards differentiate between quality and 2-3 grades are prescribed for each commodity. Grades help farmers to get prices for agricultural commodities as per the quality produced by them and consumers get the desired quality. Agricultural commodities that have been notified include fruits, Vegetables, cereals, pulses, oilseeds, vegetable oils, ghee, spices, honey, creamery butter, wheat atta, besan, etc.

- The DMI is implementing the scheme of certification of agricultural commodities for domestic trade and export. The Scheme is voluntary.
- Consumers not satisfied with the quality of agricultural produce certified under Agmark, can make a complaint to the Agricultural Marketing Adviser.

Source: [https://dmi.gov.in/Documents/Final%20Text%20Matter%20related%20to%20QC%20Section.pdf](https://dmi.gov.in/Documents/Final%20Text%20Matter%20related%20to%20QC%20Section.pdf)

(Q) UNNATI programme recently seen in news is related to

a) Skill training programme for the North-eastern parts of the country. 
b) Nutrition programme to reduce the incidence of anaemia in the adolescent girls. 
c) Capacity-building programme on nanosatellite development  
d) Scheme that aims to enrich Rural India

**Solution: c)**

**UNNATI** (Unispace Nanosatellite Assembly & Training) programme – The Indian Space Research Organisation's (ISRO) **capacity-building programme** on nanosatellite development.

Launched to commemorate the 50th anniversary of the first United Nations conference on the exploration and peaceful uses of outer space (UNISPACE 50), the programme aims to provide opportunities to the participating developing countries to become stronger in assembling, integrating and testing nanosatellites.

Consider the following statements about Green – Ag project.

1. It is for transforming Indian Agriculture for global environmental benefits and the conservation of critical biodiversity and forest landscapes.
2. Food and Agriculture Organization is the implementing agency.

Which of the above statements is/are correct?

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

Solution: c)

The Government has launched the “Green – Ag: Transforming Indian Agriculture for global environmental benefits and the conservation of critical biodiversity and forest landscapes” in association with Global Environment Facility (GEF).

About the Project:

- The project would be implemented in collaboration with the Food and Agriculture Organisation (FAO) in high-conservation-value landscapes of five States namely, (i) Madhya Pradesh: Chambal Landscape, (ii) Mizoram: Dampa Landscape, (iii) Odisha: Similipal Landscape, (iv) Rajasthan: Desert National Park Landscape and v) Uttarakhand: Corbett-Rajaji Landscape.
- The Green-Ag project seeks to integrate biodiversity, climate change and sustainable land management objectives and practices into Indian agriculture.
- The project aims to catalyze a transformative change of India’s agricultural sector to support the achievement of national and global environmental benefits and conservation of critical biodiversity and forest landscapes.
- The project supports harmonization between India’s agricultural and environmental sector priorities and investments to realise the national and global environmental benefits without compromising on India’s ability to strengthen rural livelihoods and meet its food and nutrition security.


Consider the following statements,

1. India has 2,000 health workers per 10,000 people.
2. Rural areas with nearly 71% of India's population have only 36% of health workers.
3. More than 80% of doctors and 70% of nurses and midwives are employed in the private sector.

Which of the above statements is/are correct?

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

Solution: b)
India has **20.6 health workers per 10,000 people**, a study based on National Sample Survey Organisation reveals. While it is less than the **World health Organisation’s minimum threshold of 22.8**, the numbers have increased from **19 health workers per 10000 people in 2012**.

The uneven distribution of health workers is seen in private and public health sector too — more than 80% of doctors and 70% of nurses and midwives are employed in the private sector.

Unfortunately, the distribution of health workers is uneven between urban and rural areas. Rural areas with nearly 71% of India's population have only 36% of health workers.

Source: [https://www.thehindu.com/sci-tech/health/india-has-20-health-workers-for-10000-people-study-finds/article27297736.ece](https://www.thehindu.com/sci-tech/health/india-has-20-health-workers-for-10000-people-study-finds/article27297736.ece)
IV. SCIENCE AND TECHNOLOGY

(Q) *Mosquirix*, recently seen in news is related to
a) Genetically modified mosquitoes to prevent diseases
b) Vector control program of African Nation Malawi
c) World’s first Malaria vaccine
d) None of the above

Solution: c)

- World’s first vaccine against a parasitic disease: *Mosquirix*:
- RTS,S, known by its trade name Mosquirix, uses antibodies to target proteins presented by sporozoites (such as the circumsporozoite protein of *falciparum*) to enhance the immune system and help prevent the parasite from infecting the liver.
- Mosquirix is also engineered using a **hepatitis B viral protein** and a chemical adjuvant to further boost the immune response for enhanced effectiveness.

(Q) Zearalenone, recently seen is news is
a) Antibiotic used to treat tuberculosis
b) Fungal toxin infesting cereals
c) Plant Growth Regulator
d) New Rice variety

Solution: b)

*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.

Source: https://www.thehindu.com/sci-tech/science/the-lowdown-on-zearalenone-in-cereals/article26100813.ece

(Q) Technical textiles can be used for
1. Floor and Wall coverings
2. Umbrella cloth
3. Geonets
4. Sanitary napkins
5. Artificial implants
6. Contact lenses

Which of the above statements are correct?

- a) All except 4 and 6
- b) All except 2 and 4
- c) All except 4
- d) All of them
Solution: d)

- Technical or engineered textiles are defined as products that are used for functional purposes. These textiles have applications in multiple areas of economic activity, such as aerospace, shipping, sports, agriculture, defense and health care.

Technical textiles are segregated into 12 major segments:

(Q) Stratospheric Observatory for Infrared Astronomy (SOFIA) is the
a) NASA telescope that looks at black holes, quasars and supernovas
b) Determine the three-dimensional structure and dynamic behavior of Stratosphere.
c) Study the universe in the infrared.
d) World’s largest airborne astronomical observatory

Solution: d)

Considered to be one of the premier science programs of NASA, SOFIA is a joint project between NASA and the German Aerospace Centre, DLR. It features a 100-inch diameter telescope weighing up to 20 tons and is mounted on a modified Boeing 747SP aircraft. SOFIA’s first-generation cameras and spectrographs enable NASA to use it for a wide variety of missions. It will observe celestial magnetic fields, star-forming regions, comets, nebulae, and the galactic centre.

Sofia’s 2.5-meter diameter telescope allows astronomers to access the visible, infrared and sub-millimeter spectrum. Being the world’s largest airborne astronomical observatory, the telescope has the ability to produce a higher resolution image, three times higher in quality than those captured by other observatories.


Source: [https://indianexpress.com/article/what-is/what-is-sofia-nasas-flying-observatory-5008461/](https://indianexpress.com/article/what-is/what-is-sofia-nasas-flying-observatory-5008461/)
(Q) Consider the following statements regarding BepiColombo mission.

1. It is a joint mission between ESA and NASA.
2. The mission is for the scientific investigations at planet Mercury.
3. Earlier NASA’s MESSENGER spacecraft orbited the planet Mercury.

Which of the above statements is/are correct?

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

Solution: b)

The **ESA-JAXA BepiColombo mission** has successfully completed its near-Earth commissioning phase and is now ready for the operations that will take place during the cruise and, eventually, for its scientific investigations at Mercury.

**BepiColombo** is a joint mission between ESA and the Japan Aerospace Exploration Agency (JAXA), executed under ESA leadership.

The mission comprises two spacecraft: The **Mercury Planetary Orbiter (MPO)** and the **Mercury Magnetospheric Orbiter (MMO)**.

The MPO will study the surface and internal composition of the planet, and the MMO will study Mercury’s magnetosphere, that is, the region of space around the planet that is influenced by its magnetic field.

**Mercury** is a poorly explored planet. So far, only two spacecraft have visited the planet: NASA’s Mariner 10, and NASA’s MESSENGER spacecraft.

(Q) Consider the following statements regarding Formalin in Fish.

1. Using formalin on fish will extend the storage life of fresh fish and artificially improve the sensory attributes.
2. Formalin is derived from formaldehyde which is a known cancer-causing agent.
3. To ensure safety and hygiene at fish distribution centres, Tamil Nadu government has launched ‘Operation Sagar Rani’.

Which of the above statements is/are correct?

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

Solution: a)

**Formalin** (formaldehyde in water) is a common adulterant in fish. Traders and suppliers use it to extend the storage life of fresh or chilled fish and artificially improve the sensory attributes.

- Formalin is derived from formaldehyde which is a known cancer-causing agent. It is used to preserve bodies in mortuaries.
In June 2018, Kerala food safety department officials seized nearly 9,600 kg of fish preserved in formalin at a border check post in Kollam district. The seizure was part of ‘Operation Sagar Rani’ launched by the state.


(Q) Consider the following statements about International Space Station (ISS).
1. The ISS programme is the joint project of NASA, ISRO, Roscosmos, JAXA and ESA.
2. It is a habitable artificial satellite, in low Earth orbit.
3. ISS serves as a microgravity and space environment research laboratory.
Which of the above statements is/are correct?
   a) 1, 2
   b) 2 only
   c) 1, 3
   d) 2, 3

Solution: d)
The International Space Station (ISS) is a space station, or a habitable artificial satellite, in low Earth orbit. The ISS is now the largest artificial body in orbit.
- The ISS serves as a microgravity and space environment research laboratory in which crew members conduct experiments in biology, human biology, physics, astronomy, meteorology and other fields.
- The station is suited for the testing of spacecraft systems and equipment required for missions to the Moon and Mars.
- The ISS programme is a joint project among five participating space agencies: NASA, Roscosmos, JAXA, ESA, and CSA.
- The ownership and use of the space station is established by intergovernmental treaties and agreements.
- The station is divided into two sections, the Russian Orbital Segment (ROS) and the United States Orbital Segment (USOS), which is shared by many nations.

(Q) “Serotonin” is often seen in news refers to
   (a) important chemical produced in the body and required for communication between neurons among other things
   (b) cloth, which protects humans from harsh winters
   (c) fuel often used in spaceships
   (d) a bio-degradable plastic

Solution: a)
Serotonin is a very important chemical produced in the body and required for communication between neurons among other things. Activity of this protein is crucial for appetite, emotional well being, cognition and memory.

(Q) Consider the following statements about RISAT-2B

1. It was launched by GSLV Mk III
2. RISAT-2B satellite would be vital for Armed forces, agriculture forecasting, forestry and Disaster management support.
3. Its X-band synthetic aperture radar can give added details such as the size of objects on earth, structures and movement.

Select the correct code from below:

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

Solution: b)

PSLV-C46 rocket of the Indian Space Research Organisation (ISRO) placed RISAT-2B, an X-band microwave Earth observation satellite, into orbit 556 km above earth.

- Data from the satellite would be vital for the Armed Forces, agriculture forecasters and disaster relief agencies.
- The new satellite will enhance India’s all-weather [space-based] capabilities in agriculture, forestry and disaster management.
- Designed at ISRO’s U.R. Rao Satellite Centre (URSC) in Bengaluru and fast-tracked in just 15 months, the RISAT-2B is built to operate for at least five years.
- Its X-band synthetic aperture radar can give added details such as the size of objects on earth, structures and movement. Information from RISAT-2B will complement data from normal optical remote sensing satellites. Such data are useful for agencies that need ground images during cloud, rain and in the dark.
- This is the third Indian RISAT in 10 years, and follows the Israeli-built RISAT-2 in 2009 and the ISRO-built RISAT-1 in 2012. The older RISATs have reached the end of their lives.
- ISRO has planned a series of radar imagers in the coming months to enhance its space based observation of Earth and the Indian region.


(Q) Ourasphaira giraldae is a

a) drought resistant seed variety
b) multicellular fungus
c) medicinal fruit
d) disease causing mosquito

Solution: b)

Microfossils of a globular spore connected to a T-shaped filament excavated in an Arctic region of northwestern Canada represent the oldest-known fungus, a discovery that sheds light on the origins of an important branch in earth's tree of life.

- Scientists said that multicellular fungus that they named Ourasphaira giraldae — forerunner to an immensely diverse group that today includes the likes of mushrooms, yeasts and molds — lived in an
Estuary environment about 900 million to 1 billion years ago. Until now, the oldest-known fungus fossil was one about 410 million years old from Scotland. Fungi play a key role in global ecosystems such as in the organic decomposition process.

- It plays a crucial role in global ecosystems
- The microscopic fossils, contained in shale rock from the Northwest Territories of Canada, date back to the Proterozoic era, before the advent of complex life forms.

Fungi belong to a broad group of organisms, called eukaryotes, that possesses a clearly defined nucleus and also includes animals and plants. A fundamental difference between fungi and plants is that fungi are incapable of photosynthesis, harnessing sunlight to synthesize nutrients.

Source: [https://www.thehindu.com/todays-paper/tp-life/one-billion-year-old-fungi-is-found-to-be-earths-oldest/article27229319.ece](https://www.thehindu.com/todays-paper/tp-life/one-billion-year-old-fungi-is-found-to-be-earths-oldest/article27229319.ece)

(Q) “Skai” is often seen in news refers to

a) a robot with artificial intelligence  
b) a deep space mission  
c) an warfare aircraft  
d) a transport vehicle

Solution: d)

With six rotors on the roof and seats inside for five people, a passenger model of the Skai (pronounced “sky”) unveiled which resembles an oversized drone crossed with a luxury SUV.

Like a drone, the vehicle from Alaka’i Technologies takes off and lands vertically. It’s one of many similar electric flying crafts in production, including prototypes from Boeing and Airbus that made successful test flights this year, according to Vertical Flight Society, an industry group.

The Skai uses very light hydrogen fuel cells to run its rotors, giving it a range of 644 km and the capacity to carry 454 kilograms in people or freight

V. INTERNATIONAL RELATIONS AND ORGANIZATIONS

(Q) Consider the following statements about Indian Ocean Naval Symposium (IONS).

1. It is a voluntary initiative that brings together navies of littoral states of the Indian Ocean Region with the aim of increasing maritime cooperation and enhancing regional security.
2. It was launched by India in 2012.
3. It works to ensure speedy response to requirements of Humanitarian Assistance and Disaster Relief (HADR) in the IOR.

Which of the above statements is/are correct?

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

Solution: c)
The Indian Ocean Naval Symposium (IONS) is an inclusive and voluntary initiative that brings together navies of littoral states of the Indian Ocean Region with the aim of increasing maritime cooperation and enhancing regional security. It was launched by India in February 2008.

In addition to fostering maritime cooperation, other principle objectives of IONS were to promote a shared understanding of maritime issues facing the region, formulate strategies and cooperative mechanisms to enhance regional maritime security and strengthen capabilities to ensure speedy response to requirements of Humanitarian Assistance and Disaster Relief (HADR) in the IOR.

(Q) Modern Slavery Innovation Fund, recently seen in news is the initiative of which country?

a) Russia
b) Democratic Republic of the Congo
c) Britain
d) France

Solution: c)
Britain has pledged £4 million to support the Modern Slavery Innovation Fund (MSIF). The funding will also be used to run workshops on modern slavery in South Africa, improve support for survivors in India, and develop an online data hub to boost anti-slavery policies.

It aims to tackle the root causes of modern slavery, strengthening efforts to combat slavery and reduce vulnerability, and build an evidence base to better understand what works in the future.

Source: https://www.thehindu.com/news/international/britain-to-fund-anti-slavery-projects/article26959196.ece
(Q) Consider the following statements about Treaty on the Prohibition of Nuclear Weapons (TPNW).

1. It is the first legally binding international agreement to comprehensively prohibit nuclear weapons.
2. It was passed in 1974 after India conducted its first nuclear test.
3. The treaty prohibits the development, testing, production, stockpiling, transfer and use of nuclear weapons for all the UN member countries.

Which of the above statements is/are correct?

a) 1 only  

b) 1, 2  

c) 1, 3  

d) 1, 2, 3

Solution: a)

The Treaty on the Prohibition of Nuclear Weapons (TPNW), or the Nuclear Weapon Ban Treaty, is the first legally binding international agreement to comprehensively prohibit nuclear weapons, with the goal of leading towards their total elimination. It was passed on 7 July 2017. In order to come into effect, signature and ratification by at least 50 countries is required. For those nations that are party to it, the treaty prohibits the development, testing, production, stockpiling, stationing, transfer, use and threat of use of nuclear weapons, as well as assistance and encouragement to the prohibited activities. For nuclear armed states joining the treaty, it provides for a time-bound framework for negotiations leading to the verified and irreversible elimination of its nuclear weapons programme.


(Q) Which of the following nations were declared Malaria-free by WHO?

1. Algeria  
2. Argentina  
3. India  
4. United States of America  
5. China  
6. Denmark

Select the correct code from below:

a) 1, 2, 3 and 6 Only  

b) 3, 4, 5 and 6 Only  

c) 1, 2, 4 and 6 Only  

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

Solution: c)

In news: Recently, World Health Organization (WHO) declared Algeria and Argentina as malaria-free, with no recorded cases of indigenous transmission of the disease since 2013 and 2010 respectively.

(Q) “RESPECT Women” is a framework for policymakers, was developed by

1. WHO
2. UN Women
3. UNHRC
4. World Bank
5. UNDP

Select the correct code from below:

a) 1 Only
b) 1 and 2 Only
c) 2, 3 and 5 Only
d) 1, 2, 3, 4 and 5

Solution: d)

Sources: https://www.thehindu.com/news/national/india-among-countries-where-women-face-most-violence-by-partner/article27267165.ece;
https://apps.who.int/iris/bitstream/handle/10665/312261/WHO-RHR-18.19-eng.pdf?ua=1
VI. POLITY

(Q) Consider the following statements about Right to Information (RTI), 2005.

1. The Act covers the whole of India.
2. It covers all the constitutional authorities, including executive, legislature and judiciary.
3. RTI Portal is an initiative of Ministry of Information and Broadcasting.

Which of the above statements is/are correct?

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

Solution: b)

Right to Information (RTI) is act of the Parliament of India to provide for setting out the practical regime of the right to information for citizens and replaces the erstwhile Freedom of information Act, 2002.

- It is an initiative taken by Department of Personnel and Training, Ministry of Personnel, Public Grievances and Pensions to provide a– RTI Portal Gateway to the citizens for quick search of information on the details of first Appellate Authorities, PIOs etc.
- Under the provisions of the Act, any citizen of India may request information from a “public authority” (a body of Government or “instrumentality of State”) which is required to reply expeditiously or within thirty days.
- The Act covers the whole of India except Jammu and Kashmir, where J&K Right to Information Act is in force. It covers all the constitutional authorities, including executive, legislature and judiciary; any institution or body established or constituted by an act of Parliament or a state legislature.
- Private bodies are not within the Act’s ambit directly, privatised public utility companies fall within the purview of RTI. As of 2014, private institutions and NGOs receiving over 95% of their infrastructure funds from the government come under the Act.

Source: https://en.wikipedia.org/wiki/Right_to_Information_Act,_2005

(Q) Justice Amitava Roy committee recently seen in news is constituted for the purpose of

a) Resolution of stressed assets of Public Sector Banks
b) Dealing with Sexual harassment at workplace
c) Reforms in tax laws
d) Prison Reforms

Solution: d)

The Supreme Court formed a Committee on Prison Reforms chaired by former apex court judge, Justice Amitava Roy, to examine the various problems plaguing prisons in the country, from overcrowding to lack of legal advice to convicts to issues of remission and parole.

(Q) Under Domestic Violence Act 2005, “domestic relationship” includes, relationship where two persons live or have lived together at any point of time in a shared household when they are related by

1. consanguinity
2. adoption
3. marriage
4. living in joint family

Select the correct code from below:

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

Solution: d)

In a nine-page order, the apex court Bench interpreted what the expression ‘domestic relationship’ means under the 2005 Domestic violence Act.

They held that the term meant a "relationship where two persons live or have lived together at any point of time in a shared household when they are related by consanguinity, marriage or through a relationship in the nature of marriage, adoption or are members living together as a joint family".

The court further read the term “shared household” to include “such a household which may belong to the joint family of which the respondent is a member, irrespective of whether the respondent or the aggrieved person has any right, title or interest in the shared household”.

VII. STATES

(Q) Garia festival is an important festival for the tribal community of which state?
   a) Manipur
   b) Assam
   c) Tripura
   d) Nagaland

Solution: c)

Garia festival is an important festival for the Tripuri tribal community of the state. The Garia dance is very popular among the Tripuris and the Reangs. Symbolic of the worship of deities as well as of the socio-economic activities of the households, these dances represent hunting, fishing, food-gathering and various other activities.

The Garia Puja is usually held from the beginning of the last day of the month of Chaitra till the seventh day of the month of April (Vaishakha).

(Q) India’s first genetic resource bank was recently inaugurated in?
   a) Chennai
   b) Guwahati
   c) Shillong
   d) Hyderabad

Solution: d)

The government dedicated India’s only facility for conservation of endangered species. 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.

CCMB-LaCONES is the only laboratory in India that has developed methods for collection and cryopreservation of semen and oocytes from wildlife and successfully reproducing endangered blackbuck, spotted deer and Nicobar pigeons. Through this work, it has established Genetic Resource Bank for Indian wildlife. So far, genetic resources from 23 species of Indian wild animals have been collected and preserved. This facility would increase the collection of genetic resources from wildlife through collaboration with zoos in India. It would also facilitate exchange of genetic material between the Indian zoos for maintaining genetic diversity and conservation management made accessible to scientists and wildlife managers for implementing conservation programs.

Source: [http://www.pib.nic.in/Pressreleashare.aspx?PRID=1542834](http://www.pib.nic.in/Pressreleashare.aspx?PRID=1542834)

(Q) Consider the following statements about State Disaster Response Fund (SDRF).
   1. SDRF was constituted based on the recommendations of the 14th Finance Commission.
   2. The Central Government contributes 50% to SDRF and the remaining 50% is provided from the State Government.
3. A State Government may use the funds available under the SDRF for providing immediate relief to the victims of natural disasters that they consider to be ‘disasters’ within the local context in the State.

Which of the above statements is/are incorrect?

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

**Solution: b)**

**SDRF** has been constituted by each state under the provisions of **Disaster Management act 2005**.

- It was constituted based on the recommendations of the 13th Finance Commission.
- **Funding**: The government of India contributes 75% and 90% of the total yearly allocation of SDRF to general states and special category states respectively.
- **Heads**: The state executive committee headed by the Chief Secretary is authorized to decide on all matters relating to the financing of the relief expenditure from the SDRF.

**Disaster (s) covered under SDRF**: Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves.

**Local Disaster**: A State Government may use up to 10 percent of the funds available under the SDRF for providing immediate relief to the victims of natural disasters that they consider to be ‘disasters’ within the local context in the State and which are not included in the notified list of disasters of the Ministry of Home Affairs subject to the condition that the State Government has listed the State specific natural disasters and notified clear and transparent norms and guidelines for such disasters with the approval of the State Authority, i.e., the State Executive Authority (SEC).

Source: [https://www.ndmindia.nic.in/response-fund](https://www.ndmindia.nic.in/response-fund)
(Q) Mission Raksha Gyan Shakti is related to

a) Enhance the private sector participation in defence manufacturing.
b) Boost Export of India’s Defence production
c) Boost Intellectual Property Right (IPR) culture in indigenous defence industry
d) Invisible laser walls to bolster security along border with Pakistan in Jammu and Kashmir

Solution: c)
As part of the ongoing initiatives to enhance self-reliance in defence, the Mission Raksha Gyan Shakti aims to provide a boost to the **IPR culture in indigenous defence industry**.


(Q) Consider the following statements about Arms Trade Treaty (ATT).

1. It is a multilateral treaty that regulates the international trade in conventional weapons.
2. The treaty was negotiated under the auspices of the United Nations (UN).
3. It regulates the domestic sale or use of weapons in any country.

Which of the above statements is/are correct?

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

Solution: c)
The **Arms Trade Treaty (ATT)** is a multilateral treaty that **regulates the international trade in conventional weapons**.

- The ATT is an attempt to regulate the international trade of conventional weapons for the purpose of contributing to international and regional peace; reducing human suffering; and promoting cooperation, transparency, and responsible action by and among states.
- The treaty was negotiated in New York City at a global conference under the auspices of the United Nations (UN) from 2–27 July 2012. On 2 April 2013, the UN General Assembly adopted the ATT.
- Conventional weapons covered by the UN Arms Trade Treaty include tanks and other armored combat vehicles, artillery, attack helicopters, naval warships, missiles and missile launchers, and small arms.
- It also establishes common international standards for the regulation of the international trade in ammunition, weapons parts, and arms components.
- The treaty **does not regulate the domestic sale or use of weapons in any country**. It also recognizes the legitimacy of the arms trade to enable states to provide for their own security.

(Q) Consider the following statements about Inertial Guided Bomb:

1. This precision bomb is guided to its target through the inertial guidance system, which allows precision targeting from long distances even under adverse visibility conditions.
2. Such systems have the unique ability to perform without depending on external inputs such as ground-based navigation aids (or) GPS
3. Such a bomb does not have an engine of its own and runs on the inertia imparted to it by the mother aircraft.

Which of the above statement is/are correct ?

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

Solution: d)

India’s First Inertial Guided Bomb successfully tested by DRDO:

- India successfully test fired an indigenously-made 500-kg class “inertial guided bomb” from a Sukhoi jet
- The test has been pegged as a major achievement for the Defence Research and Development Organisation (DRDO) as the guided bomb achieved the desired range and also hit its target with precision.
- The weapon system is capable of carrying different warheads
- The inertial guided bomb marks an upgrade from the existing laser-guided weapon delivery capability, which has certain limitations, such as range of delivery from the target and susceptibility to environmental conditions.
- This 500-kg class precision bomb is guided to its target through the inertial guidance system, which allows precision targeting from long distances even under adverse visibility conditions.
- Inertial guidance system is an electronic system that continuously monitors the position, velocity and acceleration of a vehicle, usually a submarine, missile, or aeroplane, and provides navigational data or control without the need for communicating with a base station.
- A recent example of such a bomb is the Israeli SPICE-2000 smart bombs that were used by the Indian Air Force in the Balakot attack in Pakistan. They had a glide range of around 60 km and used a sophisticated guided system — including inertial navigation, satellite guidance and electro-optical sensors, for accuracy.
- Countries such as the United States and Israel have been using such guided bombs for some years, but it is a first for India, with the system being indigenously developed by the DRDO.
- Such a bomb does not have an engine of its own but runs on the inertia imparted to it by the mother aircraft. Such a weapon can be fired even without a Global Navigation Satellite System (GNSS) input, denial of which is a high possibility in emerging forms of warfare.
- Indian fighter jets had inertial navigation systems earlier too, but the weapons were based on optical or laser guidance. However, this bomb uses a miniaturised Inertial Navigation Systems — indigenously developed by DRDO — as an integral component.

Source: https://theprint.in/defence/what-is-drdos-inertial-guided-bomb-and-how-it-will-boost-indias-defence-capability/242066/
(Q) Which one of the following is surface-to-air missile?

a) Agni  
b) Prithvi  
c) Astra  
d) Akash

Solution: d)

IX. REPORTS & INDICES

(Q) Global Food Policy Report is released by
a) Food and Agriculture Organisation (FAO)
b) World Health Organisation (WHO)
c) International Food Policy Research Institute (IFPRI)
d) Both a and c

Solution: c)
- The report reviews the major food policy issues, developments, and decisions of 2018, and considers challenges and opportunities for 2019.
- This year’s Report highlights the urgency of rural revitalization to address a growing crisis in rural areas.

(Q) ‘Future of Jobs’ report is published by
a) International Labour Organisation (ILO)
b) World Bank
c) World Economic Forum (WEF)
d) Asian Development Bank

Solution: c)
By 2025, machines are projected to overtake humans in workplace task hours in 12 key industry sectors, according to a ‘Future of Jobs’ report by the World Economic Forum (WEF).

(Q) Consider the following statements about ‘Status of trace and toxic metals in Indian rivers 2018’ report.
1. It is published by Central Water Commission.
2. According to the report, Ganga is polluted with five heavy metals—chromium, copper, nickel, lead and iron.
3. Heavy metals are carcinogenic and also slowly biodegradable.
Which of the above statements is/are correct?

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

42 rivers in India are polluted with at least two toxic heavy metals reveals this report published by Central Water Commission. Ganga, the national river, is polluted with five heavy metals—chromium, copper, nickel, lead and iron.

Unlike organic contaminants, **heavy metals are non-biodegradable and also carcinogenic**. Heavy metals such as Zinc, Copper, Nickel, Mercury, Cadmium, Lead, Chromium and Arsenic tend to accumulate in organisms, which may lead to a reduction in species diversity. Central Water Commission under Ministry of Water Resources, RD & GR has been playing a major role in the monitoring water quality of river water since year 1963 and at present, is observing water quality at 429 key locations covering all major river basins of India. The present report attempts to provide the water quality scenario of Indian rivers in respect of trace & toxic metals.

(Q) Sabang, a strategic location for India is located across?
   a) Strait of Hormuz
   b) Bab-el-Mandeb
   c) Strait of Malacca
   d) Johore Strait

Solution: c)

India and Indonesia have agreed to develop a naval port in Sabang, a strategic location at the entrance of Malacca Strait.

Source: https://www.thehindu.com/opinion/op-ed/a-maritime-stretch/article24027337.ece

(Q) Kerch Strait, recently in news, connects Black sea to
   a) Aegean Sea
   b) Sea of Marmara
   c) Adriatic Sea
   d) Sea of Azov

Solution: d)
(Q) Mount Makalu is located on
(a) Indo – Pak Border
(b) Indo – China Border
(c) Indo – Nepal Border
(d) Nepal – China Border

Solution: d)

Makalu is the fifth highest mountain in the world at 8,485 metres. It is located in the Mahalangur Himalayas 19 km southeast of Mount Everest, on the border between Nepal and Tibet Autonomous Region, China. One of the eight-thousanders, Makalu is an isolated peak whose shape is a four-sided pyramid. Mount Makalu is known for its spectacular beauty. Climbing is a highly challenging task and for many years it was not attempted.

Peak is identified as one among the most difficult mountains of the world to climb. The pitches are very steep and ridges are as sharp as knife thereby making it a very dangerous mountain to climb.
(Q) Consider the following statements

1. Badkhal lake is an artificial lake located in Srinagar.
2. This lake freezes in winters.

Which of the above statements is/are correct?

a) 1 Only
b) 2 Only
c) Both 1 and 2
d) None

Solution: d)  

Badkhal lake was a natural lake, near Faridabad, which was once a popular tourist gateway for the people of the national capital, has turned into a barren piece of land for the past 20 years due to illegal quarrying and mining in the area.

Now, various measures are being discussed at the government level to restore the lake, including construction of a sewage treatment plant but damaged aquifers, low groundwater level and disturbance of water catchment pathways cast aspersions.

(Q) The Jam minaret is the world's second tallest brick tower located in

a) Syria
b) Afghanistan
c) Iraq
d) Palestine

Solution: b)  

Taliban fighters have stormed many security posts providing protection to Afghanistan's historic minaret of Jam, cutting access to the UNESCO World Heritage Site and killing 18 security forces.

Located in an area largely under Taliban control, the Jam minaret is the world's second tallest made of bricks, reaching a height of 65 m.

Source: https://www.thehindu.com/news/international/18-killed-in-taliban-strike-near-jam-minaret/article27297259.ece
XI. Miscellaneous

(Q) Consider the following statements about Goldman Environmental Prize.

1. The Prize recognizes individuals for sustained and significant efforts to protect and enhance the natural environment.
2. The Prize was instituted by World Wide Fund for Nature (WWF).

Which of the above statements is/are correct?

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

Solution: a)

The Goldman Environmental Prize honors grassroots environmental heroes from the world’s six inhabited continental regions: Africa, Asia, Europe, Islands & Island Nations, North America, and South & Central America.

The Prize recognizes individuals for sustained and significant efforts to protect and enhance the natural environment, often at great personal risk.

The Goldman Prize views “grassroots” leaders as those involved in local efforts, where positive change is created through community or citizen participation in the issues that affect them. Through recognizing these individual leaders, the Prize seeks to inspire other ordinary people to take extraordinary actions to protect the natural world.

This year marks the 30th anniversary of the Prize founded in 1989 by U.S. philanthropists Rhoda and Richard Goldman.

Source: https://www.goldmanprize.org/about/

(Q) Consider the following statements about District cooling system.

1. District cooling systems produce chilled water, steam or hot water at a central plant and then pipe that energy out to buildings for air conditioning, space heating and water heating.
2. District cooling systems are more efficient than small, individual units.
3. India’s First District cooling system will come up in Delhi.

Which of the above statements is/are correct?

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

Solution: a)

- India’s First District cooling system will come up in Amravati, capital of the Andhra Pradesh.
- District cooling systems produce chilled water, steam or hot water at a central plant and then pipe that energy out (either underground or over rooftops) to buildings for air conditioning, space heating and
water heating. As a result, these buildings don’t require their own chillers, air conditioners, boilers or furnaces.

- They are considered to be highly efficient to address each of the challenges like high Capital and operating costs, reliability, flexibility and environmental sustainability while meeting their comfort and process cooling and heating needs.
- District cooling uses only 50% of primary energy consumption for cooling urban building n compared to other cooling systems. This also reduces carbon emissions.


(Q) Consider the following statements about Asia-Pacific awards for cultural heritage conservation.

1. It is awarded by UNESCO.
2. It recognises the efforts taken to restore and conserve historical structures without affecting their heritage value.
3. New Delhi has won most recognitions in India since the inception of the awards.

Which of the above statements is/are correct?

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

Solution: c)

- Launched in 2000, UNESCO Asia-Pacific awards for cultural heritage conservation programme is aimed at acknowledging the efforts taken to restore and conserve historical structures without affecting their heritage value in the region comprising 48 countries.
- The awards are classified under four categories — Award of Excellence, Awards of Distinction, Awards of Merit and Award for New Design in Heritage Context.
- They are being given to encourage the efforts of all stakeholders and the public in conserving and promoting monuments and religious institutes with rich heritage in the Asia-Pacific region.
- Mumbai has won 19 recognitions since the inception of the awards in 2000 – the most for any city in India.

(Q) Consider the following statements about Program for International Student Assessment (PISA).

1. It is an international assessment that measures 15-year-old students’ reading, mathematics, and science literacy conducted annually.
2. PISA is coordinated by UNESCO in partnership with the Organization for Economic Cooperation and Development (OECD).
3. India has signed an agreement for its Participation in PISA 2021.

Which of the above statements is/are incorrect?

a) 1, 2
b) 2, 3
c) 1, 3
d) 1, 2, 3
Solution: a)
The Program for International Student Assessment (PISA) is an international assessment that measures 15-year-old students' reading, mathematics, and science literacy every three years. First conducted in 2000, the major domain of study rotates between reading, mathematics, and science in each cycle.

PISA is coordinated by the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of industrialized countries, and is conducted in the United States by NCES.

The Union Human Resources Development Ministry has signed an agreement with Organisation for Economic Co-operation and Development (OECD) for India's Participation in Programme for International Student Assessment- PISA 2021.

Kendriya Vidyalayas, Navodaya Vidyalayas, and all schools, private and government, in Chandigarh will participate in the 2021 test.

Source: https://nces.ed.gov/surveys/pisa/

(Q) Consider the following statements regarding Denisovans
1. They were discovered in 2010 when scientists working in a cave in southern Siberia.
2. They are rare species of primitive human roamed the forests of Eurasia 200,000 years ago.
3. They may have made tools and even jewelry also.

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

Solution: D

Source: https://www.thehindu.com/sci-tech/science/denisovans-lived-in-tibetan-plateau-fossil-evidence-shows/article27005280.ece

(Q) Reporters Without Borders, often in the news, is
a) An inter-governmental agency sponsored by European Union
b) A United Nations agency to help refugees of civil war
c) Non-governmental organization on issues relating to freedom of the press
d) United Nations organisation to regulate freedom of press.

Solution: c)

Reporters Without Borders (RWB), or Reporters Sans Frontières (RSF), is an international non-profit, non-governmental organization based in Paris, France, that conducts political advocacy on issues relating to freedom of information and freedom of the press.

Source: https://en.wikipedia.org/wiki/Reporters_Without_Borders