



CA Revision Module - Test 23 (December 2023)

Consider the following statements regarding Jammu and Kashmir Reorganization Act, 2019

1. The law bifurcated the State into two Union Territories, Ladakh without legislature and J&K with legislature.
2. The Act amended the Representation of People Act, 1950 which reserved certain seats for Scheduled Tribes.
3. National Integration Day was observed on October 31, 2019, the day the two union territories (J&K and Ladakh) were established.

How many of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two
- c. All three
- d. None

Answer : b



Jammu and Kashmir Reorganization Act, 2019

- The law bifurcated the State into two Union Territories (UTs)
 - Ladakh (without Legislature) - Comprises Kargil and Leh districts
 - J&K (with Legislature) - Comprises all the remaining territories of the erstwhile State of J&K.
- The Act amended the *2nd Schedule of the Representation of People's Act, 1950* to specify the total number of seats in the Jammu and Kashmir Legislative Assembly to be 83.
- It reserved six seats for Scheduled Castes. **No seats** were reserved **for Scheduled Tribes**.
- The Governor of the existing State of Jammu and Kashmir became the common Lieutenant Governor for both the Union territories.
- The Union Territory of Jammu and Kashmir will have a Council of Ministers of not more than 10% of the total number of members in the Assembly.
- The Council will aid and advise the Lieutenant Governor on matters that the Assembly has powers to make laws.
- The Chief Minister will communicate all decisions of the Council to the Lieutenant Governor.
- The High Court of Jammu and Kashmir will be the common High Court for the Union Territories of Ladakh, and Jammu and Kashmir.
- The Legislative Council of the state of Jammu and Kashmir will be abolished.
- The Act made amendments to the First Schedule of the Indian Constitution to reflect the new status of Jammu and Kashmir and Ladakh.
- **National Unity Day** was observed on October 31, 2019, the day the two union territories (J&K and Ladakh) were established.
- **National Integration Day**, also known as Quami Ekta Divas, is celebrated in India on *November 19* each year which commemorates the birthday of Indira Gandhi, India's first-ever female Prime Minister.

2. Consider the following statement about volcanoes:

1. A volcano is an opening in the earth's crust through which magma, gases and ash are released to the earth's surface
2. There are no volcanoes in the Himalayan region of India.
3. Narcondam in Andaman and Nicobar Islands is an active volcano in India since 1991.

How many of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two
- c. All three
- d. None

Answer : a

Volcanoes

- According to the US Geological Survey, volcanoes are openings, or vents where lava, tephra (small rocks), and steam erupt onto the Earth's surface.
- **Occurrence** - It can be on land and in the ocean in Earth.
- Scientific evidences also show their presence in other planets like Mars and Venus.
- **Formation** - They are formed when material significantly hotter than its surroundings is erupted onto the surface of the Earth.
- **Earth Core** - Earth's interior has outer crust, middle mantle and inner core layer.
- Mantle is denser than that of the crust and contains a weaker zone called asthenosphere from which the molten rock materials find their way to the surface.
- Liquid rock is known as magma when it is underground and called as lava when it breaks through the surface.
- 3 ways of magma rise
 - **Divergence of tectonic plates** - Here, the magma rises up to fill in the space and when this happens underwater volcanoes can form.
 - **Convergence of tectonic plates** - When this happens, part of Earth's crust can be forced deep into its interior, which under high heat and pressure melts, and rise as magma.
 - **At hotspots** - They are hot areas inside of the Earth, where magma gets heated up and it becomes less dense, leading to its rise.
- There are **no volcanoes in the Himalayan region** of India.
- However, Barren Island, lying 135 km north-east of Port Blair became active in 1991 and 1995.
- The other volcanic island in Indian Territory is **Narcondam** (Andaman and Nicobar Islands) which is probably **extinct**. Its crater wall has been completely destroyed.

3. Consider the following statements with respect to Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

1. It was established with the signing of Dhaka declaration.
2. BIMSTEC energy centre is located in Uttar Pradesh.

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

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

Answer : d

BIMSTEC

- It is a regional organization group of littoral countries encircling the Bay of Bengal with own flag and emblem.
- **Established in** - 1997 with the signing of the **Bangkok Declaration**.
- 2022 marked the *25th anniversary* of BISTEC formation.
- **Secretariat**- At Dhaka, Bangladesh.
- **Aim** - To foster economic and social development among member countries.
- **Members** - 7 members including Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar and Thailand.
- **BIMSTEC Charter** - It was signed and adopted during the *fifth BIMSTEC Summit in Sri Lanka* in 2022.
- **BIMSTEC Centres**-
 - **BIMSTEC Energy Centre** - AT Central Power Research Institute in *Bengaluru, India*
 - **BIMSTEC Centre on Weather and Climate** - It is located in the National Centre for Medium Range Weather Forecasting in *Uttar Pradesh, India*.
 - **BIMSTEC Cultural Industries Observatory** - Bhutan
 - **BIMSTEC Technology Transfer Facility** - The entry into force is awaited.

4. Consider the following statements.

Statement-I: Dollarisation is the process by which a country decides to use two currencies the local currency and generally a stronger, more established currency like the US dollar.

Statement-II: It will have positive impact on seigniorage.

Select the correct answer using the codes given below:

- a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c. Statement-I is correct but Statement-II is incorrect
- d. Statement-I is incorrect but Statement-II is correct

Answer : c

Dollarisation

- It is the process by which a country decides to use two currencies the local currency and generally a stronger, more established currency like the US dollar.
- **Occurrence**- It occurs in developing countries with a weak central monetary authority or an unstable economic environment.
- It usually happens when a country's currency becomes unstable or loses its value due to high inflation or other economic problems.
- **Example**- Zimbabwe ran a dollarization test to see if the adoption of foreign currency could reduce high inflation and stabilize its economy.
- **Dollarised economies**- Ecuador, Panama and El Salvador have had successful economic outcomes following dollarisation.
- **Significance**- It fosters economic stability, promote investment, boost trade, encourage foreign direct investment and promotes fiscal discipline.
- **Issues**- It leads to monetary autonomy, **seigniorage loss**, the country may face a loss of public support or legitimacy and it increases the country's vulnerability to external shocks.
- Dollarisation can impair the lender of the last resort's ability to provide emergency liquidity to the financial system in the time of crisis.
- **Seigniorage loss in dollarization**- When a country dollarizes, it gives up the option to print

its own money. As a result, the central bank loses its ability to directly influence the economy through monetary policy.

- **Seigniorage is the profit that a government or a central bank makes by issuing money**

5. Consider the following statements with respect to Bharat Stage Emission Standards

1. The standards and timelines for the BS standards were introduced by the Central Pollution Control Board (CPCB), Ministry of Environment, Forest and Climate Change.
2. Mashelkar Committee recommended a roadmap for implementation of Euro norms based on emission standards for India.
3. BS VI restricts the Sulphur emission to 500 ppm.

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

- a. Only one
- b. Only two
- c. All three
- d. None

Answer : b

Bharat Stage Emission Standards

- **Objective-** To regulate the output of air pollutants from compression and spark-ignition engines equipment, including motor vehicles.
- They are in line with the European emission norms with a time lag of 5 years.
- **Mashelkar Committee** recommended a roadmap for implementation of Euro norms based on emission standards for India.
- **Launched by-** Central Pollution Control Board (**CPCB**) under the Ministry of Environment, Forest and Climate Change (MoEFCC).
- In 1999, Supreme Court mandated that all vehicles in India have to meet the Euro I or India 2000 standard.



6. Consider the following statements regarding Global Partnership on Artificial Intelligence (GPAI) summit

1. The summit concluded with the adoption of Bletchley declaration.
2. GPAI values is based on World Economic Forum recommendations.

Which of the above statement(s) is/are **incorrect**?

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

Answer : c

Global Partnership on Artificial Intelligence

- **Launched in** - 2020
- It is a multi-stakeholder initiative with experts from industry, civil society, governments, international organisations and academia.
- **GPAI Secretariat** - OECD

- The 1st 3 GPAI summits were held in Montreal, Paris and Tokyo, respectively.
- **Aim** – To bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI-related priorities.
- **Mission** – To share multidisciplinary research and identifying key issues among AI practitioners and **to understand AI impacts**.
- **4 working groups** – Responsible AI, data governance, the future of work, and innovation and commercialization.
- **Values** – Based on **OECD Recommendation on Artificial Intelligence** grounded in the principles of human rights, inclusion, diversity, innovation and economic growth.
- **Membership** – 29 members.
- It is open to countries, including emerging and developing countries.
- **GPAI summit 2023**- It adopted **New Delhi Declaration** on advancing safe, secure and trustworthy AI and commitment to supporting the sustainability of GPAI projects.
- **Bletchley declaration**- It is the outcome of UK AI safety summit which mainly focused on security and safety risks related to AI.
- The GPAI summit contrasts with Bletchley declaration as GPAI summit finds a balance between innovation and the risks associated with AI systems.

7. A stone deity 'Kakad Bhairav' worshipped by the Bhils tribe was recently proved to be a fossilized dinosaur egg. In light of this, which one of following statement (s) is/are correct?

1. Dinosaur Fossils National Park is located in the state of Madhya Pradesh.
2. Dinosaur Fossils National Park is the first site to receive UNESCO's Global Geopark tag.

Select the answer using the code given below:

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



SHANKAR
IAS PARLIAMENT
Information is Empowering

Answer : a

Kakad Bhairav or Bhilat Baba

A stone deity worshipped by the Bhils in Madhya Pradesh's Bagh (Narmada Valley) was recently proved to be a fossilized dinosaur egg.

- Just like their ancestors worshipped ancient stones as deities, generations of Bhils had worshipped this sunbaked, reddish-brown Kakad Bhairav or Bhilat Baba.
- **Dinosaur Fossils National Park** – It is a protected area located **in Madhya Pradesh**, India.
- The park is renowned for its rich fossil deposits, which provide valuable insights into the prehistoric world.
- **UNESCO Global Geopark tag** – Awarded since 2015, is given to sites with global relevance to geology, geomorphology or paleontology.
- India has sent a **proposal to recognise Bagh site** where Dinosaur fossils National Park as global Geopark which is **yet to receive the tag**.
- If selected, it will become the 1st Indian site to join a select club of 195 UNESCO Geoparks in 48 countries.
- **Bhil Tribes** – Popularly known as the *bow men of Rajasthan*, are the most widely distributed and the *largest tribe of the South Asia*.
- **Spread** – Madhya Pradesh, Maharashtra, Gujrat, and Rajasthan and also in the north eastern parts of Tripura.
- The endogamous tribe *speak Bhili*, an Indo-Aryan language.
- **Economy** – Earlier great hunters but they now practice agriculture.

- They are also demanding a separate state of Bhil Pradesh.

8. “Karan Singh’s Proclamation”, sometimes seen in the news recently, refers to?

- A proclamation to cease all violent activities in India by Khalistani protestors.
- It reflected the full and final surrender of Jammu & Kashmir's sovereignty to India.
- It refers to donation of forest lands to British for commercial cultivation.
- It relates to idea of Khalistan by separating the land from Indian Union.

Answer : b

Karan Singh’s Proclamation of 1949

Supreme Court cited Karan Singh’s Proclamation of 1949 while upholding the abrogation of Article 370.

- Yuvraj Karan Singh was the heir to the throne of Jammu and Kashmir after his father ‘Maharaja Hari Singh’.
- *Repeal of Government of India Act, 1935*
- **Applicability of Indian Constitution** – Enforced by the king, his heirs and successors in accordance with the tenor of its provisions.
- It shall, as from the date of its commencement, supersede and abrogate all other constitutional provisions inconsistent therewith which were in force in J&K.
- Thus, the paragraph 8 of the Instrument of Accession ceased to be of legal consequence **reflecting the full and final surrender of J&K's sovereignty to India.**
- **Instrument of accession (IoA)** – Maharaja Hari Singh, then ruler of J&K signed IoA in 1947 and agreed to the accession into Indian union.
- **Article 370** – It accorded a special status to J&K by limiting Parliament’s power to legislate for the State as compared to other States.
- This was revoked by a Constitution Order of 2019.

9. Consider the following statements with respect to Pradhan Mantri Anusuchit Jaati Abhyuday Yojana (PM-AJAY)

1. It was launched by the Department of Pharmaceuticals under Ministry of Chemicals and Fertilisers.
2. It aims to distribute low-cost generic medicines to vulnerable populations.

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

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer : d

PM Anusuchit Jaati Abhyuday Yojana (PM- AJAY)

- It is a 100% Centrally Sponsored Scheme for the welfare of Scheduled Caste (SC) population.
- **Launched in** - 2021-22.
- **Launched by** - **Ministry of Social Justice & Empowerment.**
- It has been framed after *merging the 3 erstwhile schemes*
 - Pradhan Mantri Adarsh Gram Yojana (PMAGY)
 - Special Central Assistance to Scheduled Caste Sub Plan (SCA to SCSP)
 - Babu Jagjivan Ram Chatrawas Yojana (BJRCY)
- **Objectives** - To **increase the income of SC population** by income generating schemes, skill and infrastructure development, **reduce the poverty and increase literacy** and enrolment of SCs in education institutions.
- 3 components
 - Development of SC dominated villages into an 'Adarsh Gram'.
 - Grants-in-aid for district/state-level projects for socio-economic betterment of SCs.
 - Construction of hostels in higher educational institutions.
- **Eligibility Criteria** - For income generating and skill development schemes, SC persons belonging to BPL category are eligible.
- In case of infrastructure development, the villages having 50% or more SC population are eligible.
- **Budget** - It is Rs. 2050 crore for FY 2023-24.

10. The Kashi Tamil Sangamam 2.0 that aims to revive the bonds between Varanasi and Tamil Nadu through cultural exchange and knowledge sharing involves which of the following entities in organising it?

1. The Union Ministry of Education
2. IIT Madras
3. Banaras Hindu University
4. The Union Ministry of Culture



Select the answer using the code given below:

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

Answer : c

Kashi Tamil Sangamam 2.0

Recently, the 2nd edition of Kashi Tamil Sangamam was conducted.

- It is an *annual* month-long programme started in 2022.
- It was organised as part of the 'Azadi ka Amrit Mahotsav' to uphold the spirit of 'Ek Bharat Shreshtha Bharat'.
- **2nd edition at** - Kasi, Uttar Pradesh in 2023.
- **Aim** - To revive the bonds between Varanasi and Tamil Nadu through cultural exchange and knowledge sharing.
- **Implementing entities**
 - **The Union Ministry of Education**
 - **IIT Madras**
 - **Banaras Hindu University**
- **Participants** - They have been divided into 7 groups, each named after a 'sacred' Rivers such

as Ganga, Yamuna, Saraswati, Sindhu, Narmada, Godavari and Cauvery.

11. Which of the following is **incorrect** with respect to Universal Declaration of Human Rights (UDHR)
- It is a treaty which is legally binding on all of its members.
 - It is based on the Vienna Declaration and Program of Action of 1993.
 - It consists of a preamble and 30 articles setting out fundamental rights and freedoms.
 - It was proclaimed through United Nations General Assembly resolution 217 A.

Answer : a

Universal Declaration of Human Rights (UDHR)

Human Rights 75 is an initiative to mark the 75th anniversary of Universal Declaration of Human Rights.

- Human Rights 75 is an initiative whose main goals focus on universality, progress and engagement under the leadership of UN Human Rights, together with its partners.
- UDHR** - A global document that establishes the human rights and civil liberty of every person in the world.
- It consists of a **preamble and 30 articles** setting out fundamental rights and freedoms.
- Basis - Vienna Declaration and Program of Action of 1993.**
- Proclaimed by** - The United Nations General Assembly in Paris on 10 December 1948 (**UNGA resolution 217 A**).
- Legality** - It **isn't a treaty** and **isn't legally binding in itself**, but it is viewed as the basis for international human rights law.
- Achievements** - It have inspired and paved the way for more than 70 human rights treaties.
- It inspired the decolonization movement, anti-apartheid movement, gender issues and the LGBTIQ+ issues.
- India is a signatory* to this declaration.

12. Consider the following pairs.

Places in News	About
1. Shidaowan Nuclear Plant	- Rajasthan
2. Gelephu Smart city	- Assam
3. Ennore creek	- Tamil Nadu

How many of the above pairs are correct?

- Only one
- Only two
- All three
- None

Answer : a

Shidaowan Nuclear Plant

- China** starts up **world's 1st 4th generation nuclear reactor** in Shidaowan that uses a high-temperature gas-cooled nuclear reactor with 1,150MW.
- 4th generation reactors can operate at higher temperatures than most other reactors, which allows them to generate both electricity and hydrogen.

Gelephu Smartcity Project

- It is a mega project in **Bhutan** to have 1,000-sq. km. green city along Assam border connecting South Asia to Southeast Asia.
- There are also discussions about a 58-km rail link between Gelephu and Kokrajhar in Assam.

Ennore Creek

- It is a backwater located in Thiruvallur District, **Tamil Nadu**.
- As an arm of the Kosathalaiyar River, the Creek meets the Bay of Bengal at Mugathwara Kuppam, while the northern channel of the creek connects to the *Pulicat Lake*.
- This creek has been demarcated as *Coastal Regulation Zone IV* (Water Body) in the coastal zone management plan by the Tamil Nadu State Coastal Zone Management Authority.
- Undertaking any reclamation, bunding, construction or altering the water bodies is illegal under Water (Prevention and Control of Pollution) Act 1974 & Environment Protection Act, 1986.

13. India during its G20 presidency in 2023, had launched an initiative named 'MAHARISHI' that deals with which one of the following?

- Yoga
- Millets
- Mangroves
- Biofuels

Answer : b

Millets and other Ancient Grains International Research Initiative (MAHARISHI)

- **Proposed by** - India
- **Aim** - To advance research in the field of millets and other ancient grains.
- **Secretariat at** - Indian Institute of Millets Research (IIMR) in Hyderabad.
- **Technical Support** - International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), 1 CGIAR Centres, and other international organizations.
- **Goals**
 - Enhance food security and nutrition
 - Strengthen agricultural resilience
 - Digital transformation
 - Public-private partnerships

14. Consider the following statements with respect to Indian Ocean Naval Symposium (IONS)

1. It aims to increase maritime co-operation among navies of the littoral states of the Indian Ocean Region.
2. It has its own designated flag, which was designed by India.
3. India is the current chair of IONS.

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

- Only one
- Only two
- All three
- None

Answer : b

Indian Ocean Naval Symposium (IONS) - 2023

The 8th edition of Indian Ocean Naval Symposium (IONS) Conclave of Chiefs (CoC) was conducted by Royal Thai Navy at Bangkok, Thailand.

- It is a voluntary initiative that was inaugurated in 2008 at New Delhi, with the Indian Navy as the Chair for 2 years.
- **Objectives** - To increase maritime co-operation among navies of the littoral states (states with coast) of the Indian Ocean Region.
- To provide an open and inclusive forum for discussion of regionally relevant maritime issues.
- **IONS Flag** - It was **designed by India**.
- **Membership** - 34 (25 Members & 09 Observers).
- The **members were grouped based on 4 sub-regions** such as:
 - South Asian Littorals
 - South East Asian and Australian Littorals
 - East African Littorals
 - West Asian Littorals
- **India** - It also took over as the co-Chair of IONS Working Groups on Maritime Security.
- India is scheduled to take over as the Chair of IONS (2025-27) during 9th CoC planned to be conducted in India in end 2025.



15. "VISION 2020: The Right to Sight" is an initiative of?

- a. Doctors Without Borders
- b. Helen Keller International
- c. World Health Organization
- d. The Global Fund to Fight AIDS, Tuberculosis and Malaria

Answer : c

VISION 2020: The Right to Sight

- It is a global program.
- **Established by** - **World Health Organization** (WHO) and the **International Agency for the Prevention of Blindness** (IAPB) in 1999.
- **Aim** - To **eliminate avoidable blindness by 2020**.
- **Supported by** - Governments and health ministries, non-governmental organizations (NGOs) and Eye care professionals, program managers and industry.
- **Causes of vision impairment and blindness** - Refractive errors, Cataract, Diabetic retinopathy, Glaucoma (a group of eye diseases that can damage the optic nerve, which connects the eye to the brain) Age-related macular degeneration.

16. Consider the following statements.

Reports

Published by

- | | |
|--|--------------|
| 1. World Malaria Report 2023 | - WHO |
| 2. Composite Water Management Index | - CPCB |
| 3. Logistics Ease Across Different State | - NITI Aayog |
| 4. Migration and Development Brief | - OECD |

How many of the above statements is/are correct?

- a. Only two

- b. Only three
- c. All four
- d. None

Answer : a

World Malaria Report 2023

According to World Malaria Report 2023, malaria cases continue to dip in India while it is increasing globally.

- **Published by - World Health Organisation (WHO)**
- **Aim** - To provide a comprehensive and up-to-date assessment of trends in malaria control and elimination.
- **2023 report** - For the 1st time, it includes a dedicated chapter on the intersection between climate change and malaria.
- **Key findings** - Globally, the malaria deaths were higher than in 2019 but the malaria mortality rate decreases.
- **This year alone**, 3 more countries were certified by WHO as malaria-free (Azerbaijan, Belize, and Tajikistan).
- **India** - There were around 5,000 deaths in India last year, a decrease of 30% and 34 % respectively compared with 2021.

Composite Water Management Index (CWMI)

NITI weighs discontinuing key water report launched 5 years ago.

- **Prepared by - NITI Aayog** in association with 3 ministries of central government (Water Resources, Drinking Water & Sanitation, and Rural Development).
- **Objective** - It ranks states in terms of efficacy of water management on the basis of 28 parameters.
- **Reports - Only 2 editions were published so far (Dec, 2023)**
 - 1st edition provided data for 2015-16 and 2016-17 in 2018
 - 2nd edition was launched in 2019 for 2017-18.
- **Unpublished reports** - The performance of states for 2018-19 and 2019-20 (CWMI 3.0 and 4.0) are yet to be released but it points out that water scarcity is a national problem.

Logistics Ease Across Different State (LEADS) 2023

The 5th edition of the LEADS annual exercise provides insights into improvement of logistics performance at State/UT level.

- **Basis - Logistics Performance Index (LPI) of World Bank.**
- Unlike LPI that relies entirely on perception-based surveys, LEADS incorporates both perception and objective data.
- **Launched in** - in 2018
- **Launched by - The Ministry of Commerce and Industry**
- **Objectives** - To assess the performance of logistics eco-system across States and Union Territories (UTs) and to promote competitive federalism for development of logistics sector.
- **Data source** - A pan-India primary survey conducted across 36 States/UTs.
- **3 pillars of logistics performance** - Quality of Logistics Infrastructure, Quality of Logistics Services, and Operating & Regulatory Environment.

Migration and Development Brief

The latest report reveals a continuing growth in remittance flows to low- and middle-income countries (LMICs) in 2023, albeit at a slower pace compared to previous years.

- The brief is a **biannual report**.
- **Prepared by** - The Migration and Remittances Unit, Development Economics (DEC).
- **Released by** - **World Bank**.
- Objectives - To provide the information about migration and remittance flows and related policies over the past 6 months and to provide medium-term projections of remittance flows to developing countries.
- 2023 report - Remittances grew by an estimated 3.8% in 2023, reaching a total of USD669 billion in LMICs.
- A 7.2% increase in South Asia with notable contribution by India.
- **India** - It remained as the *largest recipient* with an estimated USD125 billion in 2023.

17. Match the following:

Missions/ Rockets	Launched by	Significance
1. XPoSat	a. ISRO	p. First methane-liquid oxygen rocket
2. Zhuque-2	b. NASA	q. To study astronomical X-ray sources
3. TEMPO	c. LandSpace	r. Monitoring of Pollution

Select the correct answer using the codes given below:

- a. 1-b-q; 2-c-p; 3-a-r
- b. 1-a-q; 2-c-r; 3-b-p
- c. 1-c-q; 2-b-p; 3-a-r
- d. 1-a-q; 2-c-p; 3-b-r



SHANKAR
IAS PARLIAMENT
Information is Empowering

Answer : d

X-Ray Polarimeter Satellite (XPoSat)

Indian Space Research Organisation (ISRO) will soon launch X-Ray Polarimeter Satellite (XPoSat) to investigate the polarisation of intense X-Ray sources.

- X-Ray Polarimeter Satellite (XPoSat) is the 1st such satellite by **ISRO** that aims to **investigate the polarisation of intense X-Ray sources**.
- It focuses predominantly on imaging, time-domain studies and spectroscopy.
- The Mission objectives include:
 - Measurement of X-Ray polarization in the energy band of 8-30 keV emanated from X-Ray sources,
 - Long-term spectral and temporal studies of cosmic X-Ray sources in the energy band of 0.8-15 keV.
- The XPoSat will be launched by the Polar Satellite Launch Vehicle (PSLV) and is designated for observation from Low Earth Orbit (LEO).
- The mission life is expected to be approximately 5 years.
- The payloads of the XPoSat includes:
 - **POLIX** - Polarimeter Instrument in X-rays, designed to measure polarimetry parameters.
 - **XSPECT** - X-ray Spectroscopy and Timing, which will provide spectroscopic information within the energy range of 0.8-15 keV.

Zhuque-2 Rocket

- Zhuque 2 is a launch vehicle powered by a mixture of methane and liquid oxygen.
- With this, **LandSpace** becomes the **first company in the world to launch a methane-liquid oxygen rocket** ahead of U.S. rivals including Musk's SpaceX and Jeff Bezos' Blue Origin.
- **Capacity** - Currently, the rocket can carry a payload of up to 1.5 metric tons into a 500-kilometre-orbit.
- **Advantages** - The use of methane in commercial launches could help slash costs and make it easier to reuse rockets.
- **Zhuque-3** - It would use stainless steel propellant tanks and clusters of methane-liquid oxygen propellant engines.

Tropospheric Emissions: Monitoring of Pollution (TEMPO) Satellite

- TEMPO Satellite was launched by the NASA to provide hourly updates on atmospheric pollutants.
- The Tropospheric Emissions: **Monitoring of Pollution** (TEMPO) satellite is a spectrometer that monitors air pollution over North America.
- It provides hourly updates on atmospheric pollutants.
- **It is an initiative of National Aeronautics and Space Administration (NASA).**
- It measures the major elements, directly or by proxy, of the diurnal tropospheric ozone chemistry cycle.

18. Consider the following statements with respect to Codex Alimentarius Commission

1. The Codex Alimentarius is a collection of internationally adopted food standards and related texts presented in a uniform manner.
2. Member countries are mandated to enforce the food standards set by the commission.
3. India became the member of Codex Alimentarius in 1964.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All three
- d. None

Answer : b

Codex Alimentarius Commission

Recently Codex Alimentarius Commission praised India for its standards on Millets.

- The Codex Alimentarius Commission (CAC) is an *international food safety and quality standard-setting body established in 1963*.
- It is created by *Food and Agriculture Organization (FAO) and the World Health Organization (WHO)*.
- The objective of it includes protecting consumer's health and ensuring fair practices in food trade.
- Presently the Commission has 189 Codex Members made up of 188 Member Countries and 1 Member Organization (The European Union).
- Each member of the Commission is responsible for identifying any new scientific and other relevant information, which may warrant revision of any existing Codex standards or related text.
- **India became the member of Codex Alimentarius in 1964.**

- The Codex Alimentarius *includes standards for all the principal foods, whether processed, semi-processed or raw for distribution to the consumer.*
- Codex standards and related texts are voluntary in nature not a substitute or alternative to national legislation.
- **Codex texts are voluntary and non-binding.**
- *Codex currently has standards for Sorghum and Pearl Millet.*

19. *Permakore*, sometimes seen in the news, is related to which of the following?

- A permanently frozen layer of soil in Antarctica.
- A musical instrument that is made from Indian Bison.
- One of the layers present in the internal structure of Earth
- Most sacred stone worshipped by the Vaishnavas during ancient times

Answer : b

Permakore

In recent times, the Koya tribe have moved on from using traditional Indian Bison horns to palm leaves as a gesture of conservation of the Indian Bison to craft their traditional flute, Permakore.

- **Permakore is traditional flute that is made from the Indian Bison horn.**
- It is used by the indigenous *Koya tribe* inhabiting the Papikonda hill range in Andhra Pradesh.
- Another name for the Papikondalu hill range is the 'Bison hill range,' which is derived from the fact that it is home to the Indian Bison.
- In the Koya language, 'Permam' stands for Indian Bison or Guar, and 'Kore' stands for 'horn' and thus, the flute made of Bison horn is called Permakore.
- Permakore is played at a designated time and place to give a call to the entire village to go hunting in the forest.
- The flute made of the leaf is sustainable for a few years but the one that is made of Bison horn can be used for generations if preserved.

20. Consider the following statements with respect to Bonnet Macaque

1. It is a primate that is endemic to the southern India.
2. They are highly arboreal and are strong swimmers.
3. It has been listed as Vulnerable under the IUCN's Red list of threatened species.

How many of the statements given above are **incorrect**?

- Only one
- Only two
- All three
- None

Answer : d

Bonnet Macaque

The recent discovery of carcasses of 27 bonnet macaque monkeys in Dakshina Kannada district, Karnataka has highlighted the human-monkey conflict in the region.

- The bonnet macaque (*Macaca radiata*), also known as *zati*, is a **species of macaque endemic to southern India.**

- Bonnet macaques are diurnal, **arboreal** and terrestrial quadrupeds, although they spend much of their time on the ground.
- They are also are also **strong swimmers**.
- The International Union for Conservation of Nature (IUCN) lists the bonnet macaque as **vulnerable**.
- **Distribution** – It is distributed throughout southern India in a territory, restricted to the Indian Ocean on three sides as well as the Godavari and Tapti Rivers.



SHANKAR
IAS PARLIAMENT
Information is Empowering