



**UPSC
Mentorship**

A Unit of Mentorship India

DAILY CURRENT AFFAIRS

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SOURCES



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GS I

1. Kerala to integrate technology and tradition to tackle human-wildlife conflict

Source: The Hindu

Context: Wayanad is on the boil after a wild elephant chased a 47-year-old man and trampled him to death.

Rising Human-Animal Conflict in Kerala:

- The tragedy brings to attention escalating human-animal conflict in the state.
- Increased incidence of wild animals, mainly elephants, tigers, bison, and wild boars, attacking human beings have been reported from across the state.
- Government data for 2022-23 recorded 8,873 wild animal attacks, of which, 4,193 were by wild elephants, 1,524 by wild boars, 193 by tigers, 244 by leopards, and 32 by bison.
- Of 98 reported deaths, 27 were due to elephant attacks.
- Beyond posing risk to humans, these attacks also devastated Kerala's agriculture sector.
- From 2017 to 2023, there were 20,957 incidents of crop loss due to wild animal raids which also killed 1,559 domestic animals, mainly cattle.

Wayanad Worst-affected Region:

- Wayanad, which boasts of a forest cover of 36.48 per cent, has lost 41 lives to elephant attacks and seven to tiger attacks over the last decade.
- Its geographical location plays a role in this.

Reasons Behind Rise in Human-Animal Conflict in Kerala:

- A 2018 study by Dehradun's Wildlife Institute of India and the Periyar Tiger Conservation Foundation in Kerala found two major drivers of human-animal conflict in the state.

Decline in Quality of Forest Habitats:

- Largely due to the cultivation of alien plants — mainly acacia, mangium and eucalyptus — in forest tracts for commercial purposes.
- With 30,000 hectares of forest land in Kerala being used for cultivation of these species, animals are deprived of their natural habitat and food sources.
- Moreover, these water-guzzling species also strain the forest's natural water resources.
- Elephants are among the worst-affected species due to this. Invasive species such as lantana, mikania and senna, planted by the forest department over decades, have also hindered growth of natural vegetation in forests.

Changing Agri-practices:



- The study also found that changing agri-practices were also responsible for drawing animals, which do not find enough fodder in their habitats, out of forests.
- In recent years, owing to poor returns and high wage costs, more and more farmland is being left unattended.
- This makes them ideal targets for wildlife looking to snack on bananas and pineapples, among the most cultivated crops in the region.
- Moreover, the increase in wildlife attacks has further pushed people to safer settlements away from their farms.
- This further entices animals to raid estates neighbouring forests.
- The crisis in Kerala's farm sector has also driven many towards animal husbandry.
- In Wayanad particularly, the dairy sector has emerged as a lifeline for villagers.
- But domesticated animals are also prime targets for tigers and other carnivores, especially older animals less capable of hunting in the wild.

Apart from declining quality of forests and changing agri-practices, following human activities also contribute to increasing animal-human conflict in Kerala:

- Waste disposal near forested areas,
- Fragmentation of animal habitats due to wanton construction, and
- Increased human presence in and around animal habitat

How is Kerala Addressing This Issue?

- The state has several schemes meant to prevent animals from entering human settlements.
- These include schemes for the construction of elephant-proof trenches, elephant-proof stone walls, and solar powered electric fencing.
- In 2022-23, the state conducted maintenance of 158.4 km of elephant-proof trenches, and constructed 42.6 km of solar fencing and 237 m of compound walls.
- To keep animals in forests, Kerala has also undertaken eco-restoration programmes.
- The state is also running a scheme to acquire land from farmers, to be then converted into forestland.
- However, these measures are far away from addressing the crisis.

2. Karnataka to release 8,000 cusecs of Cauvery water daily to Tamil Nadu

Source: The Hindu, Page 5

Context: The CWRC has ordered the State to discharge 11,500 cusecs of water till July 31; the CM says cumulative water storage in Cauvery basin reservoirs stood at 63% of capacity, and State is expected to receive good rainfall between July 17 and 24.

River Cauvery (Kaveri):



- It is known as 'Ponni' in Tamil and is a sacred river of southern India.
- It rises on Brahmagiri Hill of the Western Ghats in southwestern Karnataka state, flows in a southeasterly direction through the states of Karnataka and Tamil Nadu, and descends the Eastern Ghats in a series of great falls and drains into Bay of Bengal through Pondicherry.
- Left Bank Tributary: Arkavathi, Hemavathi, Shimsa, and Harangi.
- Right Bank Tributary: Lakshmantirtha, Suvarnavati, Noyil, Bhavani, Kabini, and Amaravathi.

The Dispute:

- As the river originates in Karnataka, flows through Tamil Nadu with major tributaries coming from Kerala and drains into the Bay of Bengal through Pondicherry the dispute therefore involves 3 states and one Union Territory.
- The genesis of the dispute is 150 years old and dates back to the two agreements of arbitration in 1892 and 1924 between the then Madras presidency and Mysore.
- It entailed the principle that the upper riparian state must obtain consent of lower riparian state for any construction activity viz. reservoir on the river Cauvery.
- The Cauvery water dispute between Karnataka and Tamil Nadu began in 1974 when Karnataka started diverting water without Tamil Nadu's consent.
- After several years, the Cauvery Water Disputes Tribunal (CWDT) was established in 1990 to resolve the issue. It took 17 years for the CWDT to reach a final order in 2007, which outlined the sharing of Cauvery water among the four riparian states. In distress years, water would be shared on a pro-rata basis.
- CWDT issued its final award in February 2007, specifying water allocations among the four states in the Cauvery basin, considering the total availability of 740 TMC in a normal year.
- The allocation of water among the four states is as follows: Tamil Nadu - 404.25 TMC, Karnataka - 284.75 TMC, Kerala - 30 TMC, and Puducherry - 7 TMC.
- In 2018, the Supreme Court declared the Cauvery a national asset and largely upheld the water-sharing arrangements determined by the CWDT.

GS II

3.Product information made mandatory on bulk packages

Source: The Hindu, Page 12

Context: The Department of Consumer Affairs has decided to amend the Legal Metrology (Packaged Commodities) Rules, 2011 to ensure mandatory declaration of all information on pre-packaged commodities used for retail sale.

Legal Metrology (Packaged Commodities) Rules, 2011



- It regulates pre-packaged commodities in India and inter – alia mandate certain labelling requirements prior to sale of such commodities.
- The main aim of the Legal Metrology Act, 2009 is to establish and enforce standards of weights and measures, regulate trade and commerce in weights, measures and other goods which are sold or distributed by weight, measure or number and any other matter that is connected to the same.
- According to the Act, the Central Govt. may appoint a Director of Legal Metrology to perform duties related to inter-state trade and commerce.
- The State Govt. may appoint a Controller of Legal Metrology to perform duties related to intra-state trade and commerce

4. Villages along China border to get 4G, tourist circuits, all-weather roads: Home Ministry

Source: The Hindu

Context: Union Home Minister Amit Shah launched the Vibrant Villages Programme (VVP) in Kibithoo, a village along the border with China.

What is Vibrant Villages Programme?

Background:

- Vibrant Villages Programme (VVP) was announced in the Finance Minister's Budget Speech 2022.
- The programme envisages coverage of border villages on the Northern border having sparse population, limited connectivity and infrastructure, which often get left out from the development gains.

Coverage: The Centrally sponsored village scheme will cover the border areas of Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim and Ladakh.

Aims:

- To ensure comprehensive development of these villages thereby improving the quality of life of people living in identified border villages.
- To encourage people to stay in their native locations in border areas, reversing out migration from these regions and contributing to improved border security

Implementation:

- The programme will provide funding for the development of vital infrastructure and creation of livelihood opportunities in 19 districts, 46 border blocks, four states, and one UT.
- It will cover 2,963 villages with 663 villages included in the first phase.
- The programme assists in identifying and developing the economic drivers based on local human and natural resources of these border villages



- Key outcomes that have been attempted are: all-weather roads, drinking water, 24×7 electricity – solar and wind energy, mobile and internet connectivity, tourist centres, multi-purpose centres, healthcare infrastructure and wellness centres.
- With respect to tourism, regular field trips will be held for students as part of a Seema Darshan programme.

Institutions involved:

- Gram Panchayats will assist the district administration in developing vibrant village action plans.
- Through this 100 % saturation of Central and state schemes will be ensured.
- No overlap with Border Area Development Program(BADP)
- The government has stated that VVP will not have an overlap with BADP.
- The Department of Border Management, MHA has been implementing the BADP through the State Governments/ UT Administrations as part of a comprehensive approach to Border Management.
- It covers 460 border blocks of 117 border districts in 16 States and 2 UTs
- The programme aims to meet the special development needs of the people living in remote and inaccessible areas (within 0-10 km) situated near the international border. It also aims to saturate the border areas with the essential infrastructure.

5. Unprincipled alliances

Source: The Hindu, Page 6

Context: There seems to be no end to the instability of coalitions in Nepal.

India-Nepal Relations

About:

- India and Nepal, being immediate neighbours, enjoy special bonds of friendship and collaboration marked by an open border and strong people-to-people connections rooted in kinship and culture.
- Nepal shares a border of over 1850 km with five Indian states – Sikkim, West Bengal, Bihar, Uttar Pradesh and Uttarakhand.
- The India-Nepal Treaty of Peace and Friendship of 1950 forms the bedrock of the special relations that exist between India and Nepal.

Economic Cooperation:

- India is Nepal's largest trade partner and the largest source of foreign investments, besides providing transit for almost the entire third country trade of Nepal.
- India accounts for about two-third of Nepal's merchandise trade and about one-third of trade in services.
- Recently, India and Nepal agreed to review the Treaty of Transit and the Treaty of Trade, proposed amendments to existing agreements, strategies for enhancing investment, the harmonisation of standards and the synchronised development of trade infrastructure.



Defence Cooperation:

- India has been aiding the modernization efforts of the Nepal Army through equipment supply and training provisions.
- The joint military exercise, 'Surya Kiran,' at the battalion level, is conducted in both India and Nepal on a rotational basis. In 2023, it was held in Pithoragarh, Uttarakhand.

Water Sharing:

- The Koshi Agreement (1954, revised in 1966) and Gandak Agreement (1959, revised in 1964) were the initial significant agreements fostering India-Nepal cooperation in the water resources sector.
- Another pivotal pact, the Mahakali Treaty (1996), ensures the fair utilisation of Mahakali river waters for both countries.

Connectivity:

- India is assisting Nepal by upgrading 10 roads in the Terai area, establishing cross-border rail links at Jogbani-Biratnagar and Jayanagar-Bardibas, and setting up Integrated Check Posts at key locations such as Birgunj, Biratnagar, Bhairahawa, and Nepalgunj.
- Also, India exported about 2200 MUs of electricity to Nepal in 2021.

Major Challenges to India Nepal Relations:

Boundary Dispute: The boundary dispute has become a significant source of tension in recent India-Nepal relations, particularly concerning the Kalapani-Limpiyadhura-Lipulekh trijunction area in western Nepal and the Susta area in southern Nepal.

China's Rising Footprint: China has provided financial and technical assistance to Nepal in areas such as infrastructure, industrialization, human resources, health, education, and water resources. Rising Nepal and China cooperation can undermine Nepal's distinction of a buffer state between India and China. Gorkhas, traditionally in the Indian Army, might join China's People's Liberation Army (PLA) due to concerns over India's new Agniveer scheme.

Way Forward:

- **Addressing Immediate Concerns:** Prioritise addressing immediate concerns related to the Agniveer Scheme, to build trust and goodwill.
- Develop joint projects for the benefit of border regions, fostering a sense of shared development.
- **Diplomatic Dialogue:** Engage in sustained and open diplomatic discussions to address the boundary dispute and other contentious issues.
- **Track-II Diplomacy:** Encourage Track-II diplomacy involving non-governmental entities, academics, and civil society to provide a new shape to India Nepal Cooperation.



GS III

6.Three die of asphyxiation at illegal coal mine in Gujarat

Source: The Hindu, Page 12

Context: It is the fourth such incident reported this year and 10 people had lost their lives; the police in Surendranagar district have registered a case against four, including a BJP panchayat member.

About Coal:

- It is a type of fossil fuel found in the form of sedimentary rocks and is often known as 'Black Gold'.
- It is a conventional source of energy and is widely available. It is used as a domestic fuel, in industries such as iron and steel, steam engines and to generate electricity.
- Electricity from coal is called thermal power. The leading coal producers of the world include China, US, Australia, Indonesia, India.

Distribution of Coal in India:

Gondwana Coal Fields (250 million years old):

- Gondwana coal makes up to 98 % of the total reserves and 99 % of the production of coal in India. Gondwana coal forms India's metallurgical grade as well as superior quality coal. It is found in Damodar (Jharkhand-West Bengal), Mahanadi (Chhattisgarh-Odisha), Godavari (Maharashtra), and Narmada valleys.

Tertiary Coal Fields (15 – 60 million years old):

- Carbon content is very low but is rich in moisture and Sulphur. Tertiary coalfields are mainly confined to extra-peninsular regions. Important areas include Assam, Meghalaya, Nagaland, Arunachal Pradesh, Jammu and Kashmir, Himalayan foothills of Darjeeling in West Bengal, Rajasthan, Uttar Pradesh, and Kerala.

Classification:

- Anthracite (80 - 95% carbon content, found in small quantities in J&K).
- Bituminous (60 - 80% carbon content and is found in Jharkhand, West Bengal, Odisha, Chhattisgarh and Madhya Pradesh).
- Lignite (40 to 55% carbon content, high moisture content and is found in Rajasthan, Lakhimpur (Assam) and Tamil Nadu).
- Peat (less than 40% carbon content and it is in the first stage of transformation from organic matter (wood) to coal).



7. Four children die due to suspected Chandipura virus infection in Gujarat

Source: The Indian Express

Context: The virus is transmitted through vectors like mosquitoes, ticks, and sandflies, and can lead to rapid progression of illness, coma, and even death.

Chandipura Virus

What is a virus called Chandipura?

- Chandipura virus, named after the town in Maharashtra where the discovery was made and isolated, is known to cause brain inflammation, progressing rapidly from an influenza-like disease to coma and death.
- The Chandipura Vesiculovirus (CHPV) mainly infects children under 14 years of age.

Causes:

- The virus primarily spreads through the bite of sand flies, sometimes through mosquitoes.
- Animal experiments indicate that neurons are damaged by the virus and neurodegeneration is induced.
- Sand flies, which are found in mud and sand house cracks, often breed during the months of the monsoon and pre-monsoon, which is when cases are typically recorded.
- The female phlebotomine sandfly is the probable virus vector (or carrier).
- In Senegal, Nigeria and also in India, the virus was found in sandflies.
- In 2003, in southern India, the Chandipura virus was responsible for an epidemic in which 329 children developed acute encephalitis and 183 died.

Symptoms: Sudden high fever followed by headache, seizures and vomiting, often leading to unconsciousness, are the symptoms. Physicians prescribe a blood test on the basis of the symptoms.

Therapy: There is no particular drug for its treatment. With early diagnosis, however, the patient is given hospitalisation and symptomatic care, which may help save lives.

Prevention: The best approach for suppressing HPV infection is prevention. According to the National Center for Biotechnology Information (NCBI), maintaining good nutrition, sanitation, hygiene and knowledge in rural areas is important for the containment of disease-transmitting vectors.

8. Indian Neutrino Observatory

Source: The Hindu

Context: Recently, the Tamil Nadu Government has made clear to the Supreme Court that it does not want the Indian Neutrino Observatory (INO) to be set up in Eco-Sensitive Zones in the Western Ghats. INO will



incur great cost to wildlife, biodiversity and ignores the local opposition. Eco-Sensitive Zones are areas within 10 kms around Protected Areas, National Parks and Wildlife Sanctuaries.

Indian Neutrino Observatory (INO):

- It is a proposed particle physics research mega project.
- The objective of the project was to study neutrinos in a 1,200-metre deep cave.
- The project is proposed to be set up at Pottipuram village in Theni district in Tamil Nadu.
- The project was initially mooted by the Institute of Mathematical Sciences and then by the Tata Institute of Fundamental Research.

What are Neutrinos?

- A neutrino is a fundamental elementary particle, and atmospheric neutrinos can be studied when solar radiation hits the earth's atmosphere.
- They are very hard to detect as they hardly interact with other forms of matter due to their lack of electrical charge.
- However, they seem to play an important role in the universe of elementary physics, which physicists have been trying to understand for a few decades now.
- They are produced in high-energy processes such as within stars and in supernovae.
- On earth, they are produced by particle accelerators and nuclear power plants.

What can be the Future Applications of Neutrinos?

Properties of the Sun:

The visible light is emitted from the surface of the sun and neutrinos, which travel close to the speed of light, are produced in the core of the sun.

Studying these neutrinos can help us understand what goes on in the interior of the sun.

Constituents of the Universe:

- Light coming from distant stars can be studied by astronomers, for example, to detect new planets.
- Likewise, if the properties of neutrinos are understood better, they can be used in astronomy to discover what the universe is made up of.

Probing Early Universe:

- Neutrinos interact very little with the matter around them, so they travel long distances uninterrupted. The extragalactic (originating outside the Milky Way galaxy) neutrinos we observe may be coming from the distant past.
- These undamaged messengers can give us a clue about the origin of the universe and the early stages of the infant universe, soon after the Big Bang.



Editorial, Ideas and Opinions

9. The problem with the Karnataka gig workers Bill

Source: The Hindu, Page 6

Context: Karnataka became the second state after Rajasthan to come up with legislation for Gig Workers. Through a draft version of the law (Karnataka Platform-based Gig Workers (Social Security and Welfare) Bill), the Karnataka government aims to regulate the social security and welfare of platform-based gig workers in the state by creating a board, welfare fund, and grievance cell among the mechanisms.

Highlights of the Karnataka Bill

Creation of Welfare Board:

- Board comprising Karnataka labour minister, two aggregator officials, two gig workers, and one civil society member to be formed.
- A two-level grievance redressal mechanism for workers, and more transparency with regards to the automated monitoring and decision-making systems deployed by platforms has been envisaged by the draft bill.
- **Timely Payment:** The draft mandates aggregators to make payments at least every week and to inform the worker about the reasons for any payment deductions.
- **Unique ID:** Gig workers can apply to receive a Unique ID applicable across all platforms upon registration with the board.
- **Social Security and Grievance Redressal:** Access to general and specific social security schemes based on contributions along with a grievance redressal mechanism for gig workers.
- **Autonomy and Contractual Rights:** The Bill aims to provide greater autonomy to the gig workers to terminate contracts and resist being over worked by employers. The aggregator shall not terminate a worker without giving valid reasons in writing and prior notice of 14 days.
- **Work Environment and Safety:** There is a mandate for aggregators to maintain a safe working environment for gig workers.
- **Welfare Fund:** Proposed fund financed by a welfare fee from aggregators along with state and worker contributions.
- **Penalties:** Basic penalty of Rs 5,000 extendable up to Rs 1 lakh for aggregators violating conditions under the Bill.

Who are Gig Workers?

- **Gig Workers:** As per the Code on Social Security 2020, a gig worker is a person who performs work or participates in a gig work arrangement and earns from such activities outside of traditional employer-employee relationship.
- **Gig Economy:** A free market system in which temporary positions are common and organisations contract with independent workers for short-term engagements. A 2022 NITI Aayog report



estimates that India will have 23.5 million gig workers by 2029–30. Need to Provide Social Security Benefits to Gig

- **Workers Frequent Termination:** The instances of blacklisting workers or terminating them from work without hearing out their side have increased.
- **Economic Security:** The sector depends on demand which leads to job insecurity and income uncertainty, highlighting the necessity of providing social security benefits such as unemployment insurance, disability coverage, and retirement savings programs.
- **Health Insurance:** Lack of access to employer-sponsored health insurance and other healthcare benefits leaves gig workers vulnerable to unexpected medical expenses. Prioritising their health and well-being will create a healthier and more productive workforce.
- **Level Playing Field:** Exemption from traditional employment protections creates disparities where gig workers face exploitative working conditions and inadequate compensation. Providing social security benefits will level the playing field.
- **Long-term Financial Security:** Without employer-sponsored retirement plans, gig workers may struggle to save enough for their future like for post retirement needs.

Main Challenges in Providing Social Security Benefits to Gig Workers Classification and Excess Flexibility:

- The gig economy is characterised by its flexibility, allowing workers to choose when, where, and how much they work. Designing social security benefits that accommodate this flexibility and meet the diverse needs of gig workers is a complex task.
- **Funding and Cost Distribution:** Traditional social security systems depend on employer and employee contributions, with employers typically bearing a significant portion of the costs. In the gig economy, where workers are often self-employed, identifying appropriate funding mechanisms becomes complex. **Coordination and Data Sharing:** Efficient data sharing and coordination among gig platforms, government agencies, and financial institutions are necessary to accurately assess gig workers' earnings, contributions, and eligibility for various social security programs. However, as gig workers often work for multiple platforms or clients, it becomes challenging to coordinate and ensure proper coverage.
- **Education and Awareness:** Many gig workers may not fully understand their rights and entitlements regarding social security benefits. Raising awareness and providing education about the importance of social security, eligibility criteria, and the application process is a challenging task.

What can be done to Ensure Social Security of Gig Workers?

- **Implementing Code on Social Security, 2020:** Although the Code on Social Security, 2020, contains provisions for gig workers, the rules are yet to be framed by the States and not much has moved in terms of instituting the Board. These should thus be taken up expeditiously by the government.
- **Expanding Employer Responsibilities:** Strong support for gig workers should come from the gig companies that themselves benefit from this agile and low-cost work arrangement. The practice of classifying gig workers as self-employed or independent contractors needs to be eliminated.



- **Companies must be provided equal benefits as that of a regular employee Education and Training:** The government should invest in education and training programs for gig workers to improve their skills and increase their earning potential.
- **Government Support:** Collaboration between governments, gig platforms, and labour organisations to establish fair and transparent mechanisms for sharing the responsibility of providing social security benefits. Eg. Schemes similar to Ayushman Bharat should be extended to cover gig workers with cost sharing with the employer.
- **Adopting International Examples:** The UK has instituted a model by categorising gig workers as “workers,” which is a category between employees and the self employed. This secures them a minimum wage, paid holidays, retirement benefit plans, and health insurance. Similarly, in Indonesia, they are entitled to accident, health, and death insurance.

In Brief

10. Changthang Wildlife Sanctuary

Source: The Hindu

Context: As the summer rush peaks in July, a conservationist looks at how rash development and irresponsible tourism are threatening Ladakh’s unique animals and environment

Changthang Wildlife Sanctuary:

- It is located in the Ladakhi Changthang plateau in the Leh district of Ladakh.
- It covers an area of almost 1,600 sq. km and is home to the highest altitude water lakes, namely, Tso Moriri (which also happens to be the highest lake on earth), Pangong Tso and Tso Kar.
- The Changthang region is inhabited by nomadic pastoral communities, primarily the Changpa tribe, who lead a traditional way of life herding yaks, goats and sheep across the vast grasslands.
- This region is steeped in Tibetan Buddhist culture and heritage.
- It includes one of the world's highest villages, Korzok Village, which attracts tourists to the Korzok Monastery.
- **Fauna:** Tibetan wolf, wild yak, bharal, brown bear and the marmot that seems to be present everywhere.
- **Flora:** It is home to almost 200 species of wild plants that grow in the higher pastures and are food for the animals inside the sanctuary.



Daily Quiz

1. Through which states does the Cauvery River flow?

- A) Karnataka and Tamil Nadu
- B) Karnataka and Kerala
- C) Karnataka and Andhra Pradesh
- D) Tamil Nadu and Kerala

2. Which treaty forms the basis of India–Nepal bilateral relations, emphasising friendship, trade, and mutual security?

- A) Treaty of Tashkent
- B) Treaty of Versailles
- C) Treaty of Peace and Friendship (1950)
- D) Treaty of Amritsar

3. What is the most common type of coal found globally, known for its high carbon content and energy density?

- A) Peat
- B) Lignite
- C) Bituminous
- D) Anthracite

4. What is the primary goal of the Indian Neutrino Observatory (INO)?

- A) Studying gravitational waves
- B) Detecting dark matter
- C) Studying neutrino oscillations
- D) Observing cosmic rays

5. Consider the following statements about Vibrant Village Programmes:

Statement: The Vibrant Village Program aims to transform rural areas in India by focusing on sustainable development and infrastructure improvement.

Reason: It is designed to empower local communities through integrated planning and implementation of various development schemes.

- A) Statement is true, reason is true, and reason is the correct explanation of the statement.
- B) Statement is true, reason is true, but reason is not the correct explanation of the statement.
- C) Statement is true, reason is false.
- D) Statement is false, reason is true.



6. What type of work is commonly associated with gig workers?

- A) Long-term employment contracts with benefits
- B) On-demand services such as ride-sharing and food delivery
- C) Manufacturing and assembly line jobs
- D) Academic and research positions in universities

7. Which animal is prominently protected in Changthang Wildlife Sanctuary?

- A) Bengal Tiger
- B) Snow Leopard
- C) Asiatic Lion
- D) Indian Elephant

8. Consider the following statements about elephants:

Statement 1: Elephants are the largest land animals on Earth.

Statement 2: Elephants primarily inhabit tropical rainforests and coastal regions.

Statement 3: Elephants are herbivores and primarily feed on grasses, fruits, and leaves.

- A) Statements 1 and 3 are true.
- B) Statements 2 and 3 are true.
- C) Statements 1 and 2 are true.
- D) All statements are true.

9. Which country is the largest exporter of iron ore in the world?

- A) Brazil
- B) China
- C) India
- D) South Africa

10. Which of the following best defines asphyxiation?

- A) A sudden drop in blood pressure
- B) Insufficient oxygen supply to the body's cells
- C) Excessive carbon dioxide levels in the bloodstream
- D) Rapid heartbeat leading to oxygen depletion



Solutions

1. Answer-A) Karnataka and Tamil Nadu

Explanation: The Cauvery River flows primarily through the states of Karnataka and Tamil Nadu. It originates in the Western Ghats of Karnataka and travels eastward through the Deccan Plateau. It enters Tamil Nadu near Hogenakkal Falls and continues its journey through the state before emptying into the Bay of Bengal.

2. Answer- C) Treaty of Peace and Friendship (1950)

Explanation: The Treaty of Peace and Friendship, signed in 1950, is a pivotal agreement governing the bilateral relations between India and Nepal. It covers various aspects such as mutual security, trade, and transit rights.

3. Answer-C) Bituminous

Explanation: Bituminous coal is the most common type of coal found globally. It has a high carbon content and energy density, making it suitable for electricity generation and industrial use.

4. Answer-C) Studying neutrino oscillations

Explanation: One of the main objectives of the INO is to study neutrino oscillations, which is the phenomenon where neutrinos change from one type to another as they travel through space. This research can help in understanding fundamental properties of neutrinos and their role in the universe.

5. Answer-A) Statement is true, reason is true, and reason is the correct explanation of the statement.

Explanation: The Vibrant Village Program indeed aims to transform rural areas through sustainable development and infrastructure improvement. The reason provided correctly explains that it empowers local communities by integrating various development schemes and ensuring their effective implementation.

6. Answer-B) On-demand services such as ride-sharing and food delivery

Explanation: Gig workers often participate in on-demand services where they provide services or tasks as needed, such as driving for ride-sharing platforms or delivering food orders.

7. Answer- B) Snow Leopard

Explanation: Changthang Wildlife Sanctuary is known for its efforts in protecting the endangered Snow Leopard, which is a key species in the region.



8. Answer-A) Statements 1 and 3 are true.

Explanation:

Statement 1: Elephants are indeed the largest land animals on Earth, known for their size and strength.

Statement 2: Elephants inhabit a variety of habitats including savannas, forests, and grasslands, not just tropical rainforests and coastal regions.

Statement 3: Elephants are herbivores and their diet consists mainly of grasses, fruits, and leaves.

9. Answer- A) Brazil

Explanation: Brazil is the largest exporter of iron ore globally, with significant exports to countries like China and Japan.

10. Answer- B) Insufficient oxygen supply to the body's cells

Explanation: Asphyxiation is the condition where there is a lack of sufficient oxygen supply to the body's cells, leading to potential suffocation and subsequent health complications.

MAINS PRACTISE QUESTION

1. Discuss the need and challenges associated with providing social security for gig workers in India. Also, highlight steps taken by centre and state governments in this context.

2. "In spite of adverse environmental impact, coal mining is still inevitable for development". Discuss.





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